# TelevisGo v10

## The expandable supervisor with FREE Studio Plus applications IEC 61131-3

## User Manual

**TGO02_02EN**

**03/2026**




www.eliwell.com

eliwell
by Schneider Electric

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# Safety information

## Important information

Read these instructions carefully and visually inspect the equipment to familiarize yourself with the controller before installing it and/or putting it into operation or servicing it. The following warning messages may appear anywhere in this documentation or on the equipment to warn of potential dangers or to call attention to information that can clarify or simplify a procedure.



The addition of this symbol to a danger warning label “Danger” or “WARNING” indicates the existence of an electrical danger that could result in personal injury should the user fail to follow the instructions.



This is the safety warning symbol. It is used to warn the user of the potential dangers of personal injury. Observe all the safety warnings that follow this symbol to avoid the risk of serious injury or death.

**DANGER**

**DANGER** indicates a dangerous situation that, unless avoided, **will result in** death or cause serious injuries.

**WARNING**

**WARNING** indicates a potentially dangerous situation which, if not avoided, **could result in** death or serious injury.

**CAUTION**

**CAUTION** indicates a potentially dangerous situation which, if not avoided, **could result in** minor or moderate injury.

***NOTICE***

***NOTICE*** used in reference to procedures not associated with physical injuries.

## Note

Electrical equipment must be installed, used and repaired by qualified personnel only. Schneider Electric and Eliwell do not accept responsibility for any consequences resulting from the use of this material.

A qualified person is someone who has specific skills and knowledge regarding the structure and the operation of electrical equipment and who has received safety training on how to avoid the inherent dangers.

## Personnel qualification

Only personnel with suitable training and an in-depth knowledge and understanding of the content of this manual and other documentation relating to the product in question are authorized to work on and with this product.

The qualified employee must be capable of identifying any hazards that may arise from the parameters, changing the value of the parameters and from using mechanical, electrical and electronic equipment in general. Plus, they must be familiar with accident prevention standards, provisions and regulations, which must be observed while the system is being designed and implemented.

## Permitted use

The device must be installed and used in accordance with the instructions provided. In particular, parts carrying dangerous voltages must not be accessible under normal conditions.

Televis**Go** v10 is a supervisor for monitoring, recording and handing data, remote viewing and maintenance of the connected devices for refrigeration systems used in the processing, storage and distribution of foodstuffs.

It must be adequately protected from water and dust with regard to the application, and must only be accessible using tools or a keyed locking mechanism.

## Improper use

Any use other than that described in the previous paragraph, “Permitted use”, is strictly prohibited.

The functional security protection devices, required by international or local laws, must be installed outside this device.

## Liability and residual risks

Electrical equipment must be installed, used and repaired by qualified personnel only.
The liability of Schneider Electric and Eliwell is limited to the correct and professional use of the product according to the directives referred to herein and in the other supporting documents, and does not cover any damage (including but not limited to) resulting from the following causes:

- unspecified installation/use and, in particular, in contravention of the safety requirements of the legislation in force in the country of installation and/or specified in this document;
- use on equipment which does not provide adequate protection against electrocution, water and dust in the actual installation conditions;
- use on equipment which allows access to dangerous components without the use of tools and/or a keyed locking mechanism;
- tampering with and/or modification of the product;
- installation/use on equipment that does not comply with the regulations in force in the country of installation.

## Disposal



The equipment (or product) must be subjected to separate waste collection in compliance with the local legislation on waste disposal.

# About the document

## Purpose of the document

The Televis**Go** v10 user manual provides comprehensive details on the device's specifications, installation, configuration, and operation for refrigeration systems. The device supports Ethernet, GSM modems, USB, and RS232 interfaces, and can manage up to 224 devices. The manual covers various models, available accessories, mechanical and electrical installation procedures, user interface navigation, alarm management, historical data viewing, and system updates. Additionally, it provides instructions for managing network settings, updating drivers, performing backups, and restoring the system.

## Note regarding validity

This document is valid for the Televis**Go** v10 device.

The characteristics of the products described in this document are intended to match the characteristics that are available on www.eliwell.com. As part of our corporate strategy for constant improvement, we may revise the content over time to enhance clarity and accuracy. If you see a difference between the characteristics in this document and the characteristics on www.eliwell.com, consider www.eliwell.com to contain the latest information.

## General Cybersecurity Information

In recent years, the growing number of networked machines and production plants has seen a corresponding increase in the potential for cyber threats, such as unauthorized access, data breaches, and operational disruptions. You must, therefore, consider all possible cybersecurity measures to help protect assets and systems against such threats.
To help keep your Schneider Electric products secure and protected, it is in your best interest to implement the cybersecurity best practices as described in the Cybersecurity Best Practices (English document).
Schneider Electric provides additional information and assistance:

- Subscribe to the Schneider Electric security newsletter.
- Visit the Cybersecurity Support Portal to:
    - Find Security Notifications
    - Report vulnerabilities and incidents
- Visit the Schneider Electric Cybersecurity and Data Protection Posture to:
    - Access the 'cybersecurity posture'
    - Learn more about cybersecurity in the cybersecurity academy
    - Explore the cybersecurity services from Schneider Electric

## Available Languages of this Document

This document is available in the following languages:

- Italian (TGO02_02IT)
- English (TGO02_02EN)
- Spanish (TGO02_02ES)
- German (TGO02_02DE)
- French (TGO02_02FR)
- Russian (TGO02_02RU)

## Related documents

| Publication title | Reference code |
|---|---|
| TelevisGo Migration Tool manual | TGOMT |
| TelevisGo Modbus_TCP BMS Config Tool manual | 9MA00270 (IT) - 9MA10270 (EN) |
| TelevisGo v10 DP instruction sheet | 9IS54915 (6L) - 9IS54916 (AR) |
| SerialAdapter Instruction Sheet | 9IS64615 (6L) |
| TelevisGo Windows Spare SSD Instruction Sheet | 9IS64599 (6L) |
| EthernetAdapter Instruction Sheet | 9IS54871 (10L) |
| Cybersecurity Best Practices | Refer to Cybersecurity Best Practices (English document) |

The available technical documentation and other technical information can be downloaded from the website: www.eliwell.com

## Environmental Data

For product compliance and environmental information refer to the Schneider Electric Environmental Data Program.

## Information on non-inclusive or insensitive terminology

As part of a group of responsible and inclusive companies, we are currently updating our communications and products that contain non-inclusive terminology. Nevertheless, until we have completed this process, our content may still include standardized industry terminology which may be considered inappropriate by our customers.

## Product related information

**⚠ ⚠ DANGER**

**HAZARD OF ELECTRIC SHOCK, EXPLOSION, FIRE OR ARC FLASH**

- Disconnect all power from all equipment including connected devices prior to removing any covers or doors, or installing or removing any accessories, hardware, cables or wires.
- Always use a properly rated voltage sensing device to confirm the power is off where and when indicated.
- Before powering the device back up, fit back and fix all the covers, hardware components and wiring.
- Verify the earthing connections on all earthed devices.
- Use this device and all connected products only at the specified voltage.

**Failure to follow these instructions will result in death or serious injury.**

**⚠ WARNING**

**LOSS OF CONTROL**

- Carry out a new network scan every time the type, configuration or number of controllers monitored is changed.
- The installation designer must consider the potential failure modes of the control circuit and, for some critical control functions, provide a means for reaching a safe condition during and after a circuit failure. Examples of critical control functions are the emergency stop and end of travel stop, power supply cut-off and restarting.
- Redundant control circuits that are separate from the TelevisGo v10 must be provided for critical control functions.
- The control circuits can incorporate communication equipment such as proxy modems or network gateways. Keep in mind the implications of transmission delays or sudden connection failures.
- Comply with all standards regarding accident protection and local applicable safety directives.
- Every implementation of this device must be tested individually and completely in order to check its proper operation before putting it into service.
- Do not disassemble, repair or modify this equipment.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

Communication between Televis**Go** v10 and **Serial**Adapter/**Ethernet**Adapter is susceptible to electromagnetic interference and the transmission of alarm signals may not be possible.

## ⚠ WARNING

**UNINTENDED EQUIPMENT OPERATION**

- Use appropriate safety interlocks where personnel and/or equipment hazards exist.
- Do not use this equipment for safety-critical functions.
- Do not connect wires to unused terminals and/or terminals indicated as “No Connection (N.C.)”.
- Install TelevisGo v10 and SerialAdapter in an environment in which EMC disturbance is below the limits specified in standard EN61000-6-1 (residential, commercial and light industry environments).
- Configure the "LifeTest" function to make sure the TelevisGo v10 is active. Non-receipt of the periodic email indicates a malfunction of the TelevisGo v10 or the email sending service.
- The load equivalent to all the bus RS485 nodes should not exceed 30 Unit Load (for the definition of Unit Load refer to standard TIA/EIA-485-A).
- For the connection to the supervision system, use a specific shielded “twisted pair” cable (for example: BELDEN cable model 8762).

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

## ⚠ WARNING

**HAZARD OF OVERHEATING AND/OR FIRE**
Install and use the equipment exclusively in a protected environment, to prevent direct exposure to sunlight and atmospheric agents.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

The pages on the website have been designed to set up and monitor the system and to access the equipment from a web browser, via a web server.

Always use a secure protocol (HTTPS) for installation of a TLS certificate generated by a trusted CA (Certification Authority).

## ⚠ WARNING

**UNINTENDED EQUIPMENT OPERATION**
Only use software approved by Eliwell when using this equipment.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

Take the suitable care and precautions when using this product as a control device, to avoid unforeseen consequences resulting from the operation of the controlled machine, variations in controller status or changes to the machine data memory or operating parameters.

## ⚠ WARNING

**UNINTENDED EQUIPMENT OPERATION**

- Before attempting to control the application remotely, you must be perfectly familiar with the application and the machine.
- Take the necessary precautions to guarantee that you are working on the anticipated machine remotely by using clear identification documentation within the application and the corresponding remote connection.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

Eliwell adheres to industry best practices in the development and implementation of control systems. This includes a Defense-in-Depth approach to guarantee an industrial control system. This approach protects the controller with one or more firewalls to limit access exclusively to authorized personnel and protocols.

**⚠ WARNING**

**UNAUTHORISED ACCESS AND SUBSEQUENT NETWORK INTRUSION**

- Assess whether the room or the machines are connected to the critical infrastructure and, if so, take suitable preventative measures, based on “defense-in-depth” strategy, before connecting the automation system to any network.
- Minimize the number of devices connected to a network.
- Isolate your industrial network from other networks within the company.
- Protect any network from unintentional access using firewalls, VPNs or other proven security measures.
- Monitor activity within the systems.
- Prevent direct access or direct connection to the devices concerned by unauthorized individuals or unauthorized actions.
- Prepare a restore plan that includes system backup and process information.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

## Flammable refrigerant gases

This equipment is designed to operate in non-hazardous locations and where applications which generate (or could potentially generate) hazardous environments have been isolated. Install this equipment only in areas and with applications known to be constantly free from hazardous atmospheres.

**⚠ DANGER**

**RISK OF EXPLOSION**

- Install and use this equipment in non-hazardous locations only.
- Do not install or use this equipment in applications which could generate hazardous atmospheres, such as those which use flammable refrigerants.

**Failure to follow these instructions will result in death or serious injury.**

For information regarding the use of control equipment in applications capable of generating hazardous materials, please contact the relevant national regulatory bodies or certifying authorities.

## Before you start

Do not use this product on machines without effective protection for the work area.
The lack of effective protection for the work area on a machine may lead to serious injury for the machine operator.

**⚠ WARNING**

**EQUIPMENT WITHOUT PROTECTION**
Do not use this software or the relative automation equipment on a device lacking protection on the workstation.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

This automation equipment and the corresponding software are used to control various industrial and commercial processes.

Only the user, the machine manufacturer or the system integrator can be up-to-date in terms of all the conditions and factors present when preparing, starting up and servicing the machine and therefore only they are able to determine which automation equipment and corresponding safety devices and interlocks can be used correctly.

When the automation and control equipment and the relative software are selected for a particular application, the applicable local and national standards and regulations must also be taken into consideration. Furthermore, the manual for accident prevention of the National Safety Council (recognized nationally in the United States of America) provides very useful information.

Before putting the equipment into service, make sure that all the safety devices and appropriate mechanical/electrical interlocks relating to the protection of the workstation have been installed. All the interlocks and safety devices relating to workstation protection must be coordinated with the corresponding software programming and automation instruments.

## Start-up and testing

Before using the electric control and automation equipment for normal operation after installation, the system should be subjected to a start-up test by qualified personnel to make sure the equipment is functioning correctly.

It is important to carry out the preparations for this check and that sufficient time is provided in order to completely and satisfactorily perform the test.

**⚠ WARNING**

**DANGER WHEN STARTING-UP THE EQUIPMENT**

- Verify that all installation and preparation procedures have been completed.
- Before performing the operating tests, remove all the locks or other temporary retaining devices used when shipping the device components.
- Remove any tools, measuring instruments and debris from the equipment.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

Perform all the start-up tests recommended in the equipment documentation. Conserve all equipment documentation for future consultation.

**The custom software must be tested in a simulated environment as well as in the real environment**.

Check that the completed system is free of short circuits and that the temporary earth system is not installed in compliance with local standards (for example the National Electrical Code in the US). If it is necessary to perform high potential voltage tests, comply with the recommendations provided in the equipment documentation in order to avoid damaging the device.

Before powering the equipment:

- Close the door in the equipment casing.
- Remove all the temporary earth systems from the incoming power supply lines.
- Perform all the start-up tests recommended by the manufacturer.

## Terminology sourced from standards

The technical terms, terminology, symbols and corresponding descriptions in this manual, or which appear on the products themselves, are generally sourced from the terms or definitions used in international standards. In the context of functional safety systems, start-ups and general automation, this may include, but is not limited to, terms such as safety, safety function, protected status, fault, fault reset, malfunctioning, fault, error, error message, hazardous, etc.

Among others, these standards include:

| Standard | Description |
|---|---|
| IEC 61131-2:2007 | Programmable controllers, part 2: Equipment requirements and tests. |
| ISO 13849-1:2015 | Safety of machinery: Safety related parts of control systems. General principles for design. |
| EN 61496-1:2013 | Safety of machinery: Electro-sensitive protective equipment. Part 1: General requirements and tests. |
| ISO 12100:2010 | Safety of machinery - General principles for design - Risk assessment and risk reduction. |
| EN 60204-1:2006 | Safety of machinery - Electrical equipment of machines - Part 1: General requirements. |
| ISO 14119:2013 | Safety of machinery - Interlocking devices associated with guards - Principles for design and selection. |
| ISO 13850:2015 | Safety of machinery - Emergency stop - Principles for design. |
| IEC 62061:2015 | Safety of machinery - Functional safety of safety-related electrical, electronic, and electronic programmable control systems. |
| IEC 61508-1:2010 | Functional safety of electrical/electronic/programmable electronic safety-related systems: General requirements. |
| IEC 61508-2:2010 | Functional safety of electrical/electronic/programmable electronic safety-related systems: Requirements for electrical/electronic/programmable electronic safety-related systems. |
| IEC 61508-3:2010 | Functional safety of electrical/electronic/programmable electronic safety-related systems: Software requirements. |
| IEC 61784-3:2016 | Industrial communication networks - Profiles - Part 3: Functional safety fieldbuses - General rules and profile definitions. |
| 2006/42/EC | Machinery Directive. |
| 2014/30/EU | Electromagnetic Compatibility Directive. |
| 2014/35/EU | Low Voltage Directive. |

Plus, the terms used in this document may be used in passing as they are sourced from other standards such as:

| Standard | Description |
|---|---|
| IEC 60034 series | Rotating electrical machines. |
| IEC 61800 series | Adjustable speed electrical power drive systems. |
| IEC 61158 series | Digital data communications for measurement and control – Fieldbus for use in industrial control systems. |

Finally, the term "operating area" may be used in relation to the description of specific hazards, and is defined as for a hazard area or hazardous area in the Machinery Directive (2006/42/EC) and ISO 12100:2010.

**NOTE**: The abovementioned standards may or may not be applicable to the specific products mentioned in this documentation. For further information concerning individual standards applicable to the products described herein, please refer to the table of characteristics for these product references.

# Before first use

## Contents

This section includes the following topics:

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# Before first use

Before installing Televis**Go** v10, carefully read this chapter which lists the components, not included in the package, necessary to complete the initial startup procedure.

## Necessary components

- USB Mouse
- USB Keyboard
- Display with HDMI or DP interface cable.

## Initial startup procedure

1. Connect the mouse, keyboard, and monitor to Televis**Go** v10
2. Power on the monitor and Televis**Go** v10
3. Press the "ON/OFF" button on Televis**Go** v10 (see Hardware).
4. If the keyboard layout is different from English, to avoid entering a password different from the intended one, you can:
    - press to show/hide the entered password
    - press , at the bottom right, to open the Control Panel and enable the Windows virtual keyboard
    - press "**ENG**", at the bottom right, to open the selection box for one of the preloaded keyboards
        - ENG = keyboard with English layout
        - ITA = keyboard with Italian layout
        - ESP = keyboard with Spanish layout
5. When prompted to change the Windows password, enter:
    - **Current password**: none (leave blank)
    - **New password**: enter a new password (see minimum security criteria)
    - **Confirm password**: re-enter the new password.
6. Complete the procedure by pressing the **Salva** key.

**NOTE**: Store the new password in a safe place and/or create a recovery disk. The system administrator password is required for recovery operations and cannot be retrieved from the system itself.

| ***NOTICE*** |
| --- |
| **LOSS OF FUNCTION**<br>Loss of the Administrator user password prevents access to system configuration. The password cannot be recovered.<br>**Failure to follow these instructions can result in equipment damage.** |

**NOTE**: in the event of a lost password, contact Eliwell Technical Support to have it reset. The procedure requires Technical Support to be able to connect to Televis**Go** v10 remotely.

**NOTE**: a secure password is one that has not been shared with or given to unauthorized personnel, and that does not contain personal or otherwise obvious information. Do not exceed 50 characters and only use alphanumeric characters. For further information see "Operating System Password" section.

**NOTE**: Minimum password security criteria. For more information, please refer to the Microsoft website (https://learn.microsoft.com/en-us/windows/security/threat-protection/security-policy-settings/password-must-meet-complexity-requirements):

- Minimum 8 characters
- 1 numerical digit (0, 1, ... , 9)
- 1 uppercase letter (A, B, ... , Z)
- 1 lowercase letter (a, b, ... , z)
- 1 special character (|¦`!" $%^&*()_+-=[]{};:'@#~<>,./?)

# Introduction

## Contents

This section includes the following topics:

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# Description

Televis**Go** v10 is a supervisor for monitoring, recording and handing data, remote viewing and maintenance of the connected devices for refrigeration systems used in the processing, storage and distribution of foodstuffs.
Televis**Go** v10 records data, manages alarms and provides remote access to network device data to easily monitor HACCP data and schedule maintenance activities.
It has the following connectivity systems:

| | |
|---|---|
| Televis**Go** v10 C | • 2 Ethernet RJ45 ports (built-in)<br>• 4 USB ports (1x USB 2.0 + 3x USB 3.2)<br>• 4 RS232 serial ports<br>• 1 HDMI port<br>• 1 Display port |
| Televis**Go** v10 DP | • 2 Ethernet RJ45 ports (built-in)<br>• 4 USB ports (2x USB 2.0 + 2x USB 3.0)<br>• 4 RS232 serial ports<br>• 1 HDMI port<br>• 1 Display port |

Televis**Go** v10 can be accessed remotely via a web browser without the need to install additional software (see “Supported browsers”).

The multilingual user interface supports 12 languages (Italian, English, Spanish, German, French, Russian, Dutch, Polish, Portuguese, Chinese, Turkish and Japanese) but other languages can be installed at a later time.

Televis**Go** v10 is a software platform which can be updated with new functions and offers the option of transferring data to centralized systems.

The license is used to manage up to a maximum of 224 devices and 3000 acquisition points.

As Administrator, all aspects of the system can be integrally controlled via remote access
(see "Configuring the Televis**Go** v10 ").

# Models

The available models are listed below:

### TelevisGo v10 C

| Product | Description | no. of devices (maximum) |
|---|---|---|
| TGOFXE013E00K | TelevisGo v10 C /1 KIT SerialAdapter | 1 |
| TGOFXE103E00K | TelevisGo v10 C /10 KIT SerialAdapter | 10 |
| TGOFXE1H3E00K | TelevisGo v10 C /100 KIT SerialAdapter | 100 |
| TGOFXE2H3E00K | TelevisGo v10 C /224 KIT SerialAdapter | 224 |
| TGOFXE303E00K | TelevisGo v10 C /30 KIT SerialAdapter | 30 |
| TGOFXE303E02K | TelevisGo v10 C /30 KIT SerialAdapter (AR) | 30 |
| TGOFXE603E00K | TelevisGo v10 C /60 KIT SerialAdapter | 60 |
| TGOFXE603E02K | TelevisGo v10 C /60 KIT SerialAdapter (AR) | 60 |
| TGOFXE103ER0K | TelevisGo v10 C LE /10 KIT SerialAdapter | 10 |
| TGOFXE303ER0K | TelevisGo v10 C LE /30 KIT SerialAdapter | 30 |
| TGOFXE603ER0K | TelevisGo v10 C LE /60 KIT SerialAdapter | 60 |

### TelevisGo v10 DP

| Product | Description | no. of devices (maximum) |
|---|---|---|
| TGOEXE101ER0K | TelevisGo v10 DP LE /10 KIT SerialAdapter | 10 |
| TGOEXE301ER0K | TelevisGo v10 DP LE /30 KIT SerialAdapter | 30 |
| TGOEXE601ER0K | TelevisGo v10 DP LE /60 KIT SerialAdapter | 60 |
| TGOEXE101E00K | TelevisGo v10 DP /10 KIT SerialAdapter | 10 |
| TGOEXE301E00K | TelevisGo v10 DP /30 KIT SerialAdapter | 30 |
| TGOEXE301E02K | TelevisGo v10 DP /30 KIT SerialAdapter (AR) | 30 |
| TGOEXE601E00K | TelevisGo v10 DP /60 KIT SerialAdapter | 60 |
| TGOEXE601E02K | TelevisGo v10 DP /60 KIT SerialAdapter (AR) | 60 |
| TGOEXE1H1E00K | TelevisGo v10 DP /100 KIT SerialAdapter | 100 |
| TGOEXE2H1E00K | TelevisGo v10 DP /224 KIT SerialAdapter | 224 |

# Accessories available

**⚠ ⚠ DANGER**

**RISK OF ELECTRIC SHOCK, FIRE OR ARC FLASH**
Only connect compatible accessories to the device.
**Failure to follow these instructions will result in death or serious injury.**

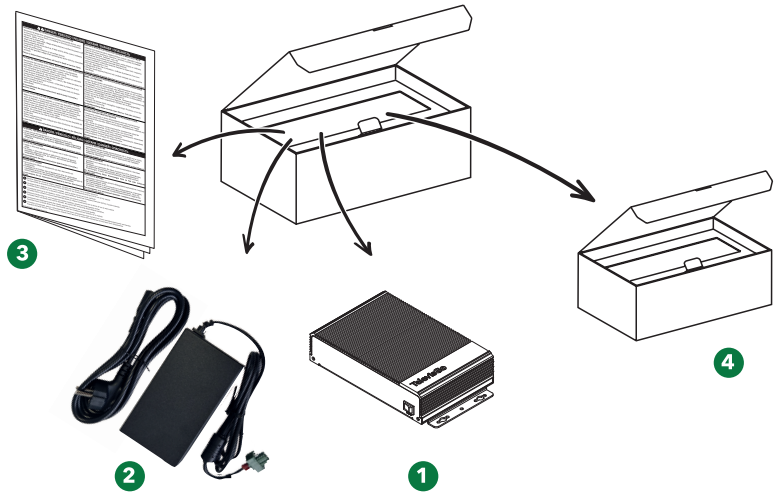
Contact a representative Eliwell for further information regarding compatible accessories.

Depending on your own applications, the following accessories may be purchased separately:

| Accessory | Description |
|---|---|
| **LTE** modem | "MODEM 4G LTE W/ANT PSU TRB 142" model (product code SAM4G0S00AA00).<br>Must be connected to **COM3** or **COM4**. |
| **Serial**Adapter | Module with RS232 / RS485 interface.<br>Must be connected to **COM1** or **COM2**. |
| **Ethernet**Adapter | Module with Ethernet / RS485 interface.<br>**Ethernet**Adaptersupports device networks with Modbus protocol. |
| **Bus**Adapter | Device with TTL/RS485 communication interface for connecting Eliwell controllers to the RS485 fieldbus. |

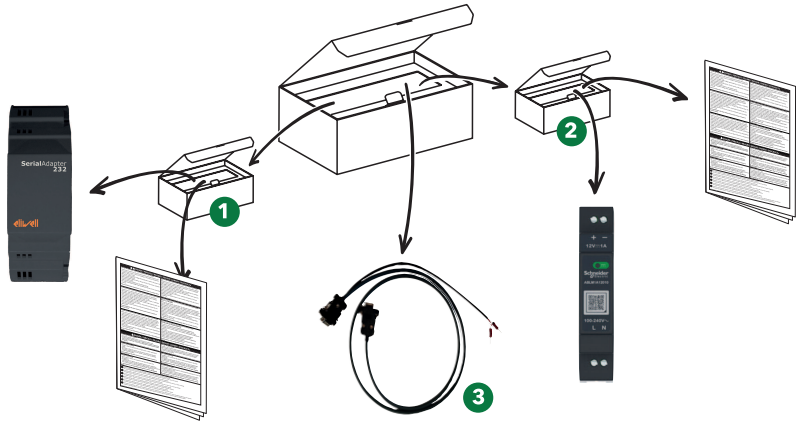
# Pack Contents

### TelevisGo v10 C




| Label | Description |
|---|---|
| 1 | Televis**Go** v10 C device |
| 2 | Televis**Go** v10 C power supply unit and power cable |
| 3 | Televis**Go** v10 C instruction sheet. |
| 4 | 1x **Serial**Adapter kit (see 'KIT **Serial**Adapter' section) |

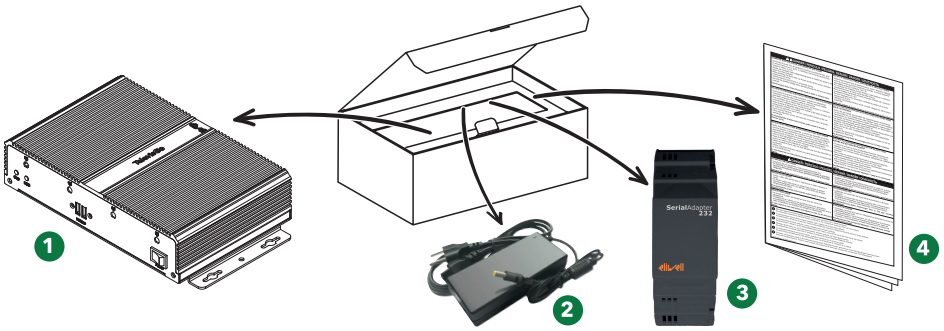
### KIT SerialAdapter




| Label | Description |
|---|---|
| 1 | **Serial**Adapter device (1) with relative Instruction sheet |
| 2 | **Serial**Adapter power supply (1) with relative Instruction sheet |
| 3 | **Serial**Adapter connection wiring with Televis**Go** v10(1) |

**(1)**: One **Serial**Adapter kit is supplied with the Televis**Go** v10. Additional kits can be purchased separately (code: KIT SAT1AMM1000AK).

### TelevisGo v10 DP




| Label | Description |
|---|---|
| 1 | Televis**Go** v10 DP device |
| 2 | Televis**Go** v10 DP power supply unit and power cable |
| 3 | **Serial**Adapter device |
| 4 | Televis**Go** v10 DP instruction sheet |

# Languages supported

The software features the following languages:

- Italian
- English
- Spanish
- German
- French
- Russian
- Dutch
- Polish
- Portuguese
- Chinese
- Turkish
- Japanese

# Browser

## Browsers supported

| Platform | Browser | Minimum version |
|---|---|---|
| Personal Computer | Google Chrome | 98 |
| | Microsoft Edge | 98 |
| | Safari | 15.4 |
| Tablet/Smartphone | Android browser | 116 |
| | Google Chrome for Android | 116 |
| | Safari for iOS | 15.4 |

## Browsers not supported

| Platform | Browser | Minimum version |
|---|---|---|
| Personal Computer | Firefox | 94 |
| Tablet/Smartphone | Firefox for Android | 116 |
| | Samsung Internet | 18 |
| | Opera mobile | 73 |

## Updating the application

The cache settings can influence the loading process of the new system version.

| ***NOTICE*** |
|---|
| **INOPERABLE DEVICE**<br>Following an application update, clear the browser history used to access the system.<br>**Failure to follow these instructions can result in equipment damage.** |

# Types of network that can be monitored

Communication between Televis**Go** v10 and **Serial**Adapter is susceptible to electromagnetic interference and the transmission of alarm signals may not be possible.

**⚠ WARNING**

**UNINTENDED EQUIPMENT OPERATION**

- Install TelevisGo v10 and SerialAdapter in an environment in which EMC disturbance is below the limits specified in standard EN61000-6-1 (residential, commercial and light industry environments).
- Configure the "LifeTest" function to make sure the TelevisGo v10 is active. Non-receipt of the periodic email indicates a malfunction of the TelevisGo v10 or the email sending service.
- The load equivalent to all the bus RS485 nodes should not exceed 30 Unit Load (for the definition of Unit Load refer to standard TIA/EIA-485-A).
- For the connection to the supervision system, use a specific shielded “twisted pair” cable (for example: BELDEN cable model 8762).

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

Televis**Go** v10 has been approved for the following networks:

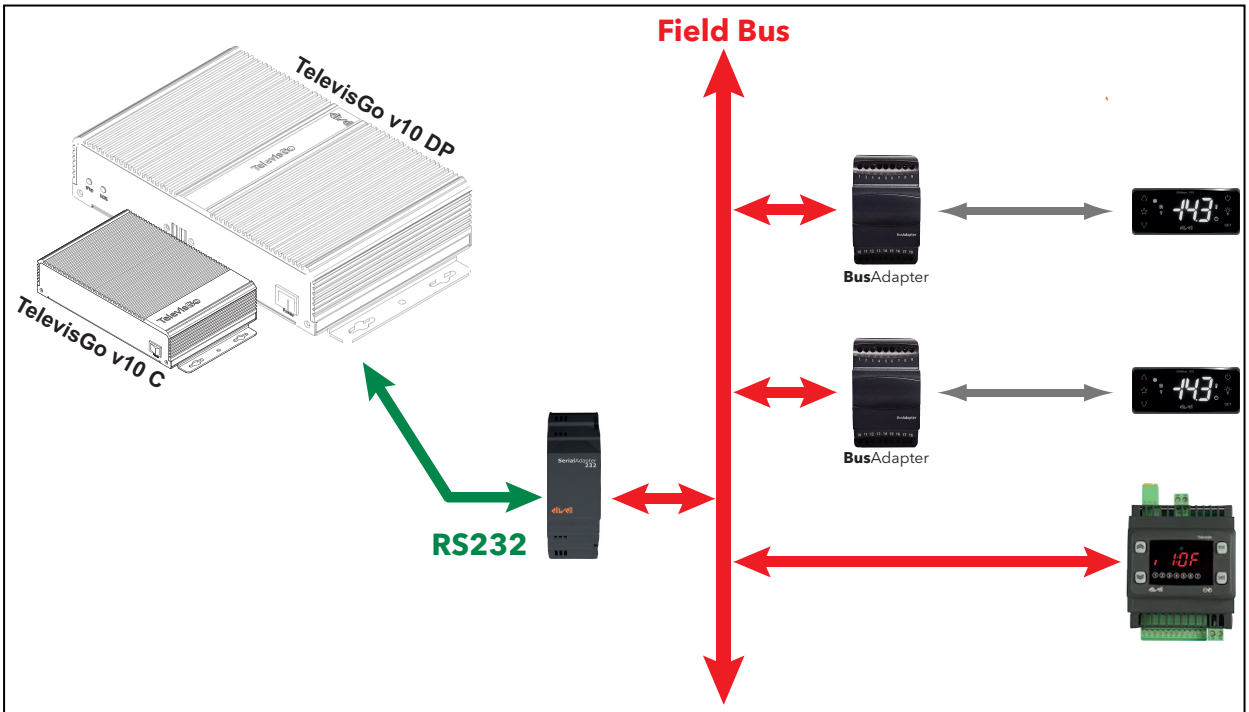
- **RS232/RS485** networks which use the **Serial**Adapter module as a gateway.
- **Ethernet/RS485** networks which use the **Lan**Adapter/**Ethernet**Adapter module as a gateway.

Signal propagation in an Ethernet network depends on bus traffic, making access times to the **Lan**Adapter or the **Ethernet**Adapter non-deterministic and potentially influencing Televis**Go** v10 access time to the various resources with possible No-Link.

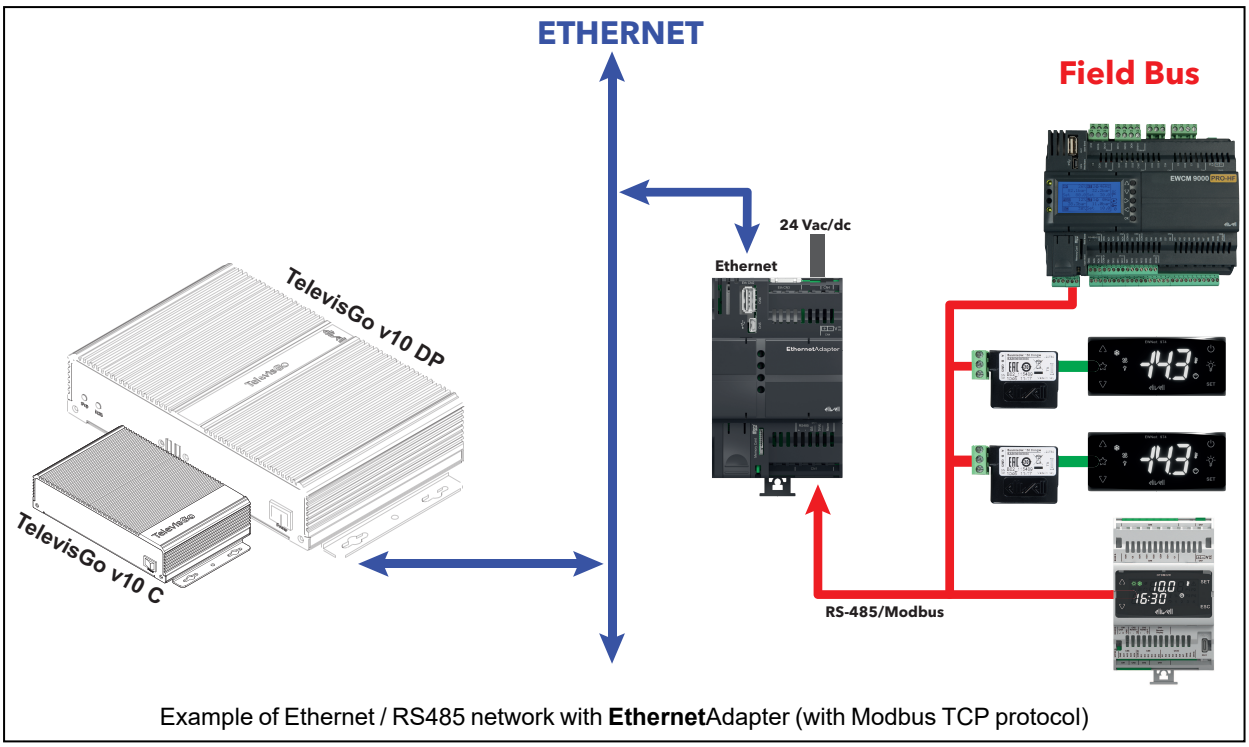
***NOTICE***

**INOPERABLE DEVICE**
Eliwell guarantees the correct operation of networks using a maximum of 10 LanAdapter devices or 10 EthernetAdapter devices.
**Failure to follow these instructions can result in equipment damage.**

Examples of usable networks are given below:




Example of RS232 / RS485 network




Example of Ethernet / RS485 network with **Ethernet**Adapter (with Modbus TCP protocol)

# Compatible modems

Televis**Go** v10 is compatible with RS232-interface LTE/GSM modems:

- powered by SIEMENS TC35-type technology.
- "MODEM 4G LTE W/ANT PSU TRB 142" model (product code SAM4G0S00AA00).

| ***NOTICE*** |
| --- |
| **INOPERABLE DEVICE**<br>Make sure the PIN code on the Modem SIM card is disabled.<br>**Failure to follow these instructions can result in equipment damage.** |

GSM modem connection can be performed directly via RS232.

# Compatible devices

The list of compatible devices and the corresponding drivers is available on the website www.eliwell.com.

# Hardware compatible with TelevisGo v10

The Televis**Go** v10 DP software is compatible with and can be installed on all models with the code **TGOFXE•••••••**, **TGOEXE•••••••**, **TGODXE•••••••** and **TGODQE•••••••**

# Configuring the TelevisGo v10

Users should be aware of the following:

- The default time zone is **GMT+1**
- Televis**Go** v10 requires the creation of secure passwords for all users. On first access, only the “Administrator” user will be present.
  To access, enter **Administrator** as the user and **0 (zero)** as the default password and you will be redirected to the password change page.
- Disconnect the USB devices after every maintenance procedure.

**⚠ WARNING**

**UNAUTHORISED ACCESS**
Do not give the password to unauthorized individuals or non-qualified personnel.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

Carefully consider the implications of giving access to other people.

***NOTICE***

**LOSS OF FUNCTION**
Loss of the Administrator user password prevents access to system configuration. The password cannot be recovered.
**Failure to follow these instructions can result in equipment damage.**

**NOTE**: in the event of a lost password, contact Eliwell Technical Support to have it reset. The procedure requires Technical Support to be able to connect to Televis**Go** v10 remotely.

**NOTE**: a secure password is one that has not been shared with or given to unauthorized personnel, and that does not contain personal or otherwise obvious information. Do not exceed 50 characters and only use alphanumeric characters.

**NOTE**: Minimum password security criteria. For more information, please refer to the Microsoft website (https://learn.microsoft.com/en-us/windows/security/threat-protection/security-policy-settings/password-must-meet-complexity-requirements):

- Minimum 8 characters
- 1 numerical digit (0, 1, ... , 9)
- 1 uppercase letter (A, B, ... , Z)
- 1 lowercase letter (a, b, ... , z)
- 1 special character (|¦`!" $%^&*()_+-=[]{};:'@#~<>,./?)

Televis**Go** v10 is dedicated exclusively to executing the pre-installed application.
Installing any other type of application may negatively affect the running of the entire system. The only installation permitted is anti-virus software.

***NOTICE***

**INOPERABLE DEVICE**

- Do not install any software on the TelevisGo v10 device with the exception of an anti-virus program.
- Make sure USB storage devices are disconnected to ensure the correct reboot of the computer.
- Make sure the anti-virus program installed does not block the TCP/UDP ports used by TelevisGo v10.
- Make sure the anti-virus program installed does not conflict with TelevisGo v10.
- Make sure the actions performed by the anti-virus program do not impact system performance.
- Do not inhibit active TelevisGo v10 services.
- Do not delete the “Eliwell” folder in the main directory on the “C:\” drive, nor any of the files or folders stored in it.

**Failure to follow these instructions can result in equipment damage.**

The user is responsible for choosing the type of anti-virus software to be installed.

# Cybersecurity

## Contents

This section includes the following topics:

Overview ..... 26
User management ..... 26
List of protocols and ports managed ..... 27
Operating System Password ..... 28
I.T. secure configuration recommendations ..... 30

# Overview

This Eliwell product features functions that enable I.T. security.
These functions are come in a default status and can be configured according to your own installation requirements.

**NOTE**: deactivating or changing the settings for these individual functions can positively or negatively affect the overall strength of the device security and ultimately, the security-related behavior of the network.

It is also necessary to observe best practices in order to guarantee advanced system protection and ensure the security of the system as a whole.
For more information, please refer to: "Cybersecurity Best Practices" (English language only).

Eliwell adheres to industry best practices in the development and implementation of control systems. This includes a Defense-in-Depth approach to guarantee an industrial control system. This approach protects the controller with one or more firewalls to limit access exclusively to authorized personnel and protocols.

**⚠ WARNING**

**UNAUTHORISED ACCESS AND SUBSEQUENT NETWORK INTRUSION**

- Assess whether the room or the machines are connected to the critical infrastructure and, if so, take suitable preventative measures, based on "defense-in-depth" strategy, before connecting the automation system to any network.
- Minimize the number of devices connected to a network.
- Isolate your industrial network from other networks within the company.
- Protect any network from unintentional access using firewalls, VPNs or other proven security measures.
- Monitor activity within the systems.
- Prevent direct access or direct connection to the devices concerned by unauthorized individuals or unauthorized actions.
- Prepare a restore plan that includes system backup and process information.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

# User management

User management is used to create groups of users with configurable authorizations.

Access can be limited to a few functions by assigning individual users to a group.

There are 5 default groups:

- **Administrators**: editing rights for all functions
- **Operators/Users/Services**: editing rights for selected functions
- **Readers**: viewing rights for selected functions

Only an administrator (**Administrator**) or authorized user can add, edit or remove users and groups.

# List of protocols and ports managed

Enabling protocols or ports can lead to cyber security issues.
For further information, please refer to: "Cybersecurity Best Practices" (English language only).

The following is a list of ports/services that are enabled and can be configured:

- Webserver: port 443 (HTTPS)
- Modbus TCP: 502
- XML: 8080 (data transfer)

The following is a list of enabled security methods:

- Firewall enabled to prevent external access to port 80
- Remote Desktop disabled: port 3389/TCP RDP
- Port 139/TCP NetBios closed
- Port 137/UDP NetBios closed
- Port 445/TCP SMB closed

# Operating System Password

## Overview

On first access, you will be prompted to change the operating system password for security reasons.

Carefully consider the implications of giving access to other people.

| ⚠ WARNING |
| --- |
| **UNAUTHORISED ACCESS**<br>• Change the default password immediately, replacing it with a new and secure password.<br>• Do not give the password to unauthorized individuals or non-qualified personnel.<br>**Failure to follow these instructions can result in death, serious injury, or equipment damage.** |

**NOTE**: a secure password is a password which has not been shared or circulated amongst unauthorized personnel and which does not contain personal or obvious information. Furthermore, a combination of upper-case and lower-case letters and numbers offers greater security. The password must contain at least 8 characters. Please refer to the Microsoft website for further information (https://learn.microsoft.com/en-us/windows/security/threat-protection/security-policy-settings/password-must-meet-complexity-requirements):

- 1 numerical digit (0, 1, ... , 9)
- 1 uppercase letter (A, B, ... , Z)
- 1 lowercase letter (a, b, ... , z)
- 1 special character (|¦`!" $%^&*()_+-=[]{};:'@#~<>,./?)

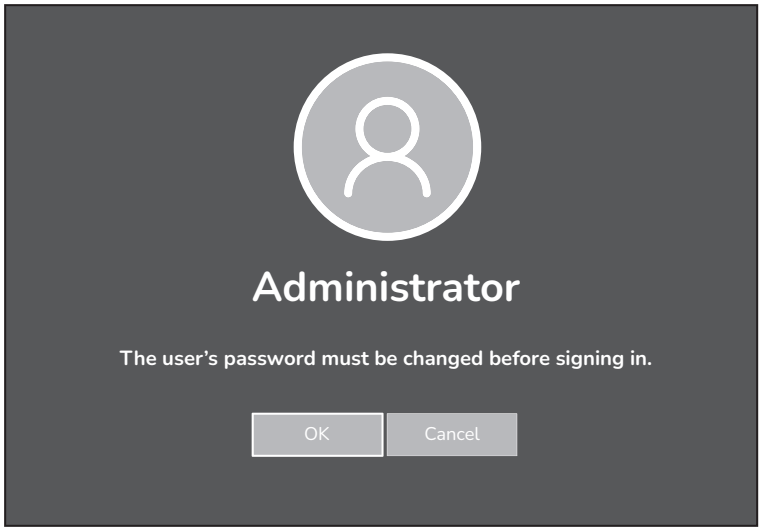
| *NOTICE* |
| --- |
| **LOSS OF FUNCTION**<br>Loss of the Administrator user password prevents access to system configuration. The password cannot be recovered.<br>**Failure to follow these instructions can result in equipment damage.** |

**NOTE**: Adopt cybersecurity best practices (for example: minimal privileges, separation of functions, etc.) to prevent unauthorized exposure, loss of or changes to data and registries, the interruption of services or accidental operation.

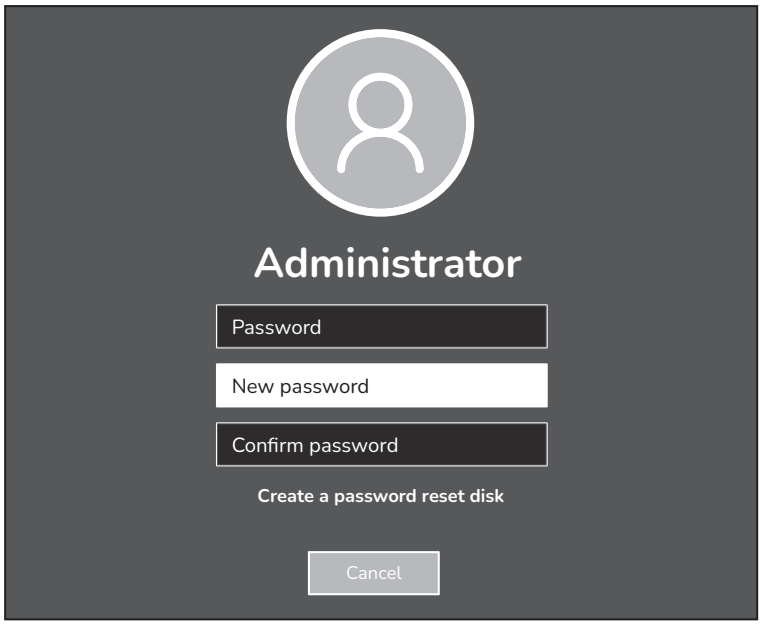
**NOTE**: Refer to company rules concerning password expiry.

## Set Password at First Access

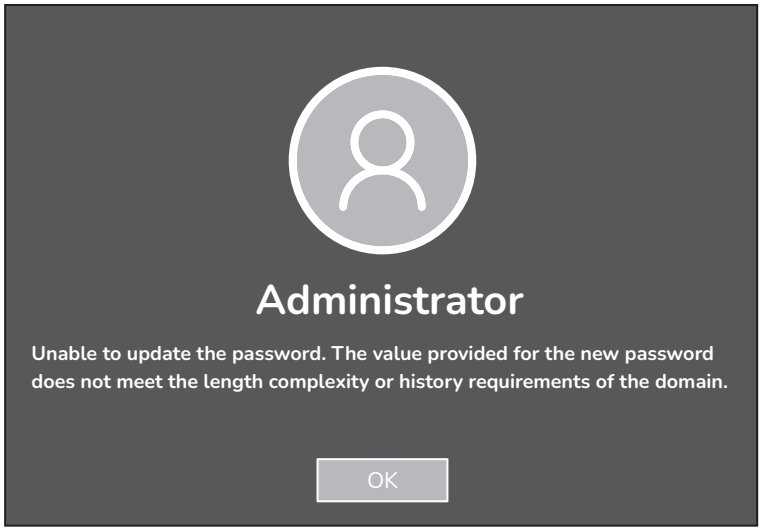
1. Switch on Televis**Go** v10. The following screen will appear:



2. Click "OK". The following screen will appear:




3. Enter the current Password: Leave the box empty
4. Enter the New Password (at least 8 characters)
5. Enter the New Password to confirm
6. If the Password does not meet the requirement for the minimum number of characters, the following screen will appear:




**NOTE**: a secure password is one that has not been shared with or given to unauthorized personnel, and that does not contain personal or otherwise obvious information. Do not exceed 50 characters and only use alphanumeric characters.
**NOTE**: The password must contain at least 8 characters. Please refer to the Microsoft website for further information (https://learn.microsoft.com/en-us/windows/security/threat-protection/security-policy-settings/password-must-meet-complexity-requirements):

- 1 numerical digit (0, 1, ... , 9)
- 1 uppercase letter (A, B, ... , Z)
- 1 lowercase letter (a, b, ... , z)
- 1 special character (|¦`!" $%^&*()_+-=[]{};:'@#~<>,./?)

# I.T. secure configuration recommendations

There are several recommendations available for secure configuration of the device.

- Do not add more users than those requiring access and evaluate the system requirements before allowing users access to critical pages, for example **Firewall management** or **Device settings**.
- Limit the number of IP addresses that can access the Televis**Go** v10 DP.

**⚠ WARNING**

**POTENTIAL COMPROMISE OF SYSTEM AVAILABILITY, STATE AND SECURITY**

- Deactivate unused ports/services and default accounts, if possible, to minimize communication channels for damaging attacks.
- Position the network devices behind various cyber defense levels (firewalls, network segmenting and network intrusion detection and protection systems).
- Adopt cyber security best practices (for example: minimal privileges, separation of functions, etc.) to prevent unauthorized exposure, loss of or changes to data and registries, the interruption of services or accidental operation.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

**NOTE**: the table below contains the risks and best practices associated with unprotected protocols. We strongly recommend adhering to these best practices.

| Unprotected protocols | Risks | Best practices |
|---|---|---|
| **SMTP** | • malware threat<br>• unauthorized access to data<br>• data loss threat<br>• email content transferred to normal text | For publication:<br>• select SMTP with SSL/TLS or SMART TLS configured for publication |
| **HTTP** | • cross-site scripting<br>• management of authentication and malfunctioning session<br>• cross-site request forgery<br>• interception and tampering | For network configuration:<br>• disable HTTP<br>• select HTTPS for network connections<br>For publication:<br>• do not select HTTP<br>• select HTTPS with authentication |
| **FTP** | • FTP brute-force attack<br>• packet sniffing<br>• spoofing attack<br>• user credentials may be compromised, as the entire authentication is carried out in unencrypted text | For publication:<br>• do not use FTP<br>• select HTTP with authentication or SMPT with SSL/TLS or SMART TLS configured for publication |
| **Modbus TCP/IP** | • message interception<br>• information acquisition<br>• arbitrary command release<br>• unauthorized users can harvest and/or tamper with device configurations | For Modbus device communications:<br>• limit access to Modbus communications using the Modbus TCP/IP filter<br>• disable the Modbus port for each network interface when not in use |

# Mechanical installation

## Contents

This section includes the following topics:


Before starting ..... 32
Disconnecting Power ..... 32
Operating environment ..... 33
Installation Considerations ..... 33
TelevisGo v10 C Mechanical Installation ..... 34
TelevisGo v10 DP Mechanical Installation ..... 35

# Before starting

Read and understand this chapter before beginning the installation of your system.
Pay particular attention in conforming to any safety information, different electrical requirements, and normative standards that would apply to your machine or process in the use of this equipment.
The use and application of the information contained herein require expertise in the design and programming of automated control systems. Only you, the user, machine builder or integrator, can be aware of all the conditions and factors present during installation and setup, operation, and maintenance of the machine or process, and can therefore determine the automation and associated equipment and the related safeties and interlocks which can be effectively and properly used. When selecting automation and control equipment, and any other related equipment or software, for a particular application, you must also consider any applicable local, regional or national standards and/or regulations.

**⚠ WARNING**

**REGULATORY INCOMPATIBILITY**
Be sure that all used equipments and designed systems comply with all applicable local, regional and national regulations and standards.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

# Disconnecting Power

Assemble and install all options and modules before installing the control system.
Before dismantling the equipment, remove the control system from the wall or panel.

**⚠ ⚠ DANGER**

**HAZARD OF ELECTRIC SHOCK, EXPLOSION, FIRE OR ARC FLASH**

- Disconnect all power from all equipment including connected devices prior to removing any covers or doors, or installing or removing any accessories, hardware, cables or wires.
- Always use a properly rated voltage sensing device to confirm the power is off where and when indicated.
- Before powering the device back up, fit back and fix all the covers, hardware components and wiring.
- Verify the earthing connections on all earthed devices.
- Use this device and all connected products only at the specified voltage.

**Failure to follow these instructions will result in death or serious injury.**

# Operating environment

This equipment is designed to operate in non-hazardous locations and where applications which generate (or could potentially generate) hazardous environments have been isolated. Install this equipment only in areas and with applications known to be constantly free from hazardous atmospheres.

**⚠ DANGER**

**RISK OF EXPLOSION**

- Install and use this equipment in non-hazardous locations only.
- Do not install or use this equipment in applications which could generate hazardous atmospheres, such as those which use flammable refrigerants.

**Failure to follow these instructions will result in death or serious injury.**

For information regarding the use of control equipment in applications capable of generating hazardous materials, please contact the relevant national regulatory bodies or certifying authorities.

**⚠ WARNING**

**UNINTENDED EQUIPMENT OPERATION**
Install and use this equipment in compliance with the conditions described in the “Technical data” section of this document.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

# Installation Considerations

**⚠ WARNING**

**UNINTENDED EQUIPMENT OPERATION**

- Use appropriate safety interlocks where personnel and/or equipment hazards exist.
- Power line and output circuits must be wired and fused in compliance with local and national regulatory requirements for the rated current and voltage of the particular equipment.
- Do not use this equipment in safety-critical machine functions.
- Do not disassemble, repair, or modify this equipment.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

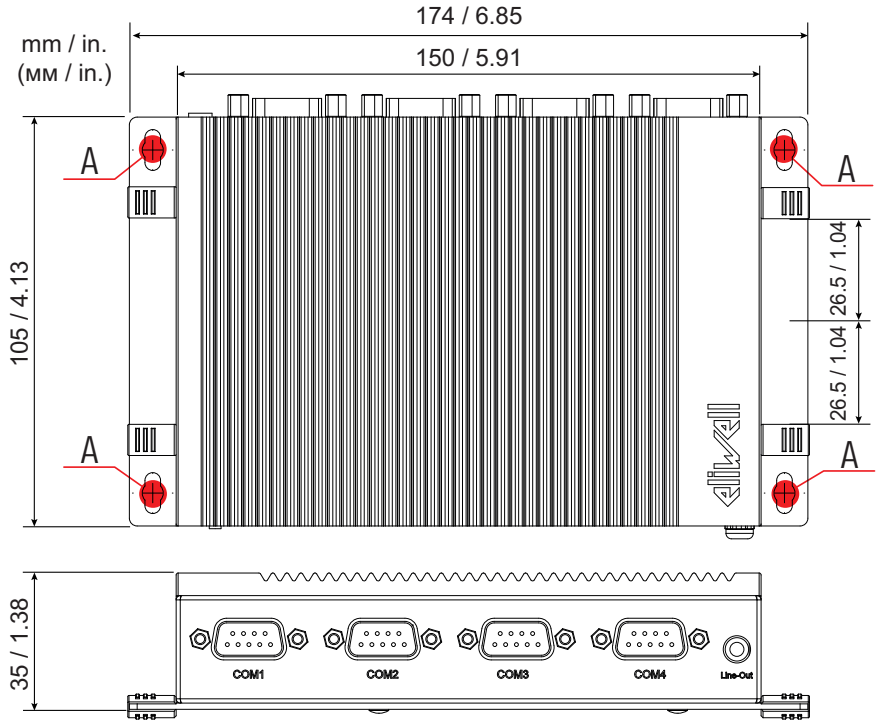
For the mechanical dimensions, refer to "Mechanical dimensions".

# TelevisGo v10 C Mechanical Installation

## Mechanical dimensions

The mechanical characteristics of Televis**Go** v10 C are:

- Length: 174 mm (6.85 in.)
- Depth: 105 mm (4.13 in.)
- Height: 35 mm (1.38 in.)

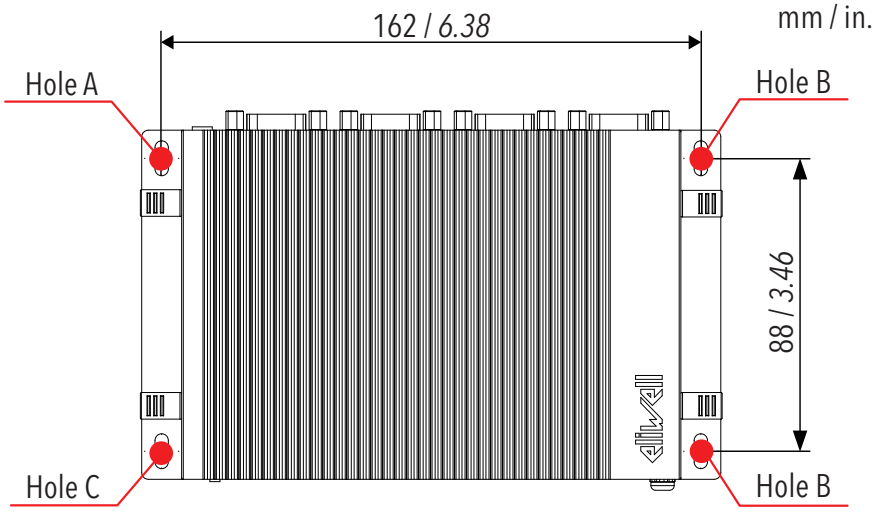



## How to install/uninstall the controller

Televis**Go** v10 C is intended for wall- or panel-mounting (on a flat surface).

**NOTE**: Televis**Go** v10 C is only suitable for indoor use. DO NOT install it outdoors.

To install, secure the device to the wall/panel with 4 screws (not supplied) in line with the holes illustrated in the figure below:



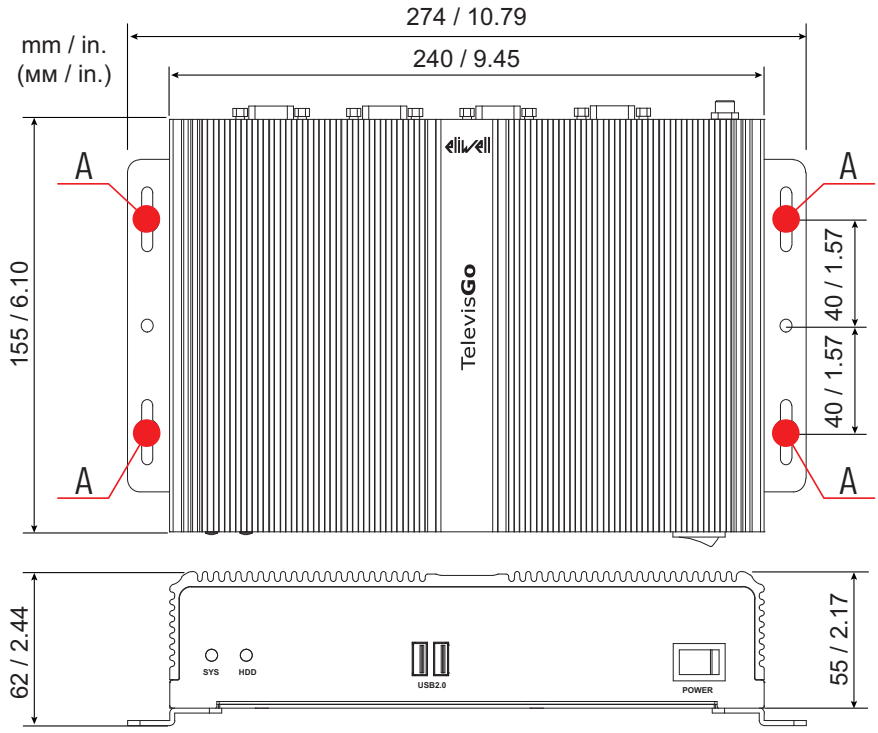

**Note**: leave the area around the slits clear to allow air recirculation and device cooling.

# TelevisGo v10 DP Mechanical Installation

## Mechanical dimensions

The mechanical characteristics of Televis**Go** v10 DP are:

- Length: 274 mm (10.79 in.)
- Depth: 155 mm (6.10 in.)
- Height: 62 mm (2.44 in.)

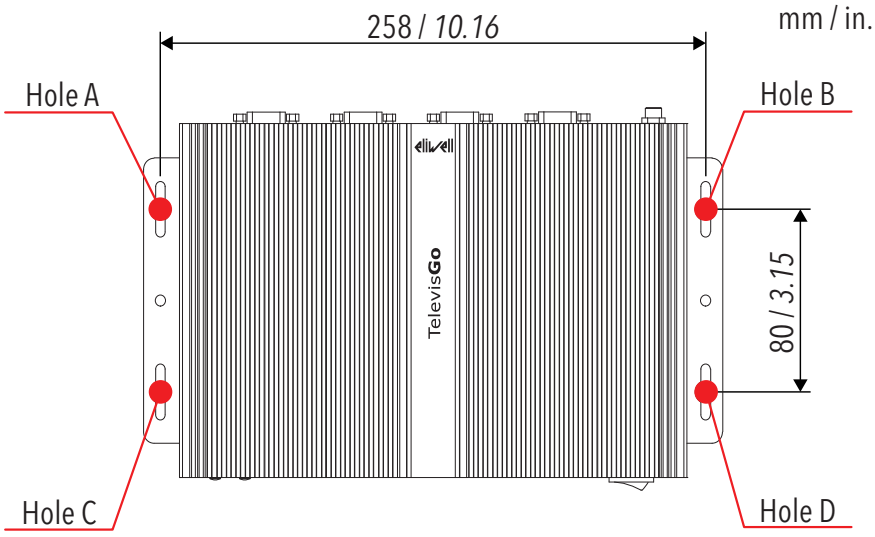



## How to install/uninstall the controller

Televis**Go** v10 DP is intended for wall- or panel-mounting (on a flat surface).

**NOTE**: Televis**Go** v10 DP is only suitable for indoor use. DO NOT install it outdoors.

To install, secure the device to the wall/panel with 4 screws (not supplied) in line with the holes illustrated in the figure below:




**Note**: leave the area around the slits clear to allow air recirculation and device cooling.

# Electrical connections

## Contents

This section includes the following topics:


Best wiring practices ..... 37
Hardware TelevisGo v10 C ..... 40
Hardware for TelevisGo v10 DP ..... 41
Connecting a network ..... 42

# Best wiring practices

## Warnings

The following information describes the guidelines for wiring and the practices to follow when using the Televis**Go** v10 device.

**⚠ ⚠ DANGER**

**HAZARD OF ELECTRIC SHOCK, EXPLOSION, FIRE OR ARC FLASH**

- Disconnect all power from all equipment including connected devices prior to removing any covers or doors, or installing or removing any accessories, hardware, cables or wires.
- Always use a properly rated voltage sensing device to confirm the power is off where and when indicated.
- Before powering the device back up, fit back and fix all the covers, hardware components and wiring.
- Verify the earthing connections on all earthed devices.
- Use this device and all connected products only at the specified voltage.

**Failure to follow these instructions will result in death or serious injury.**

**⚠ WARNING**

**HAZARD OF OVERHEATING AND/OR FIRE**
Install and use the equipment exclusively in a protected environment, to prevent direct exposure to sunlight and atmospheric agents.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

**⚠ WARNING**

**UNINTENDED EQUIPMENT OPERATION**

- Install TelevisGo v10, SerialAdapter and EthernetAdapter in an environment in which EMC disturbance is below the limits specified in standard EN61000-6-1 (residential, commercial and light industry environments).
- Configure the "LifeTest" function to make sure the TelevisGo v10 is active. Non-receipt of the periodic email indicates a malfunction of the TelevisGo v10 or the email sending service.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

**⚠ WARNING**

**LOSS OF CONTROL**

- Carry out a new network scan every time the type, configuration or number of controllers monitored is changed.
- The installation designer must consider the potential failure modes of the control circuit and, for some critical control functions, provide a means for reaching a safe condition during and after a circuit failure. Examples of critical control functions are the emergency stop and end of travel stop, power supply cut-off and restarting.
- Redundant control circuits that are separate from the TelevisGo v10 must be provided for critical control functions.
- The control circuits can incorporate communication equipment such as proxy modems or network gateways. Keep in mind the implications of transmission delays or sudden connection failures.
- Comply with all standards regarding accident protection and local applicable safety directives.
- Every implementation of this device must be tested individually and completely in order to check its proper operation before putting it into service.
- Do not disassemble, repair or modify this equipment.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

## Wiring guidelines

Observe the following standards when wiring the Televis**Go** v10 device:

- Keep the communication wiring separate from the power wiring. Keep these two types of cables in separate conduits.
- Check that the operating conditions and surroundings comply with the specification values.
- Use wires of the correct diameter and suited to the voltage and current requirements.
- Use copper conductors (required).
- Use twisted-pair shielded wires for networks and field buses.

Use shielded wires, correctly earthed for the communication connections. If shielded wires cannot be used for these connections, the electromagnetic interference may deteriorate the signal. Deteriorated signals can result in the device, modules or attached equipment operating incorrectly.

**⚠ WARNING**

**UNINTENDED EQUIPMENT OPERATION**

- Use shielded cables for all communication signals.
- Earth the wire shields for all communication signals in a single point.
- The signal cables (communication and relative power supplies) of the device must be laid separately from the power cables.
- Reduce the length of the connections as far as possible and avoid winding them round electrically connected parts.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

## Connections

The Televis**Go** v10 device has the following communication ports:

- 4 RS232 serial ports
- 1 RJ45 Ethernet port

Take extra care when performing serial line connections.
Incorrect wiring may lead to faulty operation or breakdown of the equipment.

### RS232/RS485

Connection is assured via the **Serial**Adapter and the system device must be connected using a cable with conductors of cross-section 0.5 $mm^2$:

- Use a shielded “twisted pair” cable specifically for RS485. For laying wires, comply with the indications given in standard EN 50174 on information technology wiring. Extra care must be taken in separating data transmission circuits from power lines.
- The length of the RS485 network connected directly to the device is 1200 m (in compliance with ANSI TIA/EIA RS485-A and ISO 8482:1987 (E)).
- Single terminal board with 3 conductors which must all be used (“+” and “-” for the signal; “G” for 0 V earth signal).
- The network must have BUS DAISY CHAIN topology and must be equipped with 120 Ω - 1/4 W electrical termination between the “+” and “-” terminals and each of the two ends of the BUS, or enable those already provided on the devices.

### Ethernet

The Ethernet connection is used by Televis**Go** v10 to communicate on an Ethernet network via TCP/IP protocol. The main Ethernet features are:

- Protocol: Modbus TCP/IP
- Type of connector: RJ45
- Driver: 10 M / 100 M with auto-negotiation
- Cable type: shielded

## Special Handling Considerations

When handling the equipment, use caution to avoid damage caused by electrostatic discharge. In particular, contact with uncovered connectors is likely to damage the controller due to electrostatic discharge.

**⚠ WARNING**

**UNINTENDED EQUIPMENT OPERATION DUE TO ELECTROSTATIC DISCHARGE**

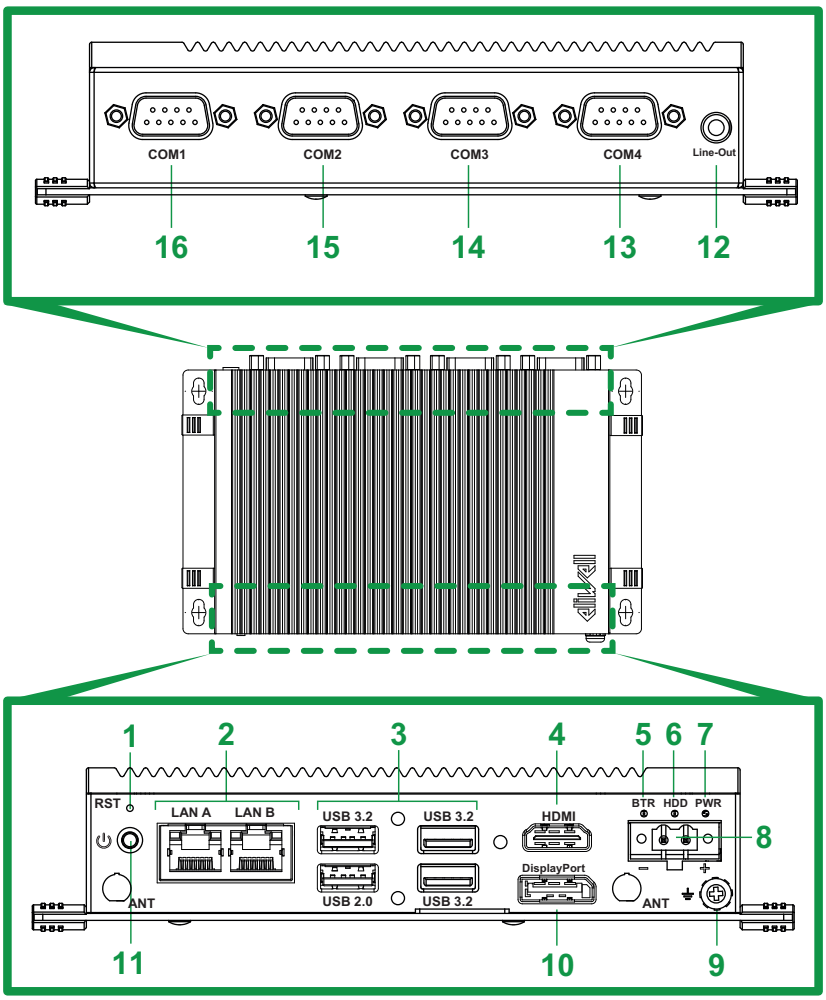
- Store the equipment in the protective packaging until ready for installation.
- Before handling the equipment, always discharge the static electricity from the body by touching an earthed surface or type-approved antistatic mat.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

Before any operations, check that the device is connected to a suitable external power supply. Please refer to "Power supply".

# Hardware TelevisGo v10 C

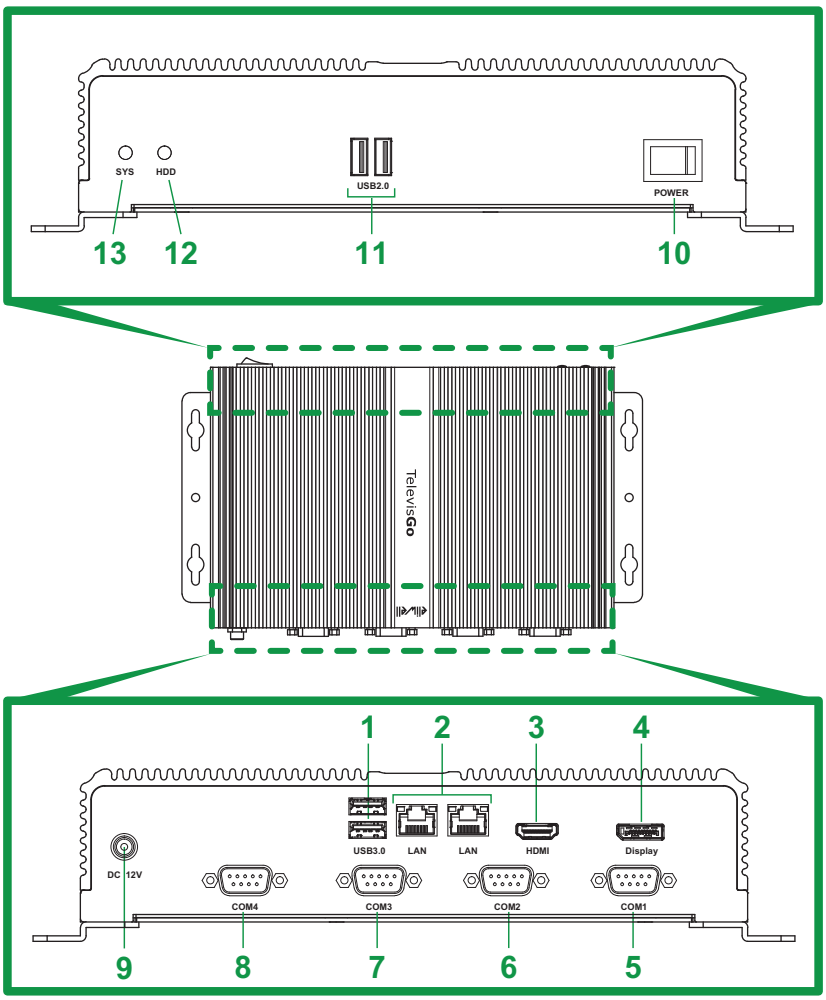
The Televis**Go** v10 C connectors are as follows:




| Number | Label | Description |
|---|---|---|
| **1** | RST | Reset button |
| **2** | LAN | 2x Ethernet ports RJ45 (LAN A and LAN B) |
| **3** | USB | 1x USB 2.0 port and 3x USB 3.2 ports |
| **4** | HDMI | HDMI port - for external monitor |
| **5** | BTR | Battery status LED |
| **6** | HDD | HDD operating LED |
| **7** | PWR | Power LED. PWR (Power): Green LED = normal operation and amber LED = standby |
| **8** | DC 12V | 12 Vdc power supply connector |
| **9** | GND | Televis**Go** v10 C grounding connection |
| **10** | Display | Display port - for external monitor |
| **11** | ⏻ | ON/OFF button |
| **12** | Line-Out | Audio output |
| **13** | COM4 | COM4 (RS232) serial port - for external modem |
| **14** | COM3 | COM3 (RS232) serial port - for external modem |
| **15** | COM2 | COM2 (RS232) serial port - for **Serial**Adapter |
| **16** | COM1 | COM1 (RS232) serial port - for **Serial**Adapter |

# Hardware for TelevisGo v10 DP

The Televis**Go** v10 DP connectors are as follows:



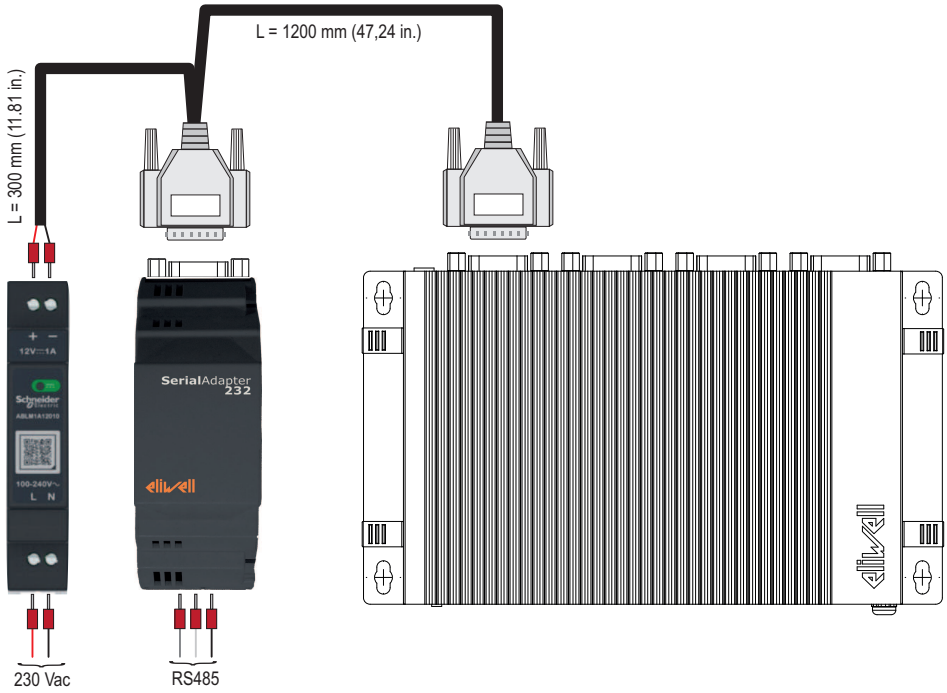

| Number | Label | Description |
|---|---|---|
| **1** | USB 3.0 | 2x USB 3.0 ports |
| **2** | LAN | 2x Ethernet ports RJ45 (LAN A and LAN B) |
| **3** | HDMI | HDMI port - for external monitor |
| **4** | Display | Display port - for external monitor |
| **5** | COM1 | COM1 (RS232) serial port - for **Serial**Adapter |
| **6** | COM2 | COM2 (RS232) serial port - for **Serial**Adapter |
| **7** | COM3 | COM3 (RS232) serial port - for external modem |
| **8** | COM4 | COM4 (RS232) serial port - for external modem |
| **9** | DC 12V | 12 Vdc power supply connector |
| **10** | ⏻ | ON/OFF button |
| **11** | USB | 2x USB 2.0 ports |
| **12** | HDD | HDD operating LED |
| **13** | SYS | Power supply LED |

# Connecting a network

**Serial**Adapter, **Lan**Adapter, **Ethernet**Adapter or Modbus TCP modules and system devices must be connected using a cable with conductors with cross-section 0.5 $mm^2$ (see "Connections").

## SerialAdapter connection

Carry out the connection of the **Serial**Adapter module to the Televis**Go** v10 unit, including its power supply, as follows:



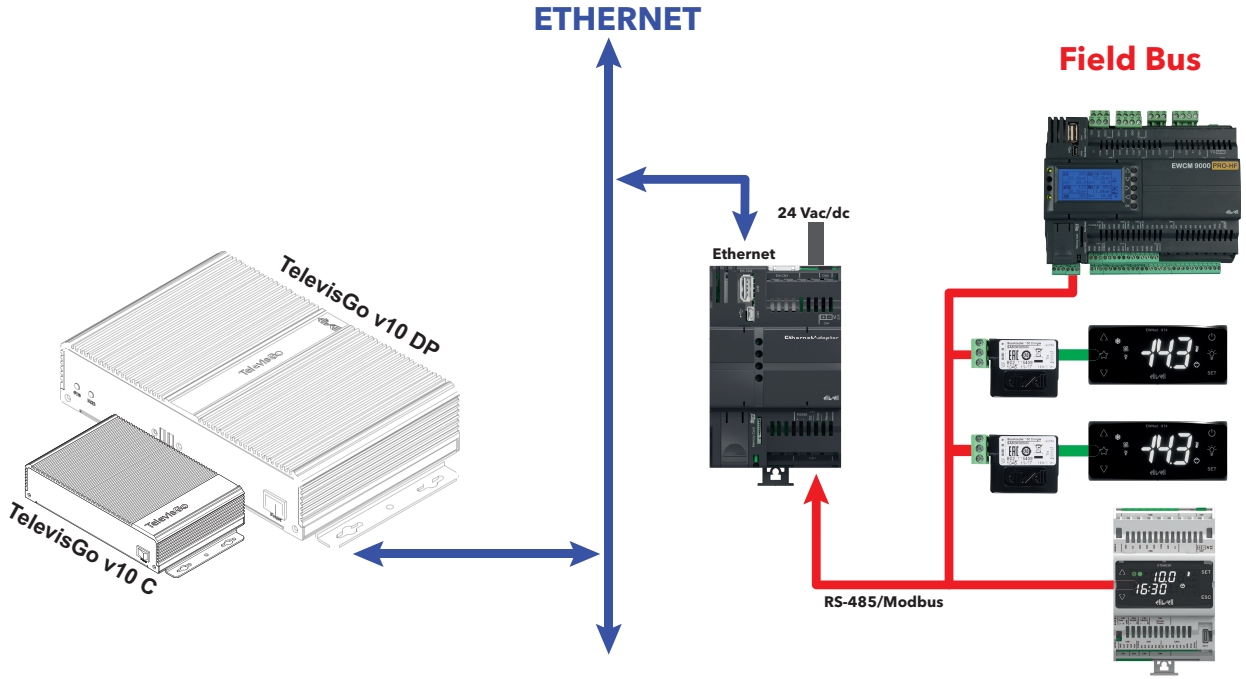

## Device configuration

Before configuring a network using Televis**Go** v10, each device in the network must be assigned a unique address within the same serial port, **Lan**Adapter or **Ethernet**Adapter, setting the following parameters based on the device protocol used:

- Device with Micronet protocol: parameters “**FAA**” (0...14) and “**dEA**” (0...14).
- Device with Modbus protocol: parameter “**Adr**” (1...255).

## Network connected with Ethernet / serial gateway Modbus (EthernetAdapter)

An Ethernet/RS485 network is connected via **Ethernet**Adapter as follows:




In the example the following devices were used:

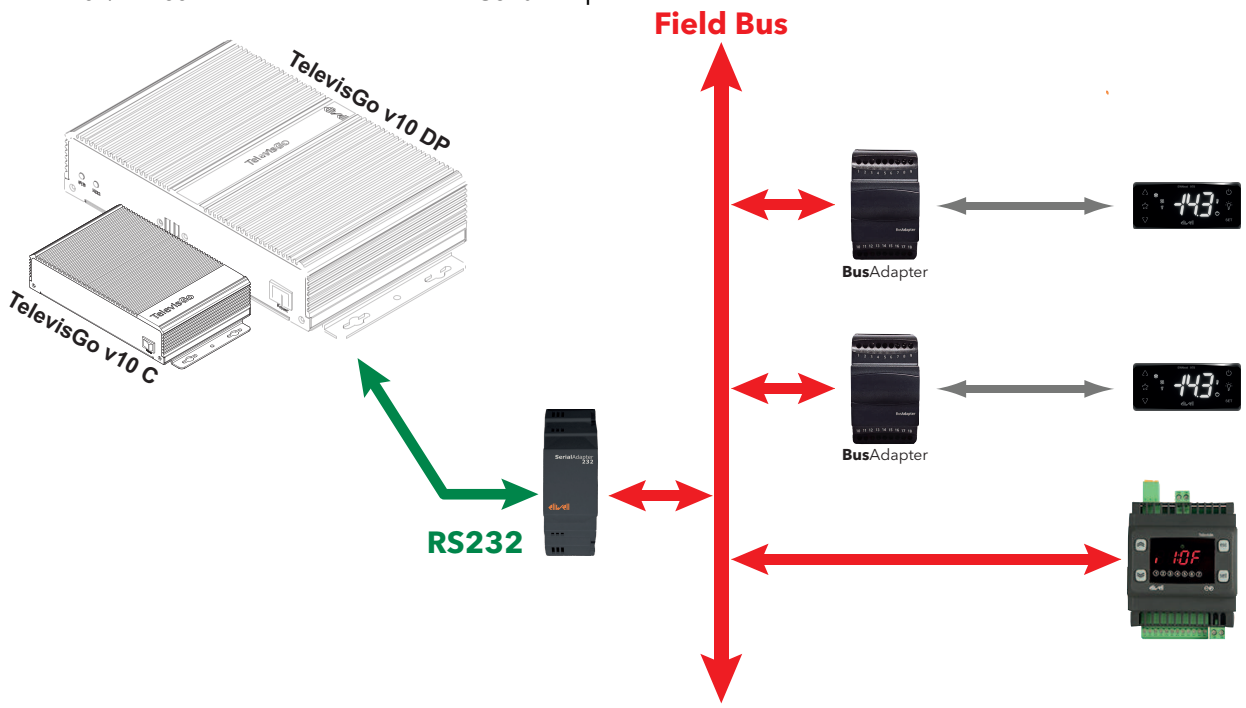
- 1 **Ethernet**Adapter
- 1 EWCM 9000 PRO-HF
- 2 **Bus**Adapter 150 Dongle
- 2 EWNext
- 1 Televis**In**

Signal propagation in an Ethernet network depends on bus traffic, making access times to the **Ethernet**Adapter non-deterministic and potentially influencing Televis**Go** v10 access time to the various resources with possible No-Link.

| ***NOTICE*** |
| --- |
| **INOPERABLE DEVICE**<br>If connection proves difficult, check if the right profile has been assigned to the network; if not, change it accordingly.<br>**Failure to follow these instructions can result in equipment damage.** |

## Network connected with RS232

An RS232/RS485 network is connected via a **Serial**Adapter as follows:




In the example the following devices were used:

- 1x **Serial**Adapter
- 3x **Bus**Adapter
- 3x EWNext

The **Serial**Adapter converter can only be connected to **COM1** or **COM2** as it is powered by them. Other serial accessories (modems) must be connected to serials **COM3** or **COM4**.

| ***NOTICE*** |
| --- |
| **INOPERABLE DEVICE**<br>Select the serial port which is suitable for the accessory you want to connect.<br>**Failure to follow these instructions can result in equipment damage.** |

# Technical specifications

## Contents

This section includes the following topics:


Technical data ..... 46
Further information ..... 48
Power supply ..... 48

# Technical data

## TelevisGo v10 C Technical data

| Feature | Description |
|---|---|
| The product also complies with the following harmonized standards: | EN 62368-1 |
| Product group: | End product |
| Classification of use by: | Skilled person |
| Equipment mobility: | Mobile |
| Method of mounting: | see section "Installation" |
| Degree of protection provided by enclosure: | IP30 |
| Pollution degree: | 2 |
| Insulation class: | III |
| Power supply: | 10...36 Vdc - via external power supply 100...240 Vac (±10 %) 50/60 Hz(*) |
| Power supply connection type: | Not directly connected to line voltage (ES1) |
| Power systems: | Not to the AC line voltage |
| Ambient operating conditions: | Temperature: -20...60 °C (-4...140 °F)<br>with airflow of 0.7 m/s (according to IEC Standard 60068-2-14).<br>Humidity: 10…95% RH (non-condensing) |
| Transportation and storage conditions: | Temperature: -40...85 °C (-40...185 °F)<br>Humidity: 10...95% RH (non-condensing) |
| Manufacturer's specified Tma (°C): | 60 °C |
| Altitude during operation (maximum): | 2000 m (6560 ft) |
| Mass of equipment: | 0.80 kg (1.80 lb) |
| Special installation location: | Restricted access area |

(*) Only use the power adapter supplied or equivalent 100…240 Vac - 50/60 Hz - 24 Vdc ±10% 60 W. Contact Eliwell Technical Support for details.

**⚠ WARNING**

**UNINTENDED EQUIPMENT OPERATION**
Do not exceed any of the nominal values specified in the environmental and electric characteristics tables.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

## TelevisGo v10 DP Technical data

| Feature | Description |
|---|---|
| The product also complies with the following harmonized standards: | EN 62368-1 |
| Product group: | End product |
| Classification of use by: | Skilled person |
| Equipment mobility: | Mobile |
| Method of mounting: | see section "Installation" |
| Degree of protection provided by enclosure: | IPX0 |
| Pollution degree: | 2 |
| Insulation class: | III |
| Power supply: | 12 Vdc - via external power supply 100...240 Vac (±10 %) 50/60 Hz(*) |
| Power supply connection type: | Not directly connected to line voltage (ES1) |
| Power systems: | Not to the AC line voltage |
| Ambient operating conditions: | Temperature: 0...40 °C (32...104 °F)<br>with airflow of 0.5 m/s (according to IEC Standard 60068-2-14).<br>Humidity: 10…90% RH (non-condensing) |
| Transportation and storage conditions: | Temperature: -20...60 °C (-4...140 °F)<br>Humidity: 10...90% RH (non-condensing) |
| Manufacturer's specified Tma (°C): | 40 °C |
| Altitude during operation (maximum): | 2000 m (6560 ft) |
| Mass of equipment: | 1.94 kg (4.28 lb) |
| Special installation location: | Restricted access area |

(*) Only use the power adapter supplied or equivalent 100…240 Vac - 50/60 Hz - 24 Vdc ±10% 60 W. Contact Eliwell Technical Support for details.

**⚠ WARNING**

**UNINTENDED EQUIPMENT OPERATION**
Do not exceed any of the nominal values specified in the environmental and electric characteristics tables.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

# Further information

| Feature | Description |
|---|---|
| Maximum number of devices connected: | 224 |
| Operating system: | Windows 10 IoT Enterprise LTSC 2021 (English).<br>**NOTE**: the label with the license number is applied to the device |
| User interface: | User interface for supervision and remote control |
| Software update: | Remote (via internet) |
| Connections: | • Ethernet (RJ45)<br>• external GSM modem<br>• integrated USB |
| Power failures: | Non-volatile internal memory, duration 10 years |
| Registration interval: | Can be configured between 1 minute and 2 hours (default 15 minutes) (1) |
| Registration time: | 1 year's worth of data guaranteed for 1500 analogue resources (if registration interval is 15 minutes) (2) |
| Maximum relative weather measurement error and weather recording error: | < 0.1 % |
| Climate range: | 'type A' in air |
| Languages supported: | Italian / English / Spanish / German / French / Russian / Dutch / Polish / Portuguese / Chinese / Turkish / Japanese |

(1) The minimum interval that can be set to make certain of re-reading all resources depends on the network response time (see "Real-time data").

(2) The presence of digital resources or machine statuses subject to a higher or lower number of variations may change the duration of the specified archive period. In this case, refer to the archive user interface pages to verify the memory capacity of your system (see "Registration interval settings").

# Power supply

The device is powered at 10...36 Vdc (Televis**Go** v10 C) or 12 Vdc (Televis**Go** v10 DP) via an external power supply 100...240 Vac (±10%) 50/60 Hz.
According to the requirements of the individual unit and/or the country of installation, if the mains voltage in the country is within the operating range, the device can be connected directly to the mains.
To avoid accidentally switching off the computer, the ON/OFF button must be pressed for at least 4 seconds.
In the event of a blackout, the computer and application restart automatically when the mains power is restored.

# User interface and device configuration

## Contents

This section includes the following topics:


Accessing the user interface ..... 50
Login ..... 51
Changing the password ..... 52
Page structure ..... 53
Status bar ..... 53
Navigation menu ..... 54
Initial device configuration ..... 55
Status icons ..... 55
Buttons and selectors ..... 56

# Accessing the user interface

TelevisGo v10 has an advanced user interface, accessed via web browser from any PC or mobile device, in order to analyze data and control all functions of the system.
To access the WEB interface, TelevisGo v10 must be switched on and connected to the Internet.
TelevisGo v10 will automatically open a local browser page with the device address.
The factory-set network parameters are as follows:

**Ethernet 1 (ETH1)**

- **Static IP address** = 192.168.1.50
- **Subnet mask** = 255.255.255.0

**Ethernet 2 (ETH2)**

- **Static IP address** = 192.168.1.51
- **Subnet mask** = 255.255.255.0

To ensure proper connection between the computer and TelevisGo v10 (Ethernet), the computer must have an IP address configured that is compatible with TelevisGo v10 subnet mask (normally the same Subnet mask and IP address, in which only the fourth numerical block changes to be different for each element in the sub-network).

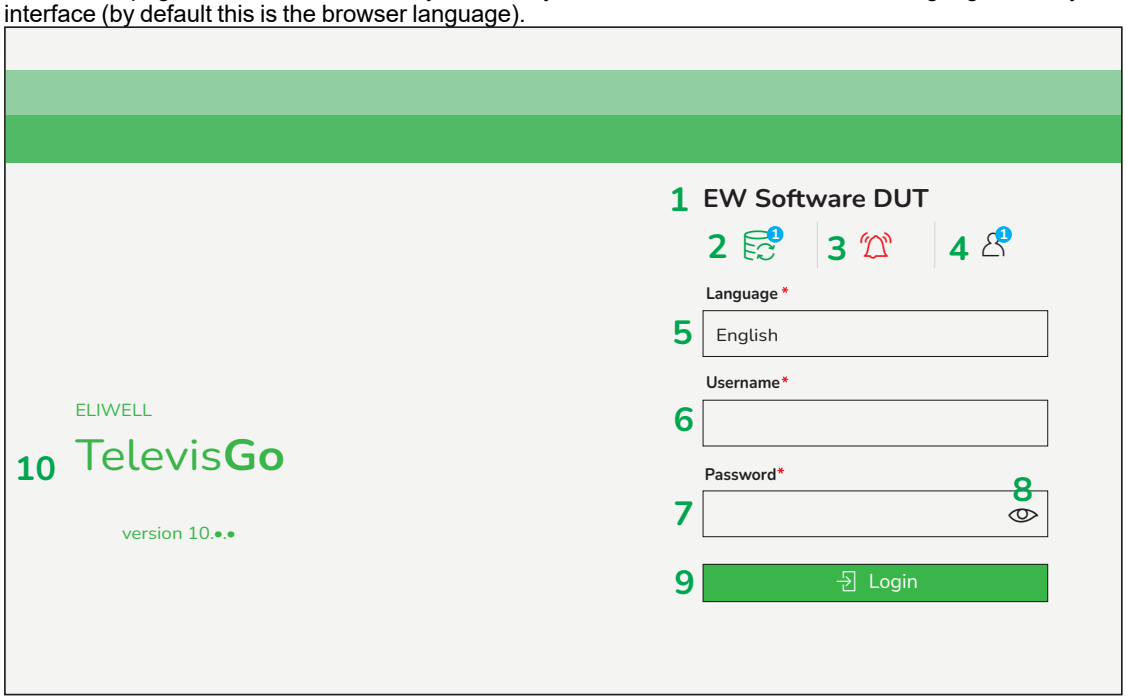
For more detailed information and special installations, contact the network administrator.

Incorrect configuration of the network connection parameters or the router can prevent connection to the TelevisGo v10 and the device network via web interface.

| ***NOTICE*** |
| --- |
| **INOPERABLE DEVICE**<br>Make sure the configuration for the network connection and the router is correct.<br>**Failure to follow these instructions can result in equipment damage.** |

# Login

The LOGIN page is used to access the system with your credentials and to select the language used by the user interface (by default this is the browser language).




The window contains:

1. Plant name
2. Registration status ( = started, = stopped) and number of services ( ) connected to Televis**Go** v10.
   **NOTE**: The number is present only if at least one service is connected.
3. Alarm status ( = alarms active, = no alarm active, = non-computable alarms).
4. Number of users connected to Televis**Go** v10 ( ).
   **NOTE**: The number is present only if at least one user is connected.
   **NOTE**: Televis**Go** v10 can be connected simultaneously to a maximum of 3 different users.
5. Select user interface language
6. Enter username
7. Enter password
8. Show password ( )
9. Access Televis**Go** v10 ( )
10. System information

For more details relating to the icons, refer to the “Status bar” section.

**NOTE**: if the user enters an incorrect password, the message “Wrong password” will appear:



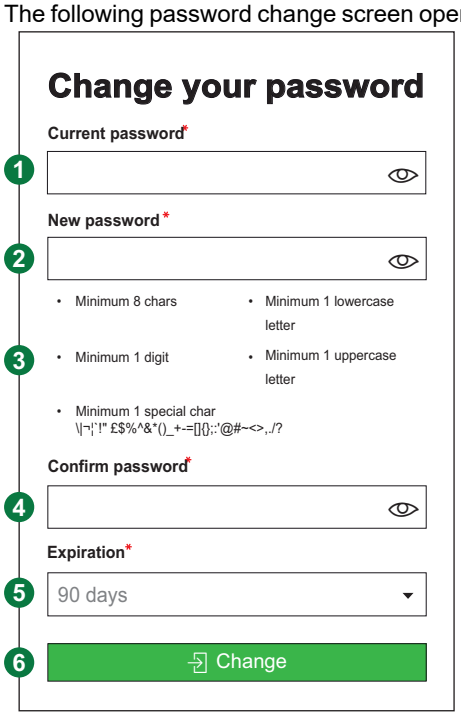

If 3 consecutive incorrect password entry attempts are made, the message “The user is temporarily disabled” will appear.




The user will be locked out for 10 minutes. At the end of this period the user can attempt login again.

# Changing the password

The following password change screen opens:




The window contains:

1. **Current password**: enter the current password.
   : show/hide the password entered
2. **New password**: enter the new password.
   : show/hide the password entered
3. **Password content**: list of characters that the password should contain
   - Minimum 8 characters
   - 1 numerical digit (0, 1, ... , 9)
   - 1 uppercase letter (A, B, ... , Z)
   - 1 lowercase letter (a, b, ... , z)
   - 1 special character (|¦`!" $%^&*()_+-=[]{};:'@#~<>,./?)
4. **Confirm password**: enter the new password.
   : show/hide the password entered
5. **Expiration**: select the password expiry period from pre-set options:
   - 90 days
   - 180 days
   - 1 year
   - never
6. **Change**: save the changes and redirect the user to the "Home" page ( ).

**NOTE**: when the password expires, the user will be redirected straight to the password change page. Once it has been changed, they will be taken to the “Home” page.

# Page structure

All pages in the web application have the same structure, i.e.:

- Status bar
- Navigation menu
- Work area

# Status bar

The status bar is always shown at the top of the window, providing important system status information.
The Status Bar consists of the following elements, displayed as text and icons:

| | | |
|---|---|---|
| Plant name: |  | shows the system name. |
| Registration status and number of connected services: |  | **Started**:acquisitions are active and the total number of connected services. |
| |  | **Stopped**: acquisitions are not active. |
| Alarm status: |  | **Active**: active alarms are present. |
| |  | **Not active**: no active alarms are present. |
| |  | **Not computable**: non-computable alarms are present. |
| Username and number of connected users: |  | indicates the name of the user and the total number of connected users.<br>The drop-down menu shows the following icons:<br>•  = End the session for the current user and return to the Login screen<br>•  = Edit the password for the current user<br>•  = Set the screen shown as the default screen for the current user. This function is only available on screens that can be configured as default screens. |

# Navigation menu

The navigation menu is shown at the top of the page and contains the hypertext links to the different sections of the application:

| | | |
|---|---|---|
|  | --- | Used to go back to the default screen.<br>For the factory setting, go back to the “Equipment” page. |
|  | Equipment | Used to:<br>• view network devices<br>• filter by individual devices (name, model, etc.)<br>• configure individual devices<br>• add new devices<br>• add new interfaces |
|  | Alarms | Used to:<br>• view devices in alarm mode and the relevant status<br>• acknowledge alarms, entering any notes required<br>• view detailed reports for the various alarms<br>• configure categories, actions and time intervals |
|  | History | Used to view/configure:<br>• alarm history<br>• data archive in table form<br>• data archive in chart form<br>• energy reports in table form<br>• energy reports in chart form |
|  | Functions | Used to:<br>• start/inhibit acquisition<br>• view controller commands<br>• view controller parameters<br>• activate the RVD (Remote Virtual Device) function (if present for the device)<br>• view/edit layouts |
|  | Settings | Used to view:<br>• interfaces<br>• users and groups of users<br>• alarms (categories, actions, time intervals)<br>• scheduled actions<br>• General settings (Life Test, Alarms, Media, etc.) |
|  | Computer | Used to:<br>• manage network settings<br>• update the application, functions and languages<br>• update parameter maps, layout pages and various settings<br>• update algorithm and device drivers<br>• restart the application Televis**Go** v10<br>• update the license<br>• backup and restore the system<br>• view the reports (.TXT) for activities carried out |

Some menus have a number of associated commands listed under the menu bar (sub-menu) (example: “Alarm History”, “Historical Table”, ...).
Clicking a menu changes the sub-menu but not the current page.
Clicking a sub-menu heading changes the current page.

# Initial device configuration

On first start-up:

- navigate to the “Equipment” page (on first start-up the page will be empty)
- click “Add device(s)”
- click "Interfaces"
  **Note**: the COM1 interface is pre-configured by default
- add any interfaces present in the network in addition to the COM1 interface (see Interface definition)
- press the back button 
- add network devices (see Adding a device)

# Status icons

The user interface illustrates the status of the system and the device network.

| | |
|---|---|
| **Acquisition status** | |
|  | Data acquisition running. |
|  | Data acquisition not running. |
|  | No information on data acquisition. |
|  | Start/Stop data acquisition. |
| **Alarm status** | |
|  | Alarm active. |
|  | Active alarm viewed by the user. |
|  | Alarm reset. |
|  | Alarm has never been active. |
|  | No information on alarm status. **Note**: check the data acquisition status. |
| **Resource status** | |
|  | Compressor: On / Off. |
|  | Defrost: On / Off. |
|  | Port: Open / Closed. |
|  | Fans: On / Off. |
| **Inputs and regulators** | |
|  | Analogue resources. |
|  | Digital resources. |
|  | Machine status. |
|  | Alarms. |
| **NoLink** | |
|  | NoLink: no communication with the device. |
| **Filters** | |
|  | Identifies the devices on which the algorithm works. |
|  | Identifies an input resource on which the algorithm works. |
|  | Identifies an output resource on which the algorithm works. |

# Buttons and selectors

| | | |
|---|---|---|
| **Acquisition status** | | |
|  | Start/Edit | Start/edit Televis**Go** v10 acquisition status. |
| **Data viewing screens** | | |
|  | Expand | Expand the view of all elements in a list. |
|  | Collapse | Collapse the view of all elements in a list. |
|  | Select all | Select all the elements in a list. |
|  | Deselect All | Deselect all the elements in a list. |
|  | Print | Exports the data in PDF format for printing. |
|  | Confirm | Confirms alarm selection. Alarm icon turns from red to yellow. |
| **Data archive** | | |
|  | Update data | Update the data after one or more filters have been edited. |
|  | Data archive window | Show/hide the data selection window. |
|  | Profile window | Show/hide the profile management window. |
|  | Load selected Profile | Upload the selected profile to the Televis**Go** v10. |
|  | Delete selected Profile | Delete the selected profile from the Televis**Go** v10. |
|  | Save current profile | Save the selected profile. |
|  | Time interval window | Show/hide the window used to set time intervals. |
|  | Interval forward | Move the interval for the data shown forward. |
|  | Interval back | Move the interval for the data shown back. |
|  | Resources window | Show/hide the “Resources” window. |
|  | Select resources | Manually select the instruments and resources to view. |
|  | Legend window | Show/hide the window providing the colors legend (charts only). |
|  | Print/Export window | Show/hide the Print/Export window for the data shown. |
|  | Export | Export the elements shown in .csv format into a folder selected by the user. |
| **Network configuration** | | |
|  | Enter interface | Enter a new network interface. |
| **FUNCTIONS** | | |
|   | | Select an instrument from the network, viewing its parameters and the RVD (Remote Virtual Device), if applicable. |
|  | Select all | Select all the elements in a list. |
|  | Deselect All | Deselect all the elements in a list. |
|  | Expand | Expand the view of all elements in a list. |

| | | |
|---|---|---|
|  | Collapse | Collapse the view of all elements in a list. |
|  | Cancel filters | Cancel all filters applied. |
|  | Execute | Send the command to the selected instruments. |
|  | Apply command filter | Hide the commands which are not applicable for the selected devices. If activated, the  icon will appear. |
|  | Remove command filter | Removes the previously applied command filter. |
|  | Write on ... | Write the values of the current instrument on one or more selected instruments. |
|  | View the last operation report | View the result of the last parameter writing procedure. |
|  | Save parameter map | Save a parameter map to disk. |
|  | Load parameter map | Load a parameter map from the disk. |
|  | Print | Print the elements shown. |
|  | Zoom | View in full screen mode. |
|  | Restore | Restore normal view. |
|  | Rebuild all layouts | Update the list of loaded layouts. |
| **SETTINGS** | | |
|  | Edit | Enable active page editing. |
|  | Select all | Select all the elements in a list. |
|  | Select devices present | Select the devices present. |
|  | Select invalid devices | Select devices that are not valid. |
|  | Deselect All | Deselect all the elements in a list. |
|  | Expand | Expand the view of all elements in a list. |
|  | Collapse | Collapse the view of all elements in a list. |
|  | Profile manager | Open a new screen where a profile can be created, edited or removed. |
|  | Export profiles | Export the selected profiles. |
|  | Cancel filters | Cancel all filters applied. |
|  | User group | Indicate the user group. |
|  | users | Indicate individual users. |
|  | Add | Add an element (network, user, scheduled activity, time interval, etc.) |
|  | Remove | Remove an element (network, user, scheduled activity, time interval, etc.) |
|  | Edit | Edit an element (network, user, scheduled activity, time interval, etc.) |
|  | Save | Save any changes you have made. |

| | | |
|---|---|---|
|  | Cancel | Cancels and exits without saving the changes made. |
|  | Preview | Preview of the instruments on which the selected action will be performed. |
| **COMPUTER** | | |
|  | Edit | Enable active page editing. |
|  | Application | Update Televis**Go** v10 application. |
|  | Functions | Update/load the software applications. |
|  | Languages | Update/load the system glossaries. |
|  | Parameters map | Load a parameters map. |
|  | Layout pages | Load a layout. |
|  | General settings | Load the file “Forced_setting.txt”. This file is sent via an update (in the .zip file) or via Eliwell Technical Support. |
|  | Scheduled actions | Update/load the scheduled actions. |
|  | Alarm categories | Update/load the alarm categories. |
|  | Device/algorithms drivers | Update the drivers for the instruments/algorithms. |
|  | Reboot | Reboot the Televis**Go** v10 application. |
|  | Backup | Back up the configuration for restoring at a later stage. |
|  | Restore | Restore the configuration saved using the backup function. |

# Equipment

## Contents

This section includes the following topics:

Introduction ..... 60
Viewing and filtering network equipment ..... 61
Basic device information tab ..... 62
Viewing equipment data ..... 64
Network devices list ..... 66
Adding equipment ..... 68
Equipment data settings ..... 70
Device resources ..... 72
Equipment alarms ..... 74
History ..... 75
Parameters ..... 76
Commands ..... 77

# Introduction

## Description

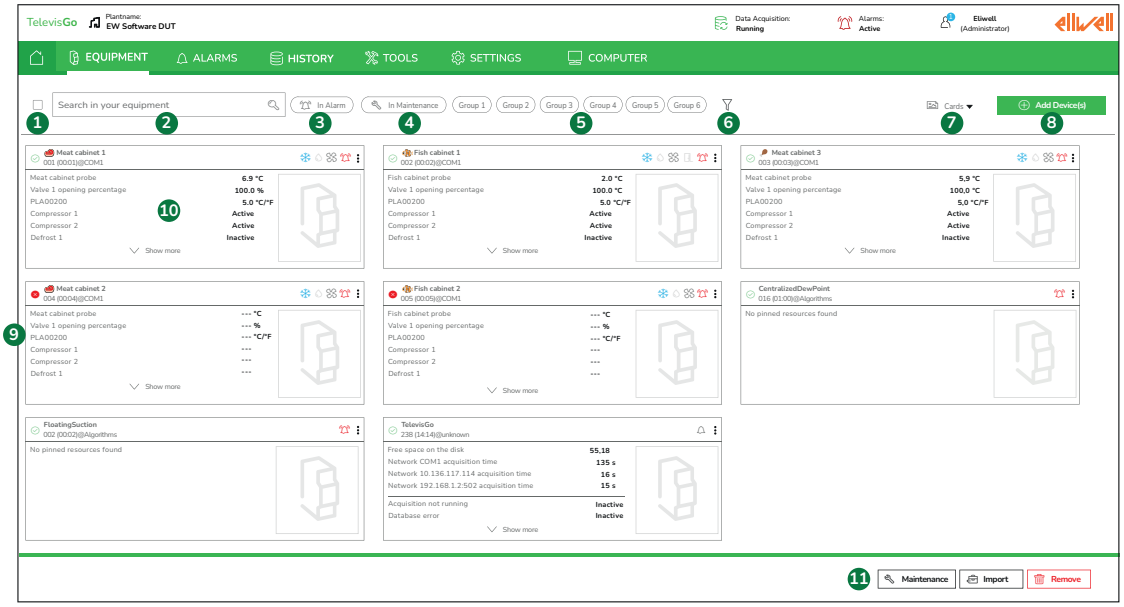
This section can be used to:

- view and filter network devices
- filter by individual devices (name, model, etc.)
- configure individual devices
- add new devices
- add new interfaces

# Viewing and filtering network equipment

## Description

On accessing or entering the EQUIPMENT menu, the following window will appear:

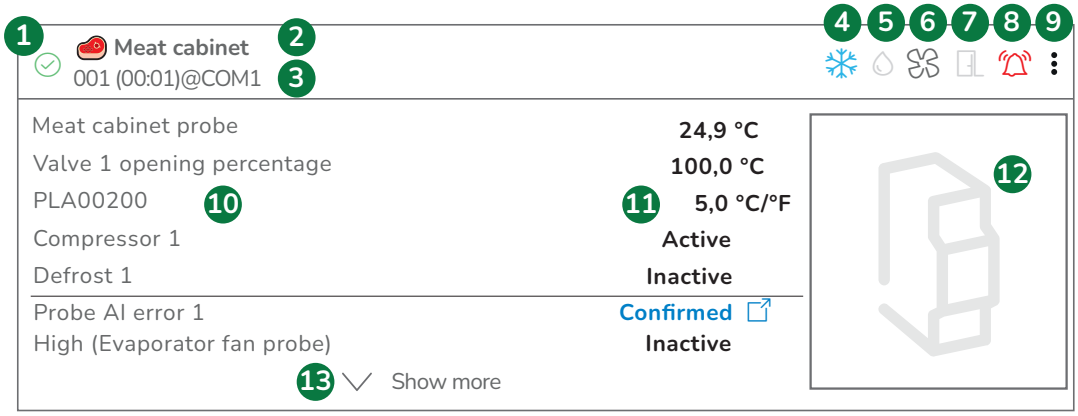



The window contains:

1. Select all devices shown. If a filter is applied, only those meeting the filter requirements will be selected
2. Filter devices by controller model (for example: RTX 600/V) or by description (for example: Fish cabinet).
3. Apply/remove the filter for devices in alarm mode only
4. Apply/remove the filter for devices in “Maintenance” mode only
5. Apply/remove the filter for the groups associated with the devices (for example: meat, fish, etc.).
   **NOTE 1**: the groups can be set on the device configuration page.
   **NOTE 2**: a device can belong to several groups
6. Show/hide the following filters:
   - **Profile Type**: displays the devices and resources associated with a specific profile
   - **Group Type**: displays the devices and resources associated with a specific group
   - **Communication status**: displays devices that are recognized, mismatched, partially matched, or No-Link
   - **Protocol Type**: displays devices using a specific protocol (Modbus or Micronet).
   - **Fieldbus interface**: displays the devices for a specific interface or address.
7. Drop-down menu to change the display type. Options:
   - (**Cards**): display the devices on cards showing the linked image
   - (**Grid**): display the devices on cards without the linked image
   - (**Compact**): Simplified view of equipment data (statuses and 1 resource only)
8. Enable entry of a new device (Add Device)
   **NOTE**: the button is only visible if the current user is authorized to configure the network of controllers.
9. View the resources in the foreground.
10. Tab with basic information for a specific device. Click to view the details of that specific device.
11. Only appears if one or more devices are selected (using the check box in the top left-hand corner of each tab) and:
    - (**Maintenance**): put the selected devices into “Maintenance” mode
    - (**Import**): apply a specific device profile to the selected devices
    - (**Remove**): remove the selected devices from the configuration

# Basic device information tab

## Description




The tab contains:

1. identifies status and selects device
   - = The device is connected
   - = The device has not yet been recognized
   - = The device is in No Link mode
   - = The device has not yet been included in the configuration
   - = The device partially corresponds to the set model
   **Note**: the parameters and commands functions are not enabled
   - = The device does not correspond to the set model
   **Note**: model change is required
   - = The device is in “Maintenance” mode
   - = Shown as the mouse passes over, used to select the device
2. Name assigned to the device
3. Controller address and fieldbus interface
4. Cooling function status (if managed by the controller):
   - = Cooling active
   - = Cooling inactive
5. Defrost function status (if managed by the controller):
   - = Defrost active
   - = Defrost inactive
6. Evaporator fan status (if managed by the controller):
   - = Fans active
   - = Fans inactive
7. Door status (if managed by the controller):
   - = Door open
   - = Door closed
8. Alarm icon:
   - = No alarm active
   - = At least one alarm active
   - = All alarms have been viewed and acknowledged
9. The 3 dots on the right-hand side can be used to:
   - (**Edit**): change the device settings
   - (**Maintenance**): put the selected devices into “Maintenance” mode

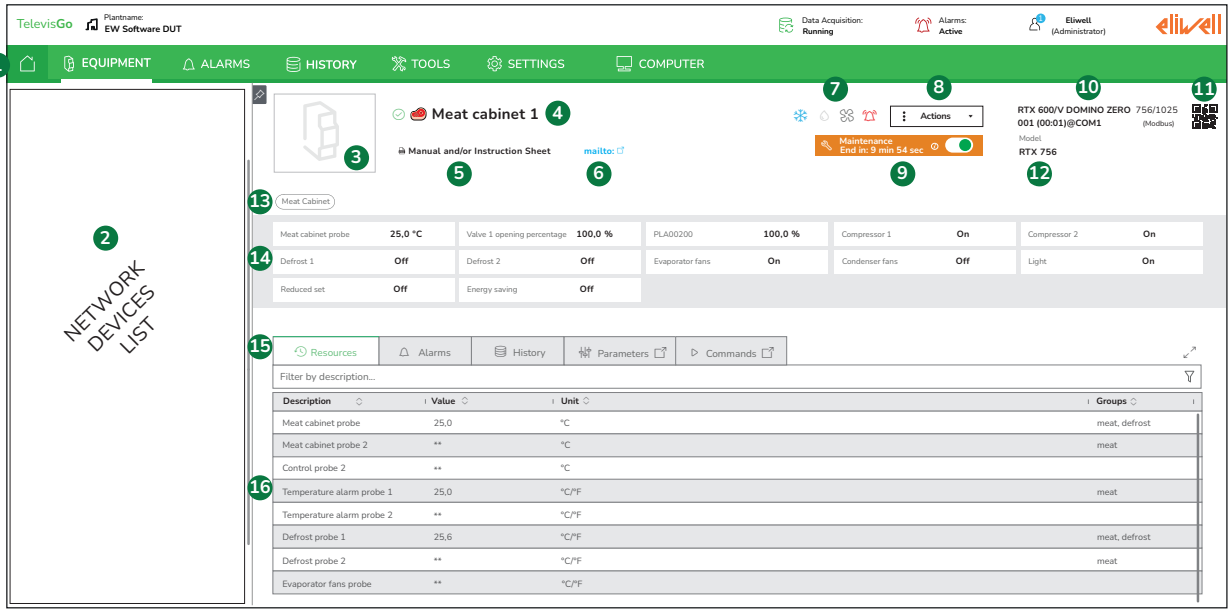
-  (**Import profile**): apply a specific device profile to the selected devices
-  (**Export profile**): export a specific device profile
-  (**Change model**): change the “Model” and “Device profile”
-  (**Remove**): remove the selected devices from the configuration

10. View the resources in the foreground.
    **NOTE**: if one or more alarms are selected in the foreground, the last 2 rows will be reserved for alarm resources
11. Shows the values of the selected resources in real time
12. Image associated with the device
13. Appears when the resources in the foreground are more than those that can be displayed and can be used to scroll through them in the device tab.

# Viewing equipment data

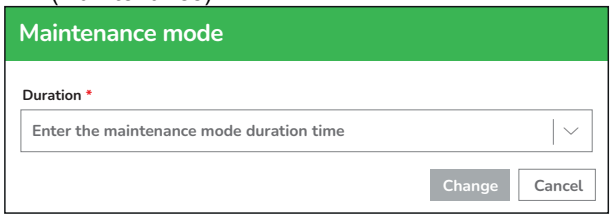
## Description

On accessing or entering the EQUIPMENT menu and selecting one of the devices, the following window will appear:




The window contains:

1. Navigation menu
2. List of network devices including display filters (see Viewing network devices)
3. Image associated with the device
4. Name assigned to the device
5. View link to any document associated with the controller. Only shown if included in the device settings
6. Shows whether a reference to a website, a telephone number or an email address has been entered. Only shown if included in the device settings
   - **URL** ( ): used to enter the Url for a website or a local Televis**Go** v10 DP address preceded by "/" (example: "/app/alarms")
   - **CALL** ( ): used to enter a telephone number. Requires an international prefix to be entered (for example: +39).
   - **MAIL** ( ): used to enter an email address
7. Controller status icons (device status, alarm, cooling, defrost, evaporator fans)
8. **Actions**: drop-down menu with the following options (only shown if the current user is authorized to configure the network of controllers or maintenance):
   - (**Edit**): change the device settings
   - (**Maintenance**): enter the “maintenance” mode duration time. Click “Change” to enable it.




   - (**Import**) : apply a device profile to the selected devices
   - (**Export profile**): export a device profile
   - (**Change model**): change the “model” and “device profile”

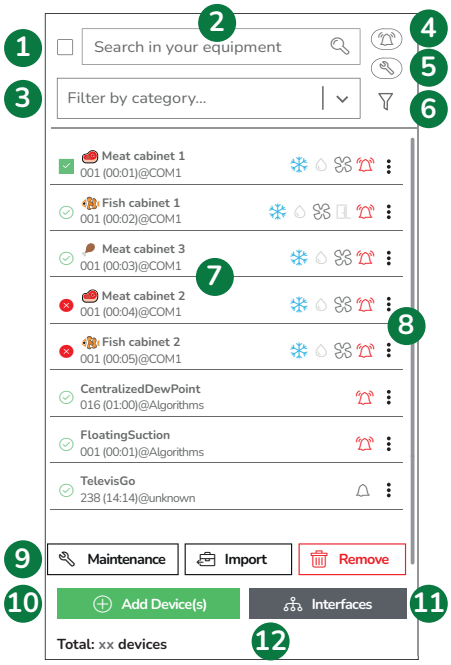
- (**Remove**): remove the selected devices from the configuration

9. (**Maintenance**): Status and duration of the controller in maintenance mode. Setting takes place within the “Actions” drop-down menu and you can exit Maintenance mode using the switch to the right of the “Maintenance” button.
10. List of basic device information:
    - Model of the controller paired with the device
    - Controller address and fieldbus interface to which it is connected
    - Type of protocol used by the controller
11. Image to scan to view the user manual for the controller
12. Information relating to the device:
    - Controller model
    - Controller serial number
13. List of groups associated with the device
14. View the resources in the foreground. These resources are shown in the Device tab on the Devices page.
15. It can be used to select the following data tabs:
    - (**Resources**): list of resources
    - (**Alarms**): list of alarms
    - (**History**): historical data shown in the form of a table or chart
    - (**Parameters**): link to the list of parameters
    - (**Commands**): link to the list of commands
16. Show detailed data for the selected tab.

# Network devices list

## Description

On accessing or entering the Equipment menu and selecting one of the devices, the following window will appear:




The window contains:

1. Select all devices shown. If a filter is applied, only those meeting the filter requirements will be selected
2. Filter devices by controller model (for example: RTX 600/V) or by description (for example: Fish cabinet).
3. Filter devices by category (for example: meat, fish, etc).
   **NOTE 1**: the categories can be set on the device configuration page.
   **NOTE 2**: a device can belong to several categories
4. Apply/remove the filter for devices in alarm mode only
5. Apply/remove the filter for devices in “Maintenance” mode only
6. Show/hide the following filters:
   - **Profile Type**: displays the devices and resources associated with a specific profile
   - **Group Type**: displays the devices and resources associated with a specific group
   - **Communication status**: displays devices that are recognized, mismatched, partially matched, or No-Link
   - **Protocol Type**: displays devices using a specific protocol (Modbus or Micronet).
   - **Fieldbus interface**: displays the devices for a specific interface or address.
7. List of basic device information (device profile associated with the device, controller address and fieldbus interface to which it is connected, type of protocol used by the controller and status icons)
8. The 3 dots on the right-hand side can be used to:
   - (**Edit**): change the device settings
   - (**Maintenance**): put the selected devices into “Maintenance” mode
   - (**Import profile**): apply a specific device profile to the selected devices
   - (**Export profile**): export a specific device profile
   - (**Change model**): change the “Model” and “Device profile”
   - (**Remove**): remove the selected devices from the configuration
9. Only appears if one or more devices are selected (using the check box to the left of each device) and shows:

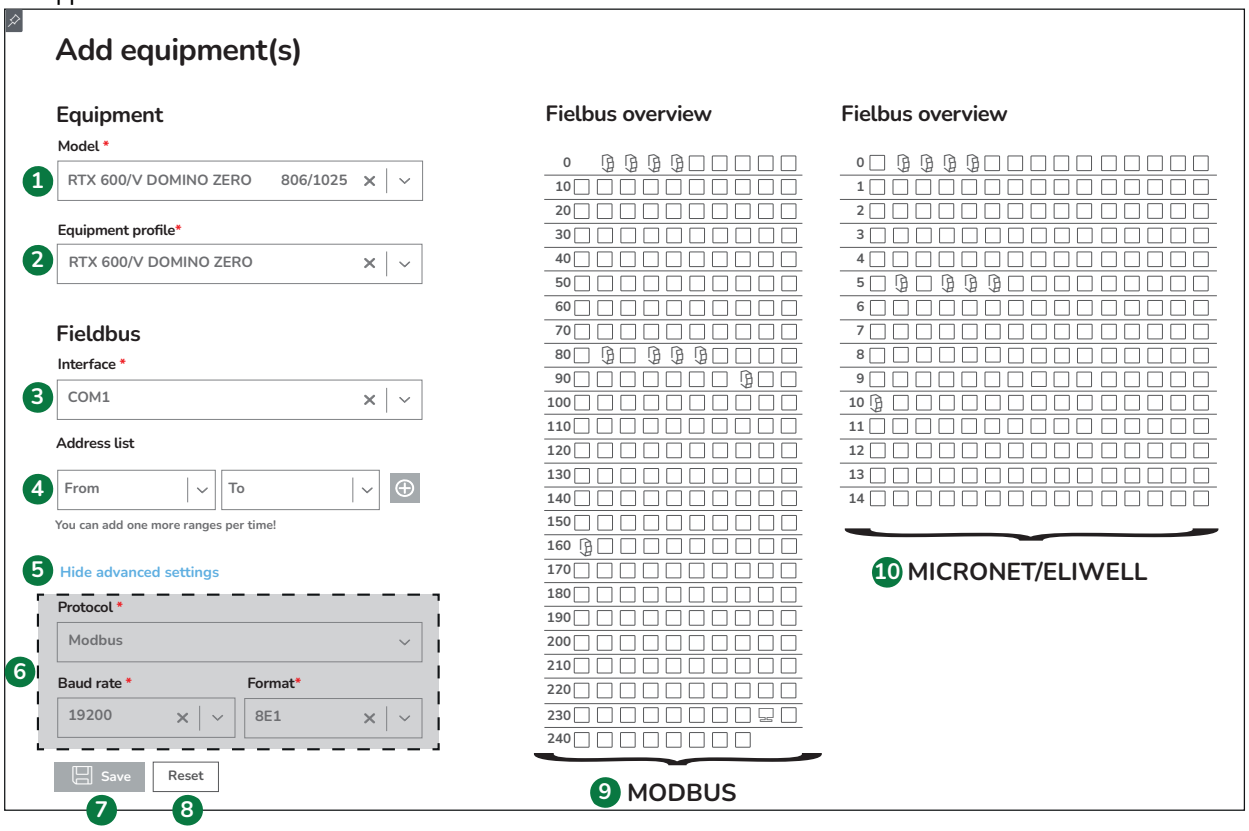
- (**Maintenance**): put the selected devices into “Maintenance” mode. **NOTE**: the button is only enabled if the current user is authorized to manage maintenance
- (**Import**): apply a specific device profile to the selected devices
- (**Remove**): remove the selected devices from the configuration

10. Used to enter a new device (Add Device(s))
    **NOTE**: the button is only visible if the current user is authorized to configure the network of controllers.
11. Offers access to the page used to define the network fieldbus interfaces (Add/edit a fieldbus interface)
    **NOTE**: the button is only visible if the current user is authorized to configure the network of controllers.
12. Indicates the total number of network devices

# Adding equipment

## Description

On accessing or entering the EQUIPMENT menu, if you select "**Add equipment**" in the top right-hand corner or select one of the pieces of equipment, then click "**Add equipment**" in the bottom left-hand corner, the following window will appear:




**NOTE**: the button is only visible if the current user is authorized to configure the network of controllers.
The window that opens contains the following editable fields (those marked with a red asterisk are compulsory):

1. Select the controller model or select “Auto-Detection Modbus” or “Auto-Detection Eliwell” to automatically scan using Modbus protocol or Micronet/Eliwell protocol respectively.
2. Select the equipment profile to use, from:
   - **system**: automatically generated profile with minimal settings (provided by Eliwell)
   - **Eliwell**: pre-configured profile with the most common settings (provided by Eliwell)
   - **Custom**: custom profile (contact Eliwell Technical Support for system customization)
3. Select the fieldbus interface to which the controller is connected (for example: COM1). If the interface does not appear, you need to configure it first (see Configuring Fieldbus Interfaces).
4. Set the range of addresses to scan in order to detect the controller. Click ⊕ to add it.
   The list of ranges set appears under **Address list**. Alongside every range is a 🗑 button that can be used to delete it.
   For Modbus equipment, the address is displayed as 1 (00:01), where the first number identifies the Modbus address and the corresponding Micronet address is in brackets.
5. Show/hide settings relating to the protocol for the selected interface.
6. Additional settings relating to the protocol type. The interface type cannot be changed, in contrast to the serial transmission speed (**Baud Rate**) and the communication parameters (**Format**) represented by 3 characters, e.g. "**8E1**", with the following meaning:

| | | |
|---|---|---|
| **8** | **Size** = 8 bit | Options: **8** bit |
| **E** | **Parity bit** = Even | Options: **n** = none; **E** = even; **o** = odd |
| **1** | **Stop bit** = 2 bit | Options: **0** = 1 bit; **1** = 2 bit |

7. 💾 **SAVE**: save the settings and check them. If the settings are correct, the equipment will be added to the network list (see Network devices list).

8. **RESET**: reset the data entered on the screen
9. **MODBUS**: shown if the set interface is Modbus type and shows the addresses already occupied by other equipment ( )
10. **MICRONET/ELIWELL**: shown if the set interface is Micronet/Eliwell type and shows the addresses already occupied by other equipment ( )

## Alarm indications (Warnings)

After clicking **SAVE**, the system checks the data entered and shows a warning pop-up (warning image) in the following cases:

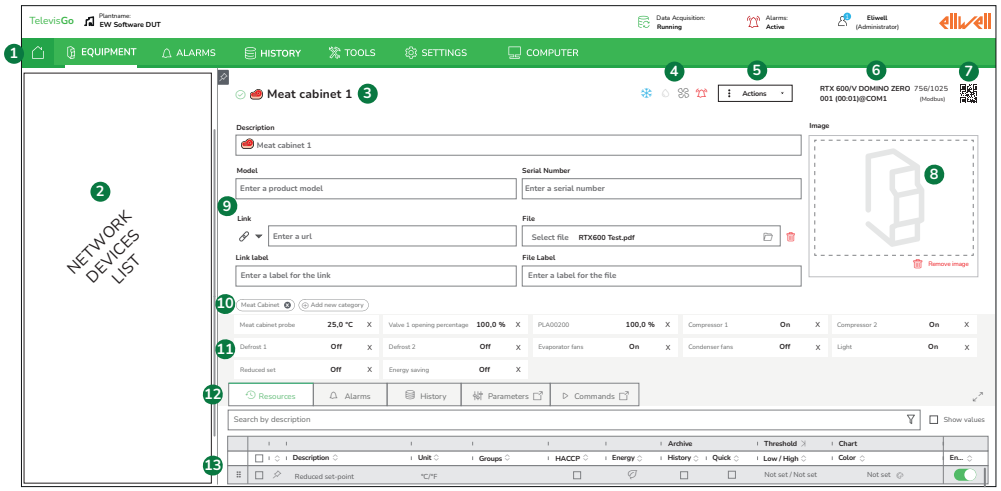
| Where | Message | Reason/Solution |
|---|---|---|
| Addresses | The range contains addresses that are not valid for the protocol | At least one invalid address has been entered for the selected protocol. Entry is only completed for valid addresses |
| Addresses | The range contains the supervisor address | The supervisor address is included in the selected range. This address cannot be selected |
| Addresses | At least one existing equipment address has been entered | At least one existing equipment address has been entered. You will be asked to confirm overwrite or cancel entry |

## Automatic identification of the controller model

If “Auto-Detection Modbus” or “Auto-Detection Eliwell” was selected during configuration of the controller, the system will read the information field relating to the connected controllers.
"Auto-Detection Modbus" selection works for Eliwell equipment and for third-party Modbus equipment for which Eliwell provides the driver.
This process may take a few minutes.
The controllers identified successfully change from the initial description “Auto-Detection Modbus” or “Auto-Detection Eliwell” to the name of the identified model.
**NOTE**: make sure all equipment has been recognized correctly.

# Equipment data settings

Once you have entered device viewing mode, use the “Configuration” drop-down menu to select Edit and the following device setting window will appear:




The window contains:

1. Navigation menu
2. List of network devices with various display filters (see Network devices list)
3. Name assigned to the device
4. Controller status icons (device status, alarm, cooling, defrost, evaporator fans)
5. **Actions**: drop-down menu with the following options:
   - (**View**) : revert to “View device” mode
   - (**Maintenance**): put the selected device into “Maintenance” mode
   - (**Import**) : apply a device profile to the selected devices
   - (**Export profile**): export a device profile
   - (**Change model**): change the “model” and “device profile”
   - (**Remove**): remove the selected devices from the configuration
6. List of basic device information:
   - Model of the controller paired with the device
   - Controller address and fieldbus interface to which it is connected
   - Type of protocol used by the controller
7. Image to scan to view the user manual for the controller
8. **IMAGE**: Image associated with the device. If you click on the image, you can upload images in ".jpg", ".jpeg", ".jfif", ".webp", ".png", ".apng", ".bmp", ".svg", ".svgz", ".xbm", ".ico", ".gif", ".tif", ".tiff", ".pjp", ".pjpeg", ".avif" format with a maximum size of 5 MB.

   **Remove image**: used to remove the uploaded image
9. Used to set the following information:
   - **Description**: assign the device name
   - **Model**: device model (optional)
   - **Serial Number**: device serial number (optional)
   - **Link**: used to enter a reference to a website, a telephone number or an email address
     - **URL** ( ): used to enter the Url for a website or a local Televis**Go** v10 address preceded by "/" (example: "/app/alarms")
     - **CALL** ( ): used to enter a telephone number complete with international dialing prefix
     - **MAIL** ( ): used to enter an email address
   - **Link Label**: assign a name to the entered link
   - **File**: used to load a file to make available for download, for example the device manual or the controller parameters. Available file formats: "pdf", "txt", ".jpg", ".jpeg", ".jfif", ".webp", ".png", ".apng", ".bmp", ".svg", ".svgz", ".xbm", ".ico", ".gif", ".tif", ".tiff", ".pjp", ".pjpeg", ".avif" with a maximum size of 25 MB.

- **OPEN FOLDER** ( ): used to open explore resources and load a file
- **REMOVE** ( ): used to remove the loaded file

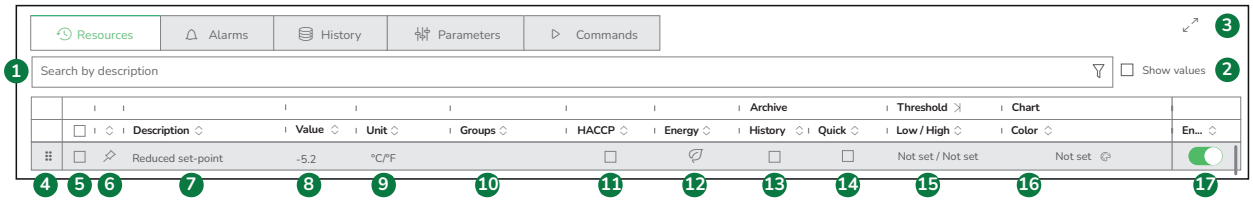
- **File Label**: assign a name to the loaded file

10. List of groups associated with the device. New categories can be entered by pressing “Add new group”
11. View the resources in the foreground. These resources are shown in the Device tab on the Devices page.
12. It can be used to select the following data tabs:
    - (**Resources**) = list of resources that can be selected
    - (**Alarms**) = list of alarms that can be selected
    - (**History**) = view the data archive for the instrument in the form of a table or chart
    - (**Parameters**) = link to the list of parameters
    - (**Commands**) = link to the list of commands
13. Shows the information relating to the selected tab.

# Device resources

Once you have entered equipment viewing mode, use the “Configuration” drop-down menu to select EDIT.
Then select the TAB: Resources.

The following window will appear:




The following fields appear at the top:

1. Filter the resources in the description column on the basis of a keyword
2. Show/hide the “Value” column for the resources
3. Enlarge the table to full-screen view
4. Can be used to drag the resource (or a group of resources selected using the check box) to a different position. Sort the list of resources in the foreground as shown in this TAB
5. Select/deselect a resource. Select multiple to apply the same settings
6. Add/remove a resource to or from the resources in the foreground
7. **DESCRIPTION**: view/edit the name of a resource
8. **VALUE**: (**only shown if point 2 is selected**) Show the resource value in real time
9. **UM**: view/edit the resource unit of measure
10. **GROUPS**: used for rapid selection of the resources to be shown in charts and historical tables
11. **HACCP**: identify whether the resource is entered in the HACCP report.
    **Note**: several analogue resources can be selected, but only one digital resource (for example: defrost) for each device
12. **ENERGY**: identify whether the resource is entered in the “Energy report”
13. **HISTORY**: enable/disable saving in the data archive
14. **QUICK**: enable/disable data recording with frequent sampling and storage in the temporary database (recent data only)
15. **LOW/HIGH**: view/edit the alarm thresholds (see “Virtual alarms” section)
16. **COLOR**: assign a color to a resource for display on real-time and historical charts
17. **SWITCH**: enable (green)/disable (gray) reading and use of the resource. This setting takes priority over all the other resource settings.

## Virtual alarms

When a value relating to each analogue resource is entered, the system will generate the corresponding "**virtual alarms**" inside the LOW/HIGH cell (point 15).
If, for example, you set:

| Resource | Low | High |
|---|---|---|
| Analogue input 1 | (**A**) 30 | (**B**) 60 |
| Analogue input 2 | - | - |
| Dew point | - | (**C**) 45 |
| Valve opening percentage | - | - |
| Door opening status | (**D**) 1 | (**E**) 0 |

the following "virtual alarms" will be generated:

| Resource | Alarm due to... | Description |
|---|---|---|
| (**A**) Low alarm (Analogue input 1) | Low | Activated when the value of analogue input 1 is < 30 |
| (**B**) High alarm (analogue input 1) | High | Activated when the value of analogue input 1 is > 60 |
| (**C**) High alarm (Dew point) | High | Activated when the value of the Dew point is > 45 |
| (**D**) Low alarm (Door opening status) | Low | Deactivated when the value becomes 0 |
| (**E**) High alarm (Door opening status) | High | Activated when the value becomes 1 |

The new alarms will inherit all the properties of the instrument to which they refer (option of putting them offline, choice of infill/color inside graphs and any activation delays).

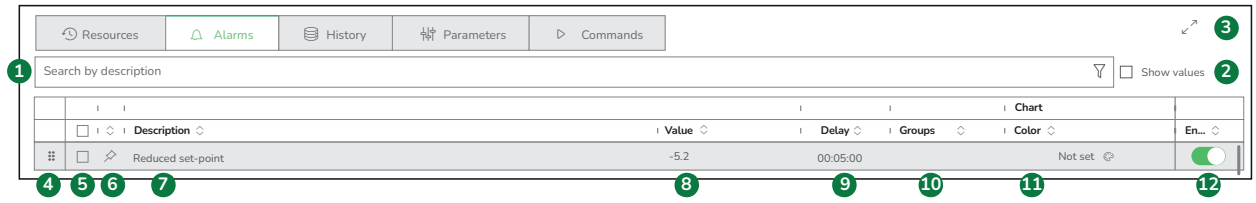
If the analogue resource to which the "**virtual alarms**" refer is no longer present, the alarms will be deleted.

# Equipment alarms

Once you have entered equipment viewing mode, use the “Configuration” drop-down menu to select EDIT.

Then select the TAB: ALARMS.

The following window will appear:




The following fields appear at the top:

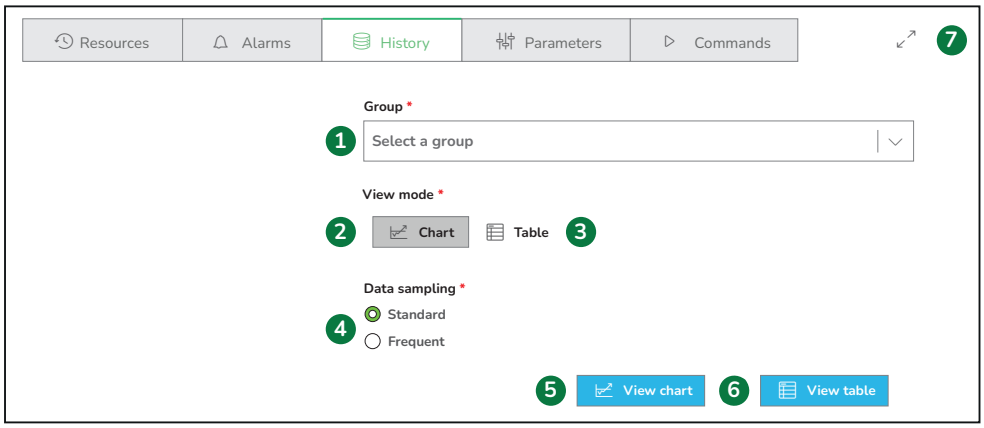
1. Filter the resources in the description column on the basis of a keyword
2. Show/hide the “Value” column for the resources
3. Enlarge the table to full-screen view
4. Can be used to drag the resource (or a group of resources selected using the check box) to a different position. Sort the list of resources in the foreground as shown in this TAB
5. Select/deselect a resource. Select multiple to apply the same settings
6. Add/remove a resource to or from the resources in the foreground
7. **DESCRIPTION**: view/edit the name of a resource
8. **VALUE**: (**only shown if point 2 is selected**) Show the resource value in real time
9. **DELAY**: used to enter a delay before alarm activation
10. **GROUPS**: used for rapid selection of the resources to be shown in charts and historical tables
11. **COLOR**: assign a color to a resource for display on real-time and historical charts
12. **SWITCH**: enable (green)/disable (gray) reading and use of the resource. This setting takes priority over all the other resource settings.

# History

Once you have entered device viewing mode, select

the TAB: HISTORY.

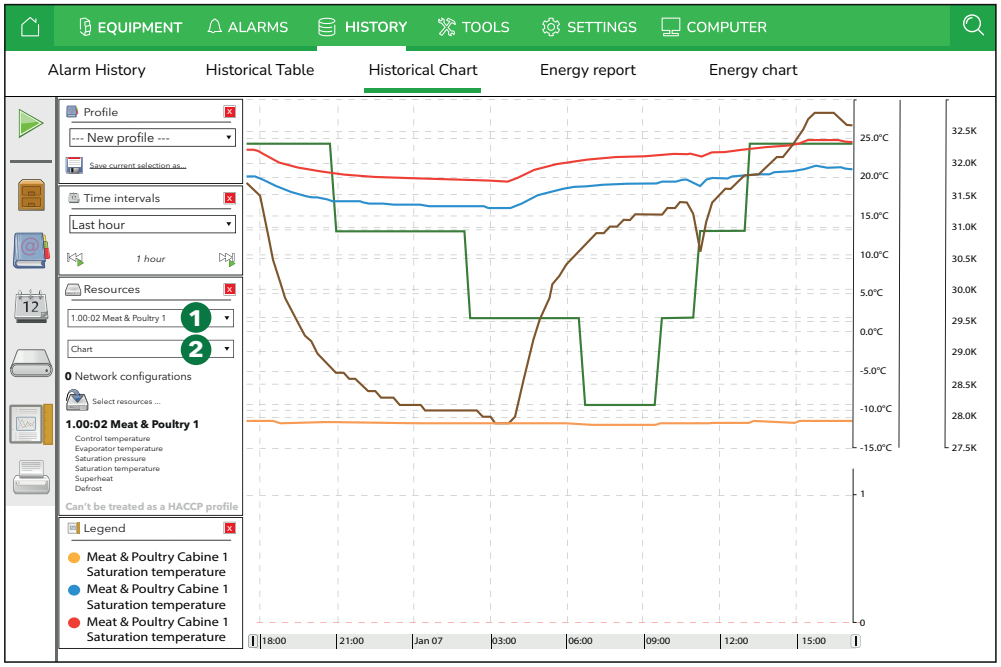
The following window will appear:




**NOTE**: the TAB is only visible if the current user is authorized to view the data archive
The following fields appear at the top:

1. Select the resource/alarm **group** to view
2. Select data viewing in the form of a **Chart**
3. Select data viewing in the form of a **Table**
4. Select whether to show the data in the "History" or "Quick" (frequent sampling) column
5. (**Present if number 2 selected**) View the data chart
6. (**Present if number 3 selected**) View the data table
7. Enlarge to full-screen view.

## Quick view across multiple equipments




Once its data is displayed (either as a Table or a Chart), you can:

- display the same group of resources data for another device selected from the Devices (1) drop down list
- display data for a different group of resources selected from the Groups (2) drop down list

**Nota**: Groups and Devices selectors are available only when the History panel is opened from a device History panel

# Parameters

Once you have entered device viewing mode, select the TAB: PARAMETERS.

The window containing the list of device parameters will appear.

**Note**: if the controller has not been recognized or is in No-Link, or the model is incorrect/does not correspond, the TAB is not enabled

You can also access this screen by selecting:
**FUNCTIONS** > **PARAMETERS**
and selecting the specific device.

**NOTE**: access to data is only permitted if the current user is authorized to view the device parameters.

# Commands

Once you have entered device viewing mode, select the TAB: ▷ COMMANDS.

The window containing the list of device commands will appear.

**Note**: if the controller has not been recognized or is in No-Link, or the model is incorrect/does not correspond, the TAB is not enabled

You can also access this screen by selecting:

**FUNCTIONS > COMMANDS**

and selecting the specific device.

**NOTE**: access to data is only permitted if the current user is authorized to view the device commands.

# Alarms

## Contents

This section includes the following topics:

Introduction ..... 79
Viewing and filtering network alarms ..... 80
Basic device alarm information tab ..... 82
Alarm details ..... 84

# Introduction

## Description

This section can be used to:

- view and filter devices in alarm mode
- view for how long a device has been in alarm mode and whether one or more relative alarms have been acknowledged
- access the screen showing a specific device in alarm mode by directly displaying the alarm resources.

## Alarms

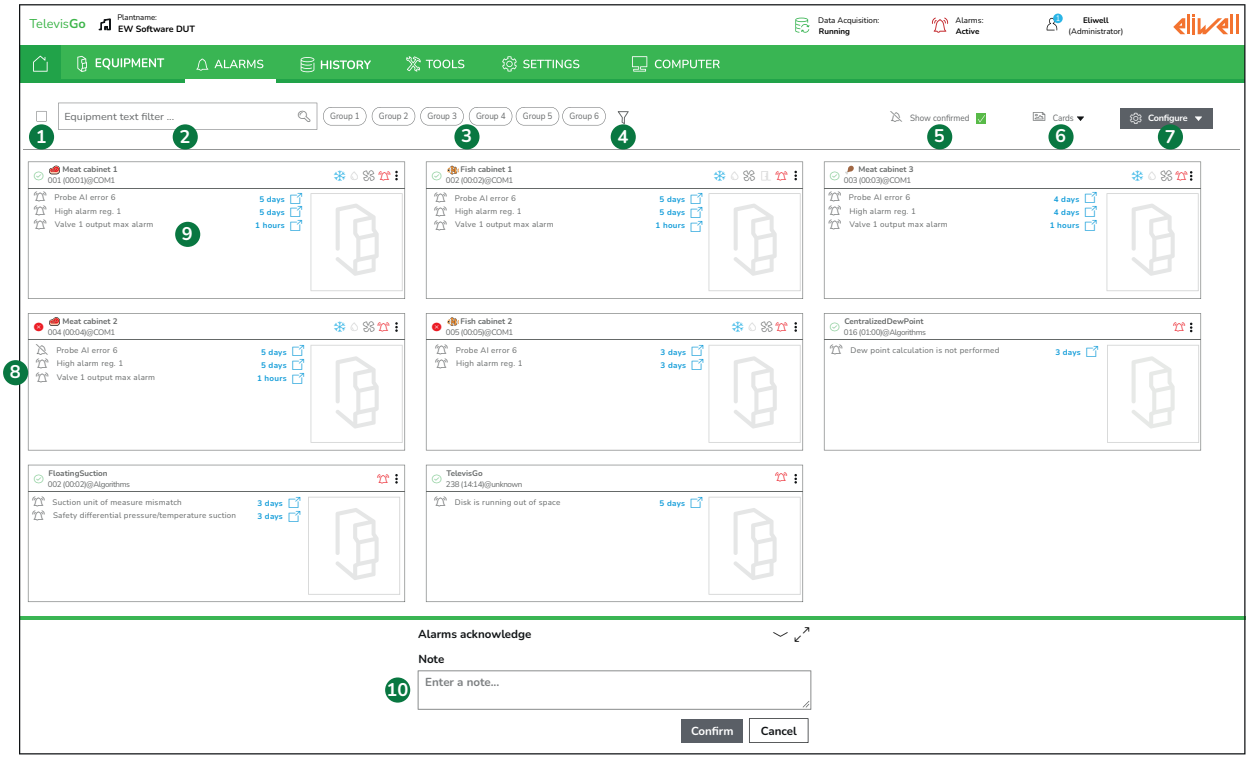
In order to verify the network devices, you need to set and enable the virtual “No-Link” alarm that the system inserts between the resources of all devices and algorithms.

| ***NOTICE*** |
| --- |
| **INOPERABLE DEVICE**<br>Set and activate the “No-Link” alarm for various devices to receive notifications relating to a lack of communication or anomalous operation linked to incorrect recognition of the device resources.<br>**Failure to follow these instructions can result in equipment damage.** |

# Viewing and filtering network alarms

## Description

On entering the ALARMS menu, the following window will appear:




The window contains:

1. Select all devices shown. If a filter is enabled, only those meeting the filter requirements will be selected.
2. Filter devices by controller model (for example: RTX 600/V) or by description (for example: Fish cabinet)
3. Apply/remove the filter for the groups associated with the devices (for example: meat, fish, etc.).
   **NOTE 1**: the groups can be set on the device configuration page.
   **NOTE 2**: a device can belong to several groups
4. Show/hide the following filters:
   Communication status (device unknown, does not match, partially matches or No-Link)
   - Protocol type (Modbus, Micronet)
   - Fieldbus interface (address - for example 192.168.1.3)
5. Show/hide confirmed alarms and update the device list according to alarms present and/or confirmed alarms
6. Drop-down menu to change the display type. Options:
   - (**Cards**): display the devices on cards showing the linked image
   - (**Grid**): display the devices on cards without the linked image
7. Drop-down “Configuration” menu for quick access to alarm configuration, with the following options:
   - (**Categories**): set the alarm categories (see Alarm categories)
   - (**Actions**): set the actions to be taken in the event of an alarm (see Actions)
   - (**Intervals**): set the time intervals (see Time intervals)

   **Note**: the menu can only be seen by users authorized for "Alarm Configuration"
8. View devices in alarm mode or quickly access alarm configuration, with confirmed network alarms based on the selection made in point (5).
9. Tab with basic alarm information for a specific device. Click to access a detailed view of the device with the Alarms tab pre-selected.
10. Alarm management panel shown if:
    - alarms for all devices are selected (1)

- all alarms for one device have been selected using the check box in the top left-hand corner of the device tab
- one or more alarms have been selected for a device using the check box to the left of each row

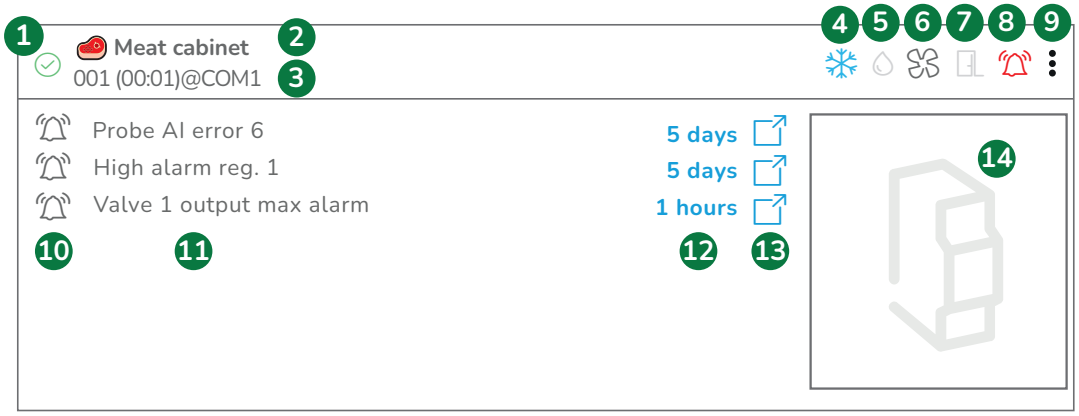
The following can be found in the panel:
- **Note**: to enter a note to be linked to all selected alarms when they are confirmed.
- **Confirm**: to change the status of the “confirmed” alarms and save the note.

**NOTE**: confirming one or more alarms only changes the displayed information on the alarms page. Its history is tracked but it does not affect the actions.
Example: it does not change the behavior of an alarm relay. You will need to wait for the alarm condition to actually end for the relay output to be disabled.

- **Cancel**: cancels the operation. The alarm status is not changed and the note is not entered.

# Basic device alarm information tab

## Description




The tab contains:

1. identifies status and selects device
   - = The device is connected
   - = The device has not yet been recognized
   - = The device is in No Link mode
   - = The device has not yet been included in the configuration
   - = The device partially corresponds to the set model
   **Note**: the parameters and commands functions are not enabled
   - = The device does not correspond to the set model
   **Note**: model change is required
   - = The device is in “Maintenance” mode
   - = Shown as the mouse passes over, used to select the device
2. Name assigned to the device
3. Controller address and fieldbus interface
4. Cooling function status (if managed by the controller):
   - = Cooling active
   - = Cooling inactive
5. Defrost function status (if managed by the controller):
   - = Defrost active
   - = Defrost inactive
6. Evaporator fan status (if managed by the controller):
   - = Fans active
   - = Fans inactive
7. Door status (if managed by the controller):
   - = Door open
   - = Door closed
8. Alarm icon:
   - = No alarm active
   - = At least one alarm active
   - = All alarms have been acknowledged
9. The 3 dots on the right-hand side can be used to:
   - (**Edit**): change the device settings
   - (**Maintenance**): put the selected devices into “Maintenance” mode
   - (**Import profile**): apply a specific device profile to the selected devices
   - (**Export profile**): export a specific device profile
   - (**Change model**): change the “Model” and “Device profile”
   - (**Remove**): remove the selected devices from the configuration

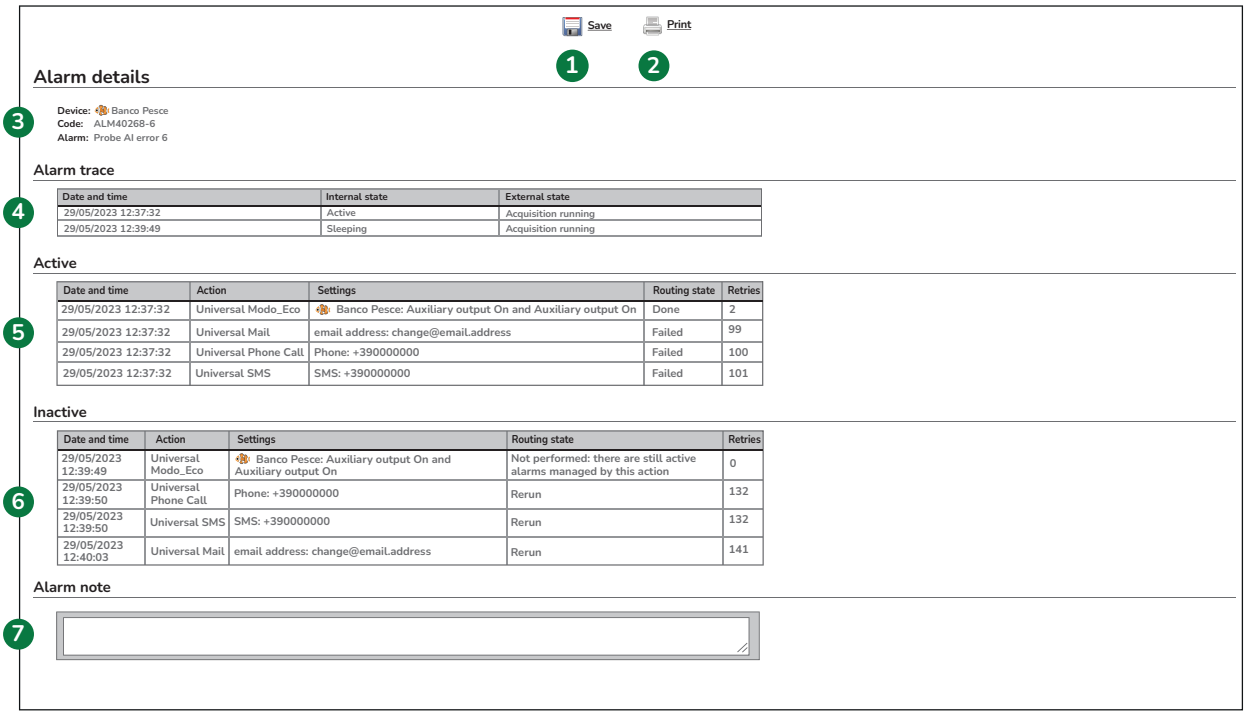
10. Shows whether the alarm is active or acknowledged:
    -  = Alarm active
    -  = Alarm acknowledged

    **Note**: if the alarm is active, it can be used to select a specific alarm using a check box that appears when the mouse moves over it, or after clicking.

    **Note**: selecting the specific alarm for acknowledgment is subject to user authorization "Alarms acknowledge" (see Group management).
11. Alarm description
12. Indicates for how long the alarm has been active
13. View alarm details (see Alarm details)
14. Image associated with the device.

# Alarm details

## Description




The tab contains:

1. **Save**: save changes to notes entered in point 7
2. **Print**: print alarm details
3. **Alarm details**: basic information relating to the alarm
   - **Device**: name of the device in alarm
   - **Code**: code for the active alarm
   - **Alarm**: description of the active alarm
4. **Alarm trace**: alarm history
   - **Date and time**: date and time at which the alarm occurred
   - **Internal state** = alarm condition (active/inactive)
   - **External state** = system status (acquisitions running, etc.)
5. **Active**: identifies the operations carried out on alarm activation
   - **Date and time**: date and time at which the alarm occurred
   - **Action** = action performed by the Televis**Go** v10 (if programmed)
   - **Settings** = parameters relating to the action
   - **Routing state** = result of the action (Done, Rerun, Failed, etc.)
   - **Retries** = number of attempts carried out
6. **Inactive**: identifies the operations carried out on alarm deactivation
   - **Date and time**: date and time at which the alarm occurred
   - **Action** = action performed by the Televis**Go** v10 (if programmed)
   - **Settings** = parameters relating to the action
   - **Routing state** = result of the action (Done, Rerun, Failed, etc.)
   - **Retries** = number of attempts carried out
7. Field used to edit or enter the note to be associated with the alarm.

# History

## Contents

This section includes the following topics:

Introduction ..... 86
Alarm log ..... 87
Data tables and charts ..... 89

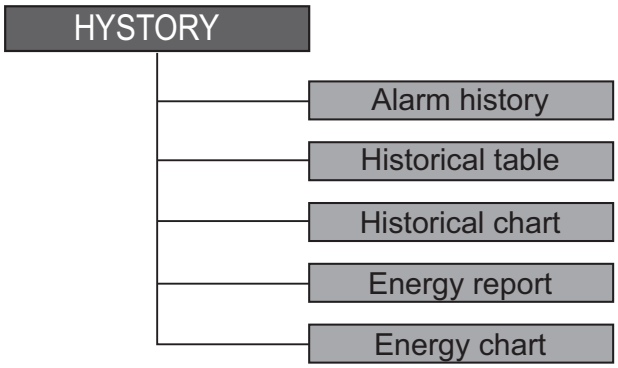
# Introduction

## Description

This section can be used to:

- view alarm history
- view the data archive in table form
- view the data archive in chart form
- view the energy reports in table form
- view the energy reports in chart form

## Menu structure



# Alarm log

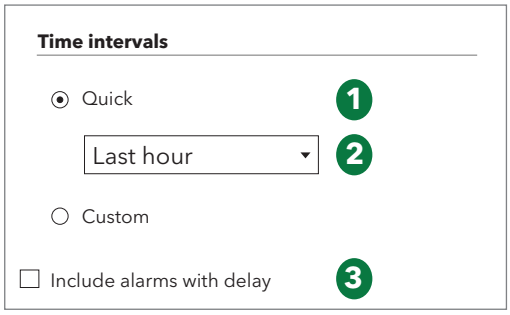
In the following menu:

**History > Alarm history**

The screen selects the type of interval to use:

- **Quick**: pre-set intervals (1, 2, 3, 6, 12 hours, 1 or 2 days, 1 week)
- **Custom**: custom interval with start and end date/time

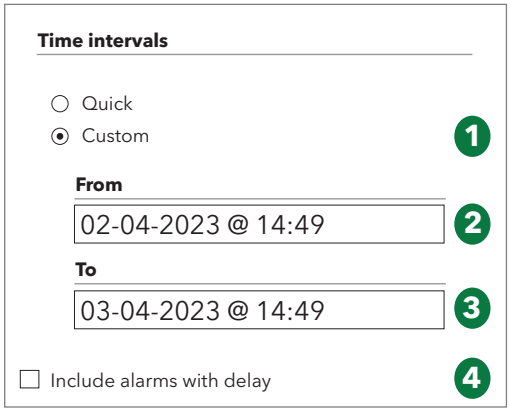
## Quick selection




Make a selection as follows:

1. If not already selected, select the option '**Quick**' (set by default)
2. From the drop-down menu, select the desired time interval:
   - Last hour
   - Last 2 hours
   - Last 3 hours
   - Last 6 hours
   - Last 12 hours
   - Last day
   - Last 2 days
   - Last week
3. Choose whether or not to select alarms with a delay in signaling (they may not be active yet).

## Custom selection



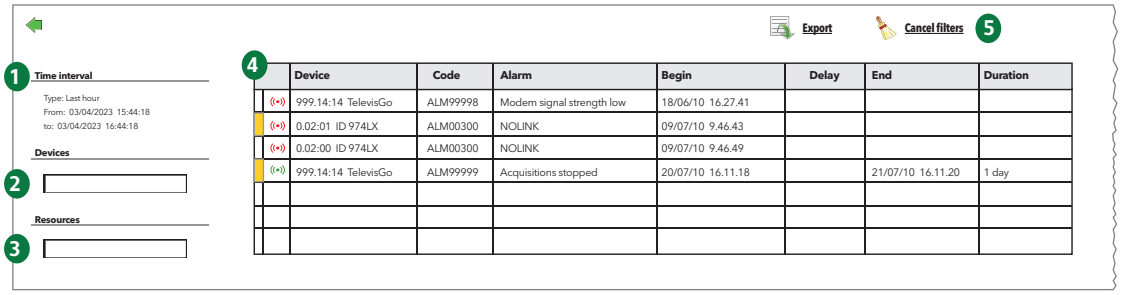

Make a selection as follows:

1. If not already selected, select the option '**Custom**'
2. In the box 'From", enter the start date/time of the desired time interval
3. In the box 'To", enter the end date/time of the desired time interval

4. Choose whether or not to select the box to include alarms with a delay in signaling (they may not be active yet).

## Viewing alarm history

Once you have selected the desired time interval, click to access the screen with the alarm history:




The screen components are as follows:

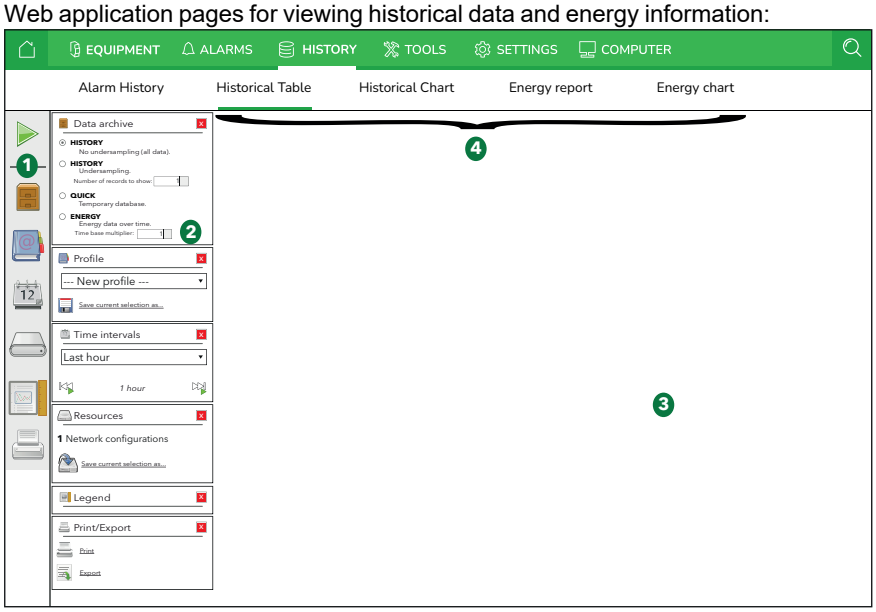
1. **Time interval**: indicates the time interval set on the previous page
2. **Devices**: used to filter the alarms by device name
3. **Resources**: used to filter the alarms by resource type
4. **Details**: shows the details relating to the alarms:
    - **Alarm note**: present if colored yellow ( )
    - **Alarm icon**:
        - **RED** ( ) = identifies an active alarm at the end of the time interval.
        - **GREEN** ( ) = identifies an alarm that ended before the end of the time interval.
        - GREY ( ) = identifies an alarm that is not yet active because the alarm delay has not yet expired.
    - **Device**: device name
    - **Code**: alarm code
    - **Alarm**: alarm description
    - **Begin**: alarm start date/time
    - **Delay**: indicates for how long the alarm has been delayed (and therefore not signaled)
    - **End**: date/time alarm ended
    - **Duration**: indicates the total duration of the alarm.
5. **Control bar**: see Buttons and Selectors.

The "Alarm note" can be also entered/edited within that alarm (click on the alarm icon).

# Data tables and charts

## Page structure

Web application pages for viewing historical data and energy information:

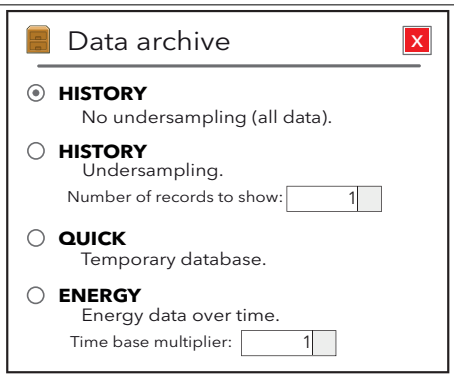
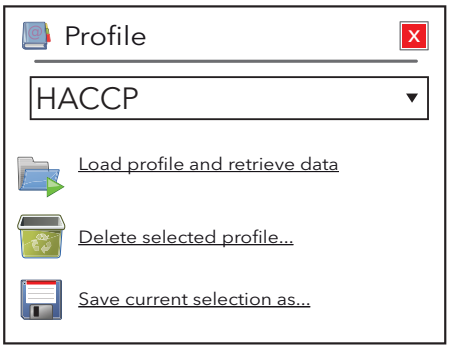
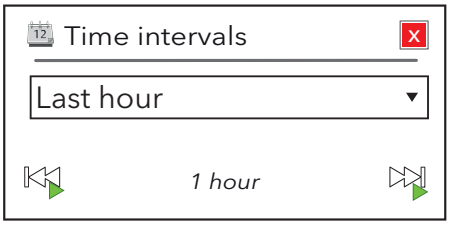
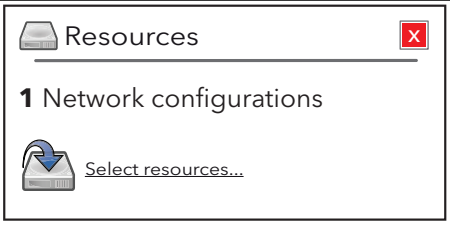
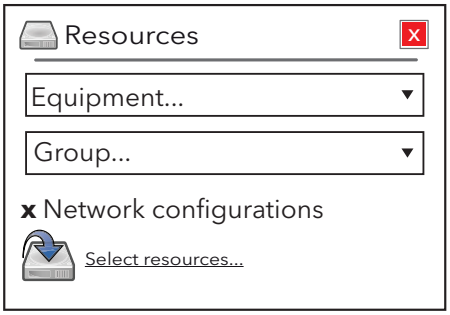


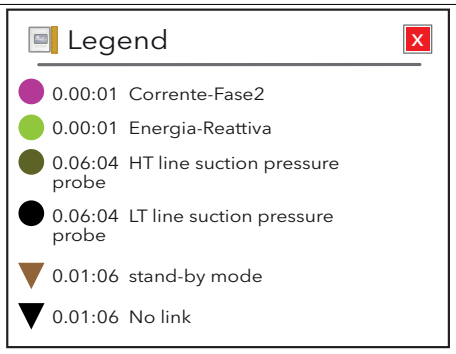
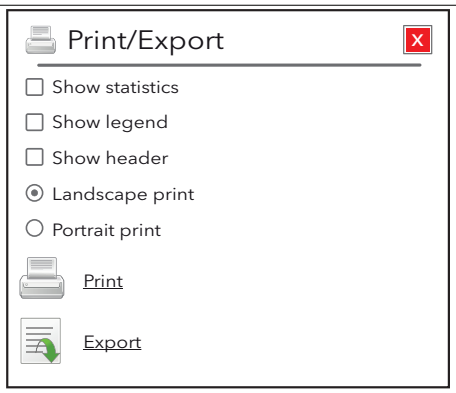

The different parts of the page are:

1. **Selection toolbar**: used to activate or deactivate viewing of the following information:
   - : performs a search for data based on the settings in the selection windows described in point 2
   - : shows/hides the “Data archive” window
   - : shows/hides the “Profile” window
   - : shows/hides the “Time intervals” window
   - : shows/hides the “Resources” window
   - : shows/hides the “Legend” window (only available with charts)
   - : shows/hides the “Print/Export” window.
2. **Selection windows**: used to customize the search by setting the type of data, profile, time intervals, resources, etc. (see 'System general settings').
3. **Data display**: data is displayed in the form of a table or a chart, depending on the settings selected previously. This takes place when the icon is clicked.
4. **Selection**: 4 types of information appear on this screen:
   - Historical table
   - Historical chart
   - Energy report
   - Energy chart.

## Selection windows

The windows shown/hidden by pressing the icons in the selection bar are used as follows:

| Icon | Window | Description of actions |
|---|---|---|
|  | / | Filters settings according to the selection windows. |
|  |  | Used to select the data to show:<br>• **HISTORY (no undersampling)**: Shows all logged data<br>• **HISTORY (undersampling)**: Used to select the number of records to show<br>• **QUICK (frequent sampling)**: Shows data from the temporary archive (only recent data)<br>• **ENERGY (energy data over time)**: Used to select the time multiplication factor for calculation of the relative value for the energy resources (see Energy resource selection). |
|  |  | Used to:<br>• Select a saved profile<br>• Create a new profile<br>• Save a profile that has just been created or edited<br>• Delete a profile saved previously<br>**NOTE**: after selecting a profile, click the button to apply it and view the data. |
|  |  | Used to select the display interval from a list of pre-set values (1 hour, 2 hours, 3 hours, 6 hours, 12 hours, 1 day, 2 days, 1 week) or by defining a "custom" value (by specifying the interval start and end date/time in "dd-MM-yyyy@ hh:mm" format).<br>The software will then display the values present in the interval corresponding to your selection, beginning with the current time at which the archive is being searched (for example, if you set 2 hours, the values recorded in the last 2 hours will be shown). |
|  |  | If you decide not to select a profile that has been created already, you can use this box to set which instruments and network resources to view. |
| |  | **Note**: available only when accessing the data history page from from a specific device History panel<br>Select an equipment from the drop down list to display the same group of resources for another device.<br>Select a group from the drop down list to switch the view to the different group of resources for the currently displayed device. |

| | | |
|---|---|---|
|  |  | Pairs each line (using color and shape) to a parameter selected during selection of the system settings.<br>**NOTE: only visible if a chart is shown.** |
|  |  | Used to print or export the data shown.<br>**Other options only visible if a chart is shown:**<br>Selects whether the following should be shown during the printing or exporting process:<br>• statistics<br>• legend<br>• header.<br>It also selects whether the output should be oriented horizontally or vertically. |

## HACCP profiles

During the profile definition phase there is the option of creating one or more profiles, categorized as **HACCP** profiles, that influence the way in which data is displayed and formatted during the printing phase.
In order to create an **HACCP** profile one of the following conditions must be satisfied:

A. For each device you wish to enter in the profile, select only one analogue resource (typically the control probe) and only one machine status associated with the selected analogue probe (typically defrost status)

B. For each device to be entered in the profile, select only analogue resources.

To the right of the temperature value an * (asterisk) is added if the machine status (typically defrost) is active.

In the case of Flash printing (periodical printing of real-time data) or real-time display, the system behaves as follows:

- In the event of an analogue resource error or "no-link" device, the system will search the historical data for the first previous valid temperature value
- The duration of the search window is defined in the configuration (default = 30 minutes).

Only profiles that satisfy the conditions described in points **A** and **B** can be marked as **HACCP** profiles. The user decides whether to mark a profile as **HACCP** by selecting the corresponding box, but the software offers this option only if the conditions are observed.

Televis**Go** v10 makes a System-HACCP profile available, which corresponds to the HACCP selections in the configured devices, together with any **HACCP** profiles created by the user, and can be viewed on the data archive screen.

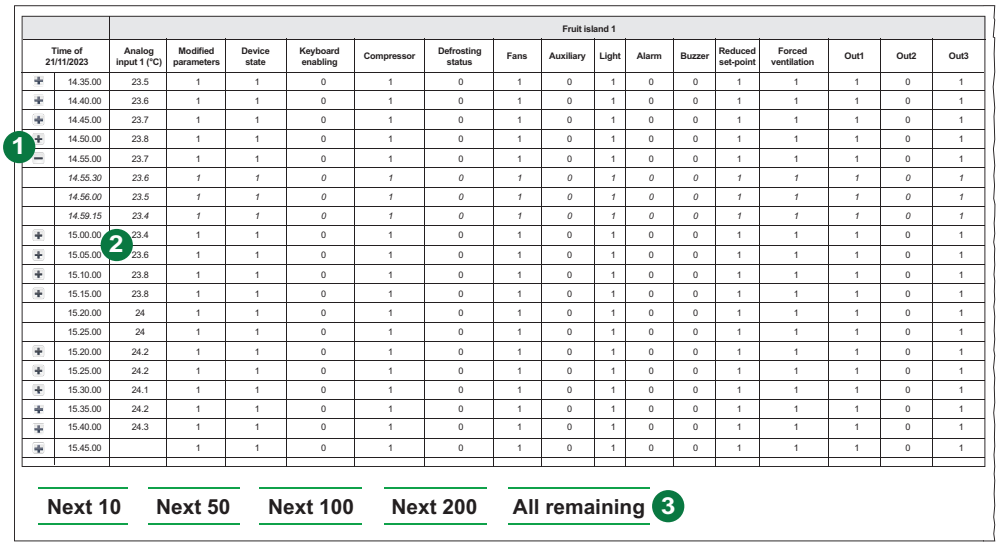
## Historical table

To view the data saved on the Televis**Go** v10, go to the following menu:

**History** > **Historical Table**

The screen that opens is described in 'Page structure' with the relevant options available for selection.

Once you have made the selections, click to load a selected profile or the icon; the following screen will appear:



| | Time of 21/11/2023 | Fruit island 1 | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Analog input 1 (°C) | Modified parameters | Device state | Keyboard enabling | Compressor | Defrosting status | Fans | Auxiliary | Light | Alarm | Buzzer | Reduced set-point | Forced ventilation | Out1 | Out2 | Out3 |
| + | 14.35.00 | 23.5 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 14.40.00 | 23.6 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 14.45.00 | 23.7 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 14.50.00 | 23.8 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| − | 14.55.00 | 23.7 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| | *14.55.30* | *23.6* | *1* | *1* | *0* | *1* | *0* | *1* | *0* | *1* | *0* | *0* | *1* | *1* | *1* | *0* | *1* |
| | *14.56.00* | *23.5* | *1* | *1* | *0* | *1* | *0* | *1* | *0* | *1* | *0* | *0* | *1* | *1* | *1* | *0* | *1* |
| | *14.59.15* | *23.4* | *1* | *1* | *0* | *1* | *0* | *1* | *0* | *1* | *0* | *0* | *1* | *1* | *1* | *0* | *1* |
| + | 15.00.00 | 23.4 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 15.05.00 | 23.6 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 15.10.00 | 23.8 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 15.15.00 | 23.8 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 15.20.00 | 24 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 15.25.00 | 24 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 15.20.00 | 24.2 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 15.25.00 | 24.2 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 15.30.00 | 24.1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 15.35.00 | 24.2 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 15.40.00 | 24.3 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| + | 15.45.00 | | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |



The different parts of the screen are:

1. / : used to expand/collapse the variations of asynchronous resources (digital inputs and outputs, statuses, alarms).
2. **Date/Time**: identifies the date/time the data was saved. There is then a series of columns with the previously selected resources and relative values read for each device at the indicated time.
3. **New records**: the initial screen will show the first 50 results by default. To view other values, select one of the following options:
   - **Next 10**: shows the next 10 values
   - **Next 50**: shows the next 50 values
   - **Next 100**: shows the next 100 values
   - **Next 200**: shows the next 200 values
   - **All remaining**: show all values

   (**NOTE**: in some cases this may take a few minutes).

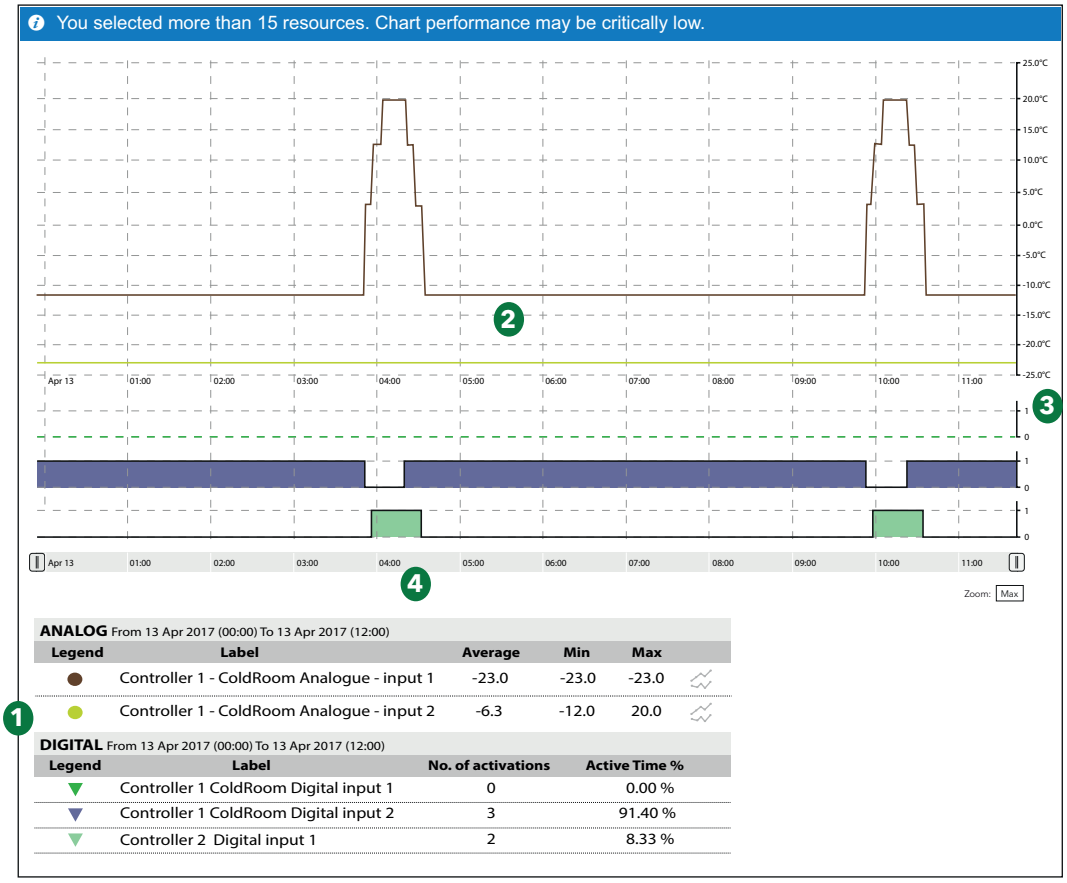
## Historical data chart

To view the historical data chart, go through the following menus:

**History > Historical chart**

The screen that opens is described in "Page structure" with the relevant options available for selection.

Once you have made the selections, click to load a selected profile or the icon; the following screen will appear:




The different parts of the page are:

1. **Legend**: shows the color chosen when creating the device profile for each resource (see 'Device resources') and a symbol to identify the resource type ( ● = analogue resource and ▼ = digital resource).
2. **Resource chart**: the curve on the screen shows how the values read (y-axis) varied over time (x-axis). Each selected resource has its own line in the assigned color with the value trend over time (for example: ● Controller 1 - ColdRoom Analogue input 1).
3. **Value axes**: shows the y-axis for the different curves displayed. If the y-axes of several resources are compatible, it will show a single axis, otherwise it will show several y-axes on the right.
4. **Statistics**: shows the statistics for the analogue and digital resources displayed.

Click on the symbol of a resource to hide/show it.

If the hidden resource is an 'analogue resource', the corresponding line on the chart will be also hidden and the axes of the read values (one for each unit of measure up to a maximum of 3) will be sized according to the remaining values. If a digital resource (digital inputs/outputs, machine statuses and alarms) is hidden, the chart will disappear and its place will be taken by the next resource.
Click on the first row of the resource name and a window opens which can be used as follows:

- **Change color**: used to change the color used in the chart
- **Mark**: (digital resources only) used to view a vertical band in line with value 1 for the digital resource.

| ANALOGUE RESOURCE | DIGITAL RESOURCE |
|---|---|
| **Controller 1 ColdRoom Analogue input 1**<br>Change color | **Controller 1 ColdRoom Digital input 1**<br>Change color<br>Mark |

Read value axis (y ordinates)

Click on the value axis to open a new window with the following items:

- **Set as default**: visible only with 2 or 3 axes and used to view the values in the unit of measure of the selected axis on the chart
- **Change color**: used to customize the color of the axis and the corresponding grid
- **Change minimum/maximum**: used to customize the min and max values shown on the value axis
- **Set bands**: according to set values A and B (set to the closest value in the grid).

If more than 15 resources have been selected, the message at the top will appear: "You selected more than 15 resources. Chart performance may be critically low."

The chart shown is interactive: by moving the mouse over the rows of the various resources, the mouse cursor will take the shape ● (in the same color as the resource) and:

- **Within the chart**: the values and the moment at which they were recorded will be displayed
- **In the legend**: the values of all resources in their unit of measure will be displayed

**Zoom**: selection boxes used to select a specific time band to view are in the bottom right-hand corner:

- **1 hour**: the charts for the last hour of the selected time interval are shown (see previous page)
- **3 hours**: the charts for the last 3 hours of the selected interval are shown (see previous page)
- **Max**: the charts for the whole selected interval are shown (see previous page).

The interval can be edited by dragging the cursors downwards.

**NOTE**: check that the orientation set on the printer used is the same as the type of printing selected.

## Energy report

To view the history for energy resources, go through the following menus:

**History > Energy report**

The screen that opens is described in "Page structure" with the relevant options available for selection.

Once selection is complete, click  to load a selected profile or the  icon to open the same screens as described for the data archive (see "Historical table").

The difference between one row and the next indicates the change in the resource monitored during the time period.
Data is grouped by registration interval set for the energy resource (see Selecting energy resources).
A value greater than or equal to 1 can be entered in the text box as a multiple of the calculation time for the value relating to the energy resources.
The page will automatically calculate the value of the resulting period. To confirm the selected aggregation period click on **Set value**.

## Energy chart

To view the energy chart, go through the following menus:

**History > Energy chart**

The screen that opens is described in "Page structure" with the relevant options available for selection.

Once selection is complete, click  to load a selected profile or the  icon to open the same screens as described for the historical chart (see "Historical chart").

# Functions

## Contents

This section includes the following topics:

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List of controller parameters ..... 103
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Writing on more than one device ..... 111
RVD (Remote Virtual Device) ..... 112
Layout ..... 113

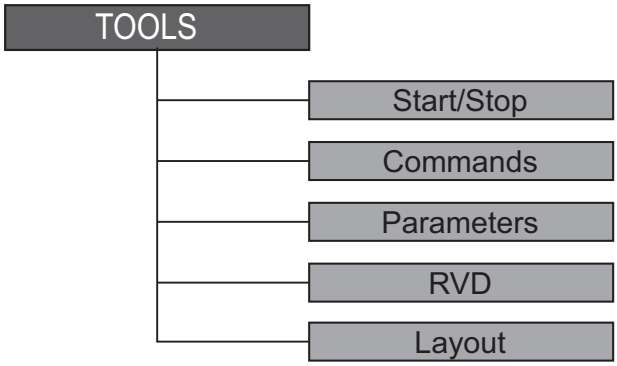
# Introduction

## Description

This section can be used to manage:

- Start/Stop acquisition
- Commands
- device parameters
- the RVD function (if available for the device)
- layouts

## Menu structure



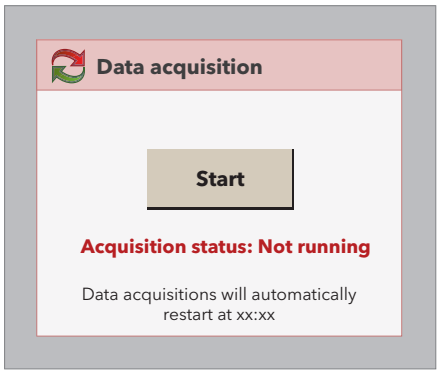
# Start/Stop acquisition

In the following menu:

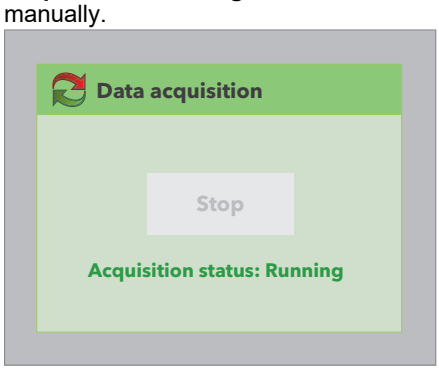
**Functions > Start/stop**

On entering the menu, one of the windows shown below will open:

- **Acquisitions not running**: the window below will appear. Click on **Start** to manually start them.
  **NOTE**: If the acquisition are not manually restarted, the acquisitions will be automatically restarted after a predefined time.
  **NOTE**: Logging will be stopped automatically in the event of repeated service restarts in a short space of time.




- **Acquisitions running**: the window below will be displayed. It is not possible to stop acquisitions manually.




You can check the acquisition status in the Status bar (see "Status icons").

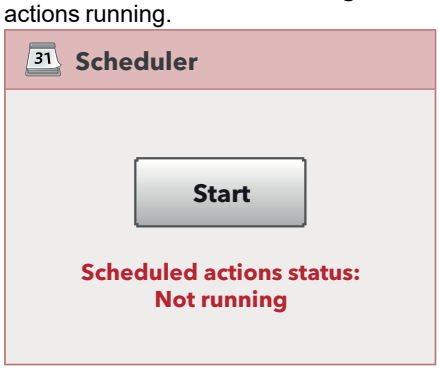
# Scheduled actions start/stop

In the following menu:

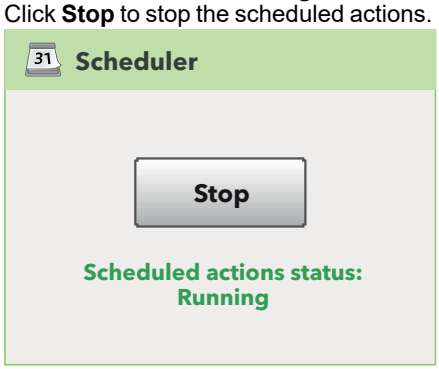
**Functions > Start/stop**

Depending on whether the actions have commenced, when you enter this menu one of the windows shown below will open:

- **Scheduled actions not running**: the window below will appear. Click **Start** to start the scheduled actions running.




- **Scheduled actions running**: the window below will appear.
Click **Stop** to stop the scheduled actions.

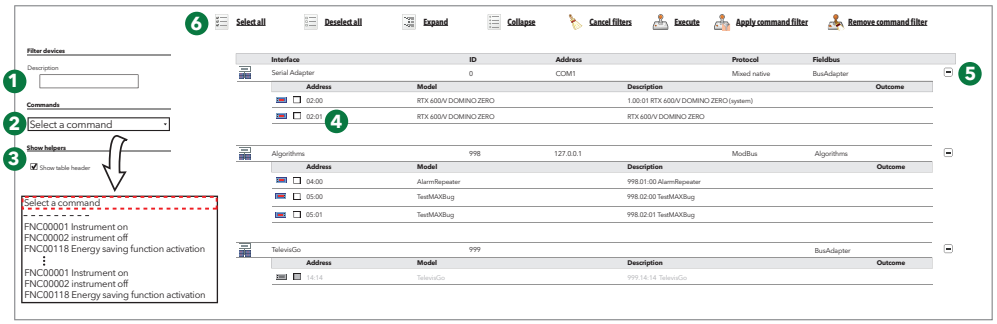


# Commands

In the following menu:

**Functions > Commands**

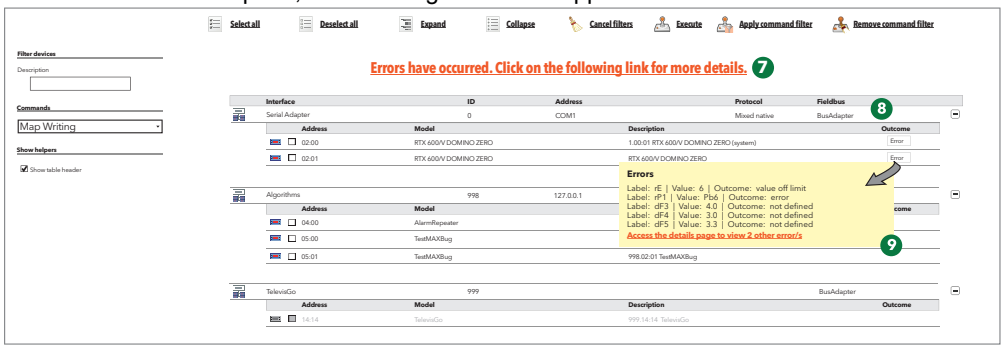
The following screen will appear:




The different parts of the page are:

1. **Filter devices**: used to filter the devices by description
2. **Commands**: used to select the command/action to send to one or more devices. The list represents the grouping of all commands available on all devices in the network, plus any actions for writing "Manual Execution" parameters defined within the “Scheduled activities”
3. **Show table header**: show/hide table headers
4. **Device list**: used to select the individual devices by ticking the check box to the left of the address
5. **Expand/Collapse**: expands/collapses the list of devices in an interface
6. **Control bar**: see Buttons and Selectors.

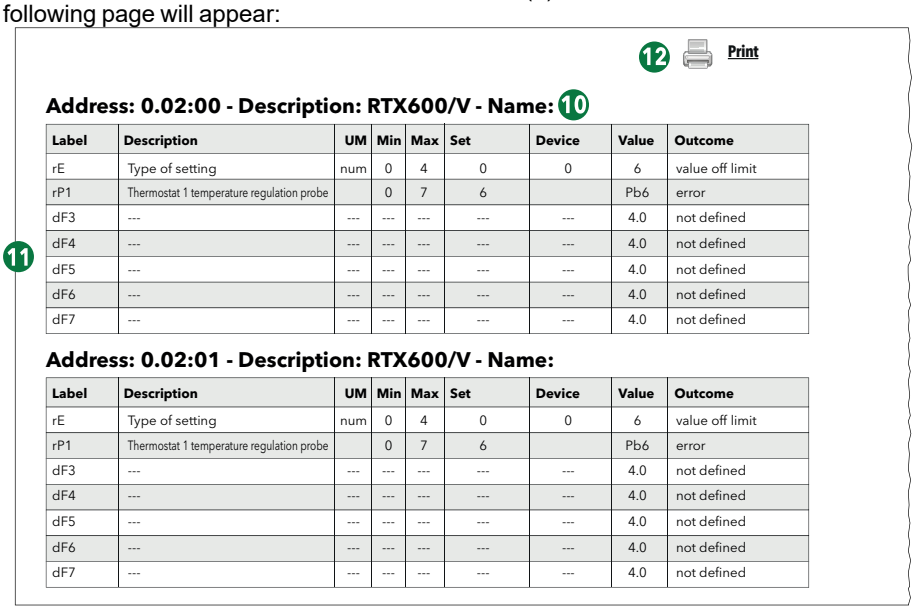
Once execution is complete, the following screen will appear:




The following information will appear:

7. A sentence warning the user of any errors. On clicking the highlighted text, a pop-up opens with the full list of errors detected.
8. The **Outcome** column where, for the selected devices, the following may appear:
    - **Done**: the action was carried out successfully
    - **Error**: if an error has occurred.
9. If there are errors: click the label "**Error**" for a specific device to open a pop-up with a list of errors detected.

To view the full list of errors, click on the sentence (**7**) or on the sentence in red in the new yellow window (**9**); the following page will appear:



12 Print

**Address: 0.02:00 - Description: RTX600/V - Name:** 10

| Label | Description | UM | Min | Max | Set | Device | Value | Outcome |
|---|---|---|---|---|---|---|---|---|
| rE | Type of setting | num | 0 | 4 | 0 | 0 | 6 | value off limit |
| rP1 | Thermostat 1 temperature regulation probe | | 0 | 7 | 6 | | Pb6 | error |
| dF3 | --- | --- | --- | --- | --- | --- | 4.0 | not defined |
| dF4 | --- | --- | --- | --- | --- | --- | 4.0 | not defined |
| dF5 | --- | --- | --- | --- | --- | --- | 4.0 | not defined |
| dF6 | --- | --- | --- | --- | --- | --- | 4.0 | not defined |
| dF7 | --- | --- | --- | --- | --- | --- | 4.0 | not defined |

11

**Address: 0.02:01 - Description: RTX600/V - Name:**

| Label | Description | UM | Min | Max | Set | Device | Value | Outcome |
|---|---|---|---|---|---|---|---|---|
| rE | Type of setting | num | 0 | 4 | 0 | 0 | 6 | value off limit |
| rP1 | Thermostat 1 temperature regulation probe | | 0 | 7 | 6 | | Pb6 | error |
| dF3 | --- | --- | --- | --- | --- | --- | 4.0 | not defined |
| dF4 | --- | --- | --- | --- | --- | --- | 4.0 | not defined |
| dF5 | --- | --- | --- | --- | --- | --- | 4.0 | not defined |
| dF6 | --- | --- | --- | --- | --- | --- | 4.0 | not defined |
| dF7 | --- | --- | --- | --- | --- | --- | 4.0 | not defined |

The screen displays:

10. The data for the device on which the errors have been detected.
    - address
    - description
    - name assigned to the device.
11. The list of errors detected. It contains the following information relating to each error:
    - parameter label
    - description
    - unit of measure
    - default value
    - value set on the device
    - value the action attempted to write
    - type of error detected
12. The **Print** button used to print the full error report.

**NOTE**: incorrect selection of one or more commands (for example, “Device OFF”) can influence the proper running of the equipment. In the example, sending the command “Device OFF” physically switches off the device and prevents it from acquiring any data or performing any regulation. Always provide control systems outside of the Televis**Go** v10 for functions that are critical to the application.

## ⚠ WARNING

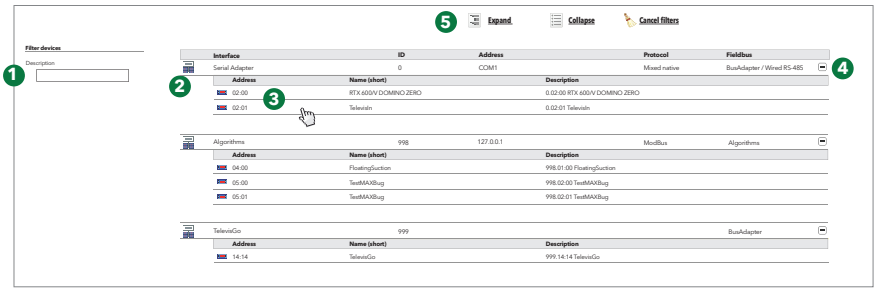
**LOSS OF CONTROL**
The installation designer must consider the potential failure modes of the control circuit and, for some critical control functions, provide a means for reaching a safe condition during and after a circuit failure. Examples of critical control functions are the emergency stop and end of travel stop, power supply cut-off and restarting.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

# Parameters

In the following menu:

**Functions > Parameters**

The following screen will appear:




The different parts of the page are:

1. **Filter devices**: used to filter by device description.
2. **Device list**: shows the list of network devices grouped by interface. The controls present are those for each individual device
3. **Parameters**: click the device row to access the selected device parameters
4. **Expand/Collapse**: expands/collapses the list of devices in an interface.
5. **Control bar**: see Buttons and Selectors.

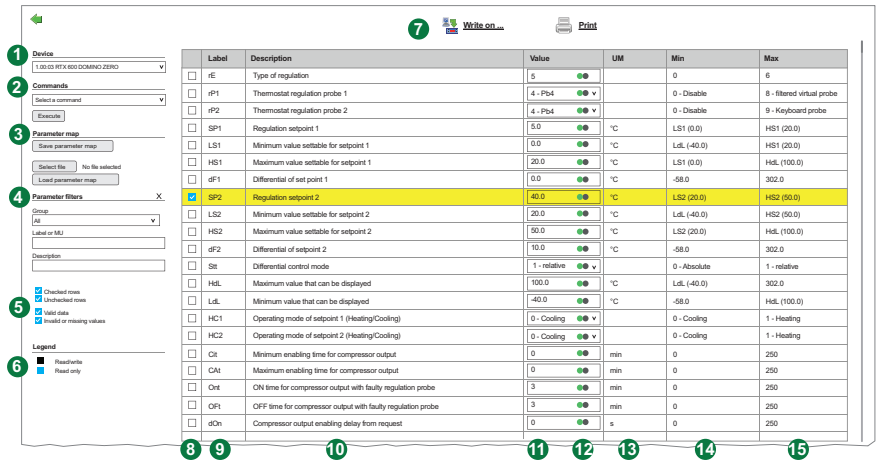
Only one device can be selected at a time.

Setting the value of some of the parameters incorrectly can affect the proper operation of the equipment, even if the values fall within the range of values that can be set (for example: setpoints, temperatures, etc.).

| ***NOTICE*** |
| --- |
| **INOPERABLE DEVICE**<br>Enable the TelevisGo v10 alarm thresholds for resources that are critical to the application.<br>**Failure to follow these instructions can result in equipment damage.** |

# List of controller parameters

The following screen will appear:




The different parts of the page are:

1. **Controller**: shows the information relating to the selected device: selected device Address, Description and Name
2. **Commands**: used to select the command to be sent to the device (only commands available on the selected controller are listed).
   Click "**Execute**" to execute the selected command.
3. **Parameter map**: used to load/save a parameter map:
   - **Save parameter map**: saves the parameter map for the controller in "**.dat**" format
   - **Select file**: select the parameter map to load onto the controller in "**.dat**" format
   - **Load parameter map**: load the parameter map onto the controller.
4. **Parameter filters**: apply filters to the parameter map for the controller. The filters are:
   - **Group**: filter parameters by the group to which they belong
   - **Label or MU**: filter parameters by name (Label) or unit of measure (MU)
   - **Description**: filter parameters by their description.

   **NOTE**: The "**X**" to the right of the heading resets applied filters.
5. **Parameter filters 2**: there are 2 pairs of check boxes which act independently from the previous filters:
   - **Checked rows/Unchecked rows (*)**: filters the checked or unchecked rows
   - **Valid data/Invalid or missing values (*)**: filters the rows with or without valid data.

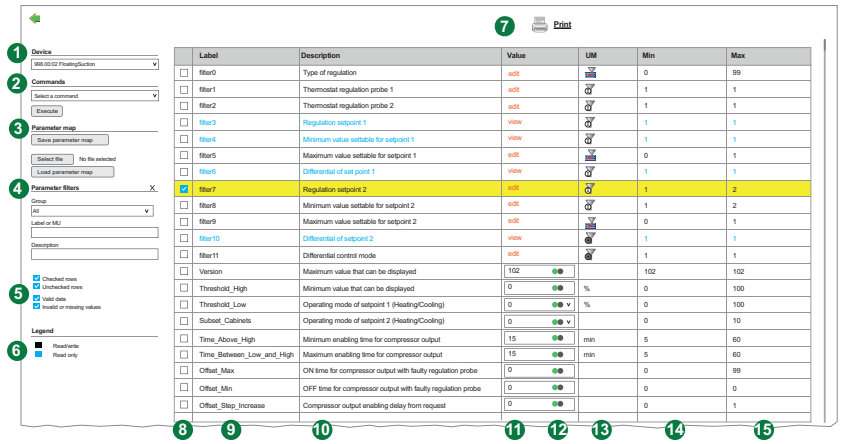
   (*) If both check boxes in a pair are ticked, all rows are shown.
   If neither of the check boxes in a pair are ticked, the table will be empty.
6. **Legend**: identifies the text color depending on whether the parameter is read/write (black) or read-only (blue).
7. **Control bar**: the following buttons are shown at the top: (see Buttons and Selectors):
   - **Write on...**: opens a selection template for the devices onto which the map shown should be copied
   - **Print**: print the map shown
8. **Parameter select**: tick the box to select/deselect one or more parameters.
9. **Label**: shows the label for the controller parameters (filtered or not).
10. **Description**: shows the description for the controller parameters.
11. **Value**: shows value read for the controller parameters (filtered or not) and can be used to change them instantly.

    To edit a parameter, simply change its value and click Enter or exit the field
    - If writing is successful the cell around the edited field turns **green**
    - If writing is not successful (or the value is outside the range), the entire row turns **red**. The incorrect value continues to be shown. You therefore need to change it to a valid value or delete the field and move on to another parameter so that the system reads the current value from the instrument again
12.  : if shown, this means that the Televis**Go** v10 is reading the values on the controller.
13. **UM**: shows the unit of measure (UM) for the parameters (if previously entered on the map and saved).

14. **Min**: shows the minimum value the parameter can assume and any reference to other parameters.
15. **Max**: shows the maximum value the parameter can assume and any reference to other parameters.

# List of algorithm parameters

The following screen will appear:




The different parts of the page are:

1. **Controller**: shows the information relating to the selected device: selected device Address, Description and Name
2. **Commands**: to select the command to be sent to the device (the list groups together all commands available for all network devices).
   Click "**Execute**" to execute the selected command.
3. **Parameter map**: used to load/save a parameter map:
   - **Save parameter map**: saves the parameter map for the controller in "**.dat**" format
   - **Select file**: select the parameter map to load onto the controller
   - **Load parameter map**: load the parameter map onto the controller.
4. **Parameter filters**: apply filters to the parameter map for the controller. The filters are:
   - **Group**: filter parameters by the group to which they belong
   - **Label or MU**: filter parameters by name (Label) or unit of measure (MU)
   - **Description**: filter parameters by their description.

   **NOTE**: The "**X**" to the right of the heading resets applied filters.
5. **Parameter filters 2**: there are 2 pairs of check boxes which act independently from the previous filters:
   - **Checked rows/Unchecked rows (*)**: filters the checked or unchecked rows
   - **Valid data/Invalid or missing values (*)**: filters the rows with or without valid data.

   (*) If both check boxes in a pair are ticked, all rows are shown. If none of the check boxes in a pair are ticked, the table will be empty.
6. **Legend**: text color depends on whether the parameter is read/write (black) or read-only (blue).
7. **Print**: print the map shown (see Buttons and Selectors):
8. **Parameter select**: tick the box to select/deselect one or more parameters.
9. **Label**: shows the label for the controller parameters (filtered or not).
10. **Description**: shows the description for the controller parameters.
11. **Value**: shows a hypertext link or value read for the controller parameters (filtered or not) and can be used to change them instantly. Options are:
    - **view**: normally present for filters. Click to view the filter loaded by the designer; cannot be changed
    - **edit**: normally present for filters. Click to view the filter loaded by the designer; can be changed
    - **parameter value**: value read on the controller. A value change, if valid according to the specified limits and the value type, will automatically be sent to the controller for updating
    - **Value**: shows value read for the controller parameters (filtered or not) and can be used to change them instantly.

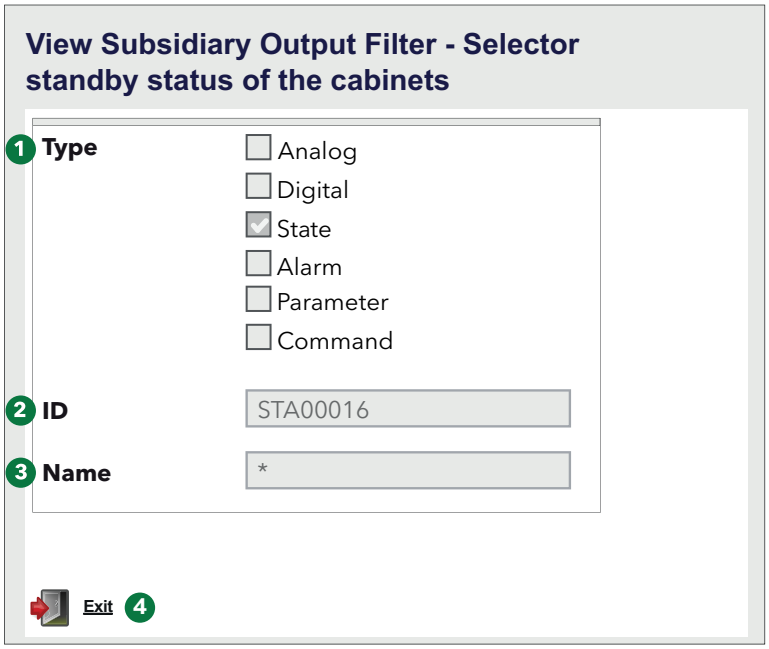
    To edit a parameter, simply change its value and click Enter or exit the field
    - If writing is successful the cell around the edited field turns **green**
    - or, if writing is not successful (or the value is outside the range), the entire row turns **red**. The incorrect value continues to be shown. You therefore need to change it to a valid

value or delete the field and move on to another parameter so that the system reads the current value from the instrument again

12.  : if shown, this means that the Televis**Go** v10 DP is reading the values on the controller.
13. **UM**: shows the unit of measure (UM) for the parameters (if previously entered on the map and saved); in the case of filters, it identifies the type of resource (devices or resources).
14. **Min**: shows the following
    - **Parameters:** minimum value the parameter can assume;
    - **Master filters:** minimum number of devices;
    - **Subsidiary filters:** minimum number of resources allowing an output to be restored.
15. **Max**: shows the following
    - **Parameters:** maximum value the parameter can assume;
    - **Master filters:** maximum number of devices that can be selected with the filter;
    - **Subsidiary filters:** the maximum number of resources that can be selected with the filter.

## “View” value

Click the "**view**” hypertext link to open a screen like the one below, showing details of the filter:



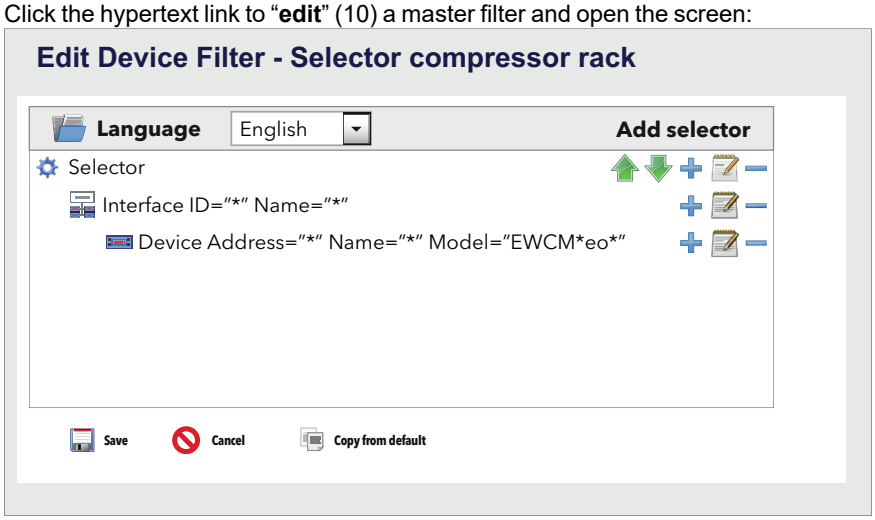

The various parts of the screen are:

1. Type of resource used
2. Resource ID
3. Resource name (optional)
4. Output

**NOTE**: the filter cannot be changed.

## “Edit” value

Click the hypertext link to “**edit**” (10) a master filter and open the screen:




The master filter and subsidiary filter act independently of each other.

The types of output resources are a subset of the types of input resources; only network parameters and commands can be set as output resources.
For the subsidiary filters, the * symbol in the **MAX** field indicates no upper limit
If the minimum set number is greater than the maximum number, the set of elements is empty.

The selection and rule hierarchy is shown on the left. The buttons have the following meaning:

| Button | Description |
|---|---|
|  | Move the selector up a position |
|  | Move the selector down a position |
|  | Add a sub-rule (selector > interface; interface > device; device> resource) |
|  | Modify selector or rule |
|  | Delete selector or rule and all sub-rules |

A filter consists of at least one selector. Each selector identifies a specific subset of resources and can be additive or subtractive.

An additive selector adds the resources it has filtered to the final set, whereas a subtractive selector removes the resources it has filtered.

**NOTE: selector order is significant**.

A subtractive filter only makes sense when used to filter the result of the additive filter before it.

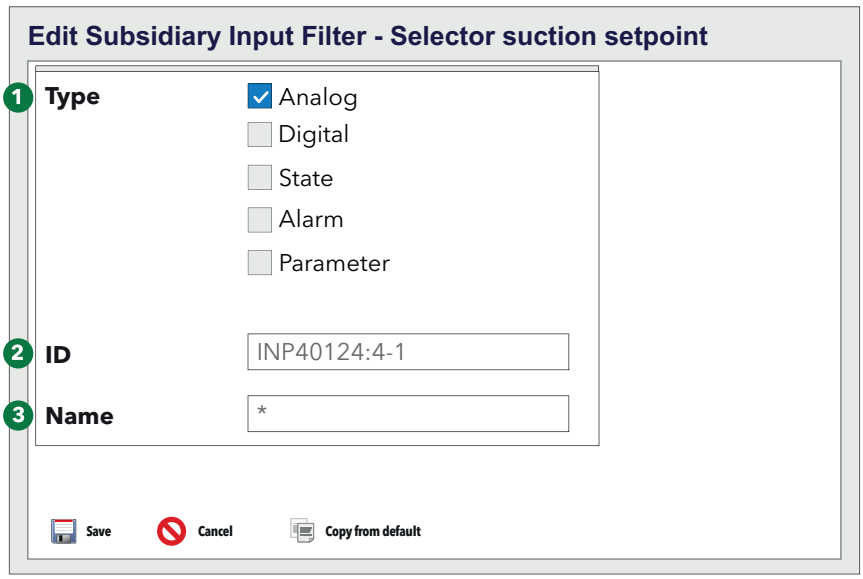
To modify a selector, click the relative  icon.

For more information on the boxes appearing on the right of the screen (see "Scanning").

Once all changes have been made to selector properties, click  **Save**.

Click the hypertext link to **set** (**10**) a subsidiary input or output filter and open the screen:

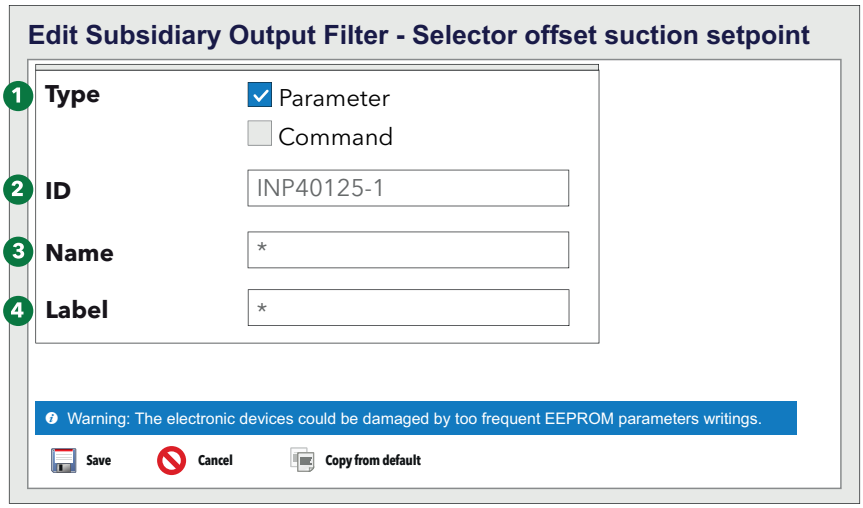
**Subsidiary input filter**




**WARNING**

**UNINTENDED EQUIPMENT OPERATION**
Frequent writing of EEPROM parameters can damage the system memory.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

**Subsidiary output filter**




**WARNING**

**UNINTENDED EQUIPMENT OPERATION**
Frequent writing of EEPROM parameters can damage the system memory.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

The different parts of the page are:

1. **Type**:
   for a subsidiary input filter, select the type of element to apply the filter to, either:
   - Analog resource
   - Digital resource
   - State resource
   - Alarm
   - Parameter

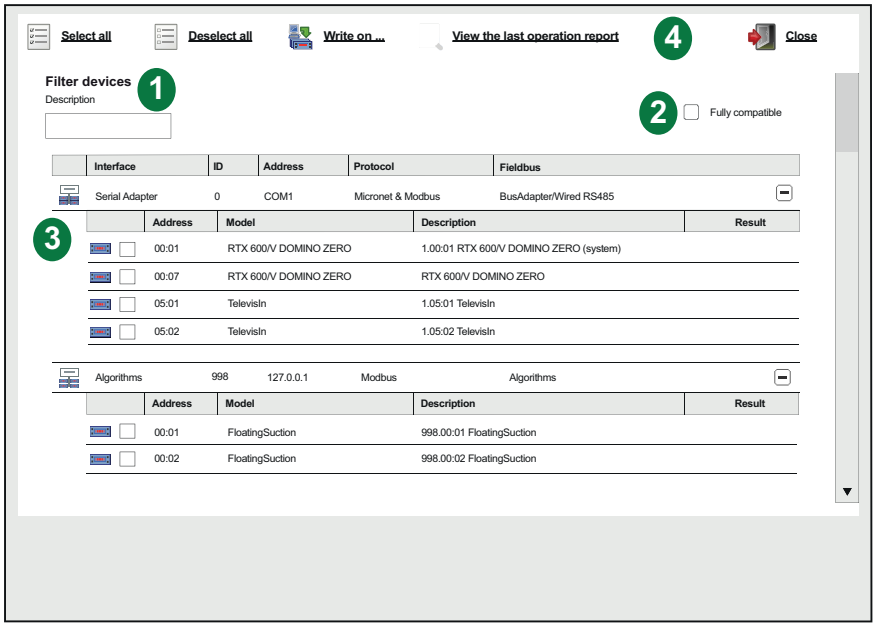
   For a subsidiary output filter, select the type of element to apply the filter to, either:
   - Parameter
   - Command
2. **ID**: used to filter the resources by their identification number. It only accepts specific combinations of characters, numbers and wildcard characters (**?** and *****). It consists of 3 upper case letters and 5 numbers followed by a hyphen or other text. For example: INP40001-1, ALM00300
3. **Name**: used to filter resources by their name translated into the language selected in the previous step. Allows the use of wildcard characters (**?** and *****)
4. **Label**: only visible if the "Parameter" type is selected - (**1**). Used to select the input or output resource by entering its code (selection is case-sensitive).

Once all changes have been made to selector properties, click  **Save**.

# Writing on more than one device

Using the "Device parameters list" screen as reference, click **Write on ...** to access the device selection page where you can write the value of the parameters included in the previous page.

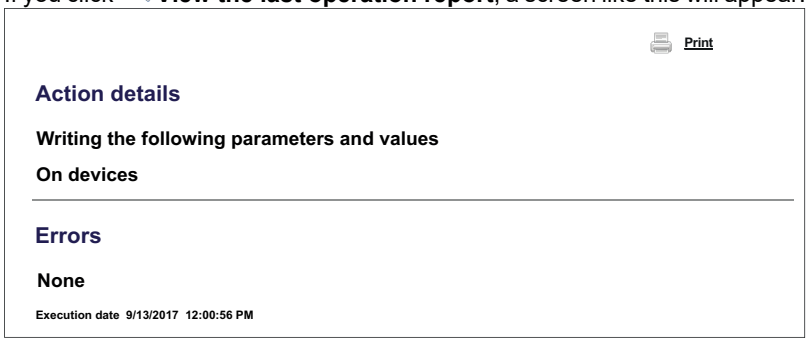
A window similar to this one will open:




The various screen components are:

1. **Filter devices**: used to filter the devices by description
2. **Fully compatible**: used to show only the devices that are fully compatible with the first ones where the new parameter values have been entered
3. **Device list**: shows the list of selectable devices to which apply the parameter writing should be applied. Televis**Go** v10 and the reference device cannot be selected
4. **Control bar**: see Buttons and Selectors.

If you click **View the last operation report**, a screen like this will appear:



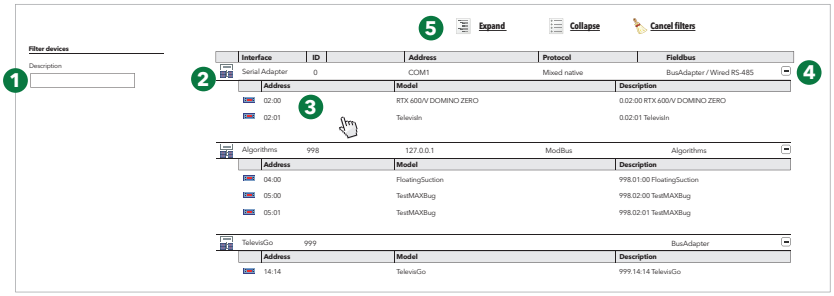

where the last writing operation performed is shown, along with information regarding on which devices and on which parameters. Click the **Print** button to print the full report.

# RVD (Remote Virtual Device)

In the following menu:

**Functions > RVD**

The following screen will appear:




The different parts of the page are:

1. **Filter devices**: used to filter by device description.
2. **Device list**: shows the list of network devices grouped by interface. Only the devices where the function exists and is activated will be displayed.
3. **RVD access**: click a device row to access its RVD.
4. **Expand/Collapse**: expands/collapses the list of devices in an interface.
5. **Control bar**: see Buttons and Selectors.

A picture of the selected device will be shown:



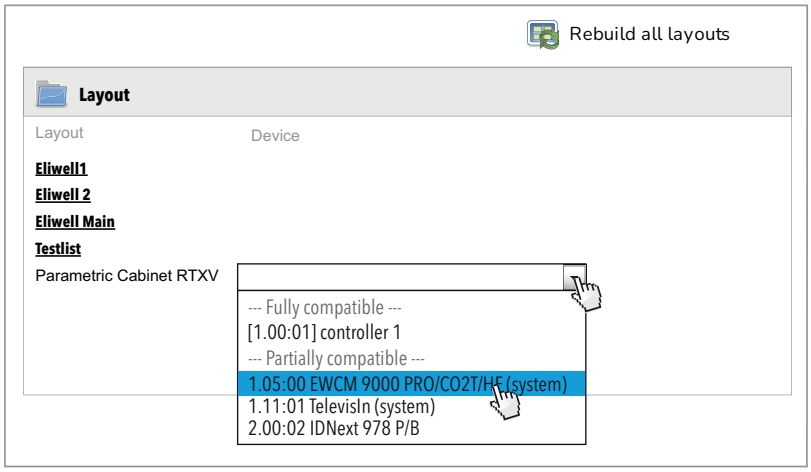

The Control bar is at the top (see "Buttons and Selectors").
The chart representation is similar to that on the actual device.
The various operations running on the device screen (click buttons, view active LEDs, etc.) are equivalent to working directly on the device.
**NOTE**: The RVD function is only available for some devices.

# Layout

In the following menu:

**Functions > Layout**

The following screen will appear:




Press **Rebuild all layouts**, for:

- **Layout Designer on external computer**: only upgrades the layout list uploaded to the system update page:

  **Computer > Update > System > Layout pages**

  Reload any new or edited layouts from the system update page.
- **Layout Designer pre-loaded in TelevisGo v10 DP**: will update all layouts present (Televis**Go** v10 DP imports any changes made to a layout) and any new layouts will be loaded. In this case, you do not need to load them using the system update page.

Click one of the names in the list to view the layout associated with it.

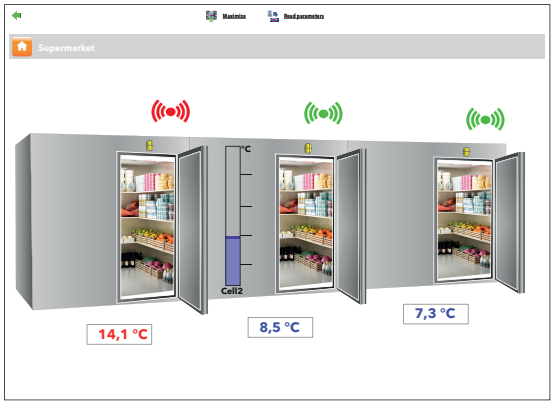
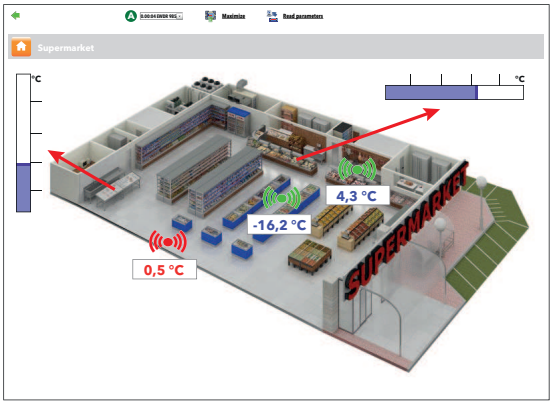
If the layout is parametric (valid for a number of devices that are the same and can be selected individually), on the right there will be a drop-down menu from which the user can select the device to be displayed.

In the drop-down menu, the devices will be subdivided as shown below:

- **Fully compatible**: devices shown at the start of the list, which have all resources present in the layout
- **Partially compatible**: devices shown at the end of the list, which have some resources present in the layout
- **Incompatible**: devices which are not shown, and have none of the resources present in the layout.

The same drop-down menu will also be available in the layout screen, and allows the user to switch devices simply by selecting the one required.

Press  to go back to the previous page and view the list of available layouts.

| Example 1 | Example 2 (parametric layout) |
|---|---|
|  |  |



At the top of the general and parametric layout pages there is a **Control bar** (see "Buttons and Selectors").

Parameters are automatically upgraded only when you open a Layout screen. To manually update the values displayed, press **Read parameters**.

When the mouse cursor is placed on an item, a window appears containing its characteristics.

To edit a parameter, select the value using the mouse, enter the value and press “Enter”.

If a valid value is entered, a green message “**Done**” will appear above the text box; otherwise, a red “**Error**” message will appear.

**NOTE**: For further details regarding the creation/maintenance of a Layout, please refer to the manual: **9MA00237 MAN Layout Designer EN**

# Settings

## Contents

This section includes the following topics:

Introduction ..... 116
Adding/editing a fieldbus interface ..... 117
User management ..... 123
Alarm configuration ..... 126
Scheduler ..... 135
Registration interval settings ..... 147
System general settings ..... 149

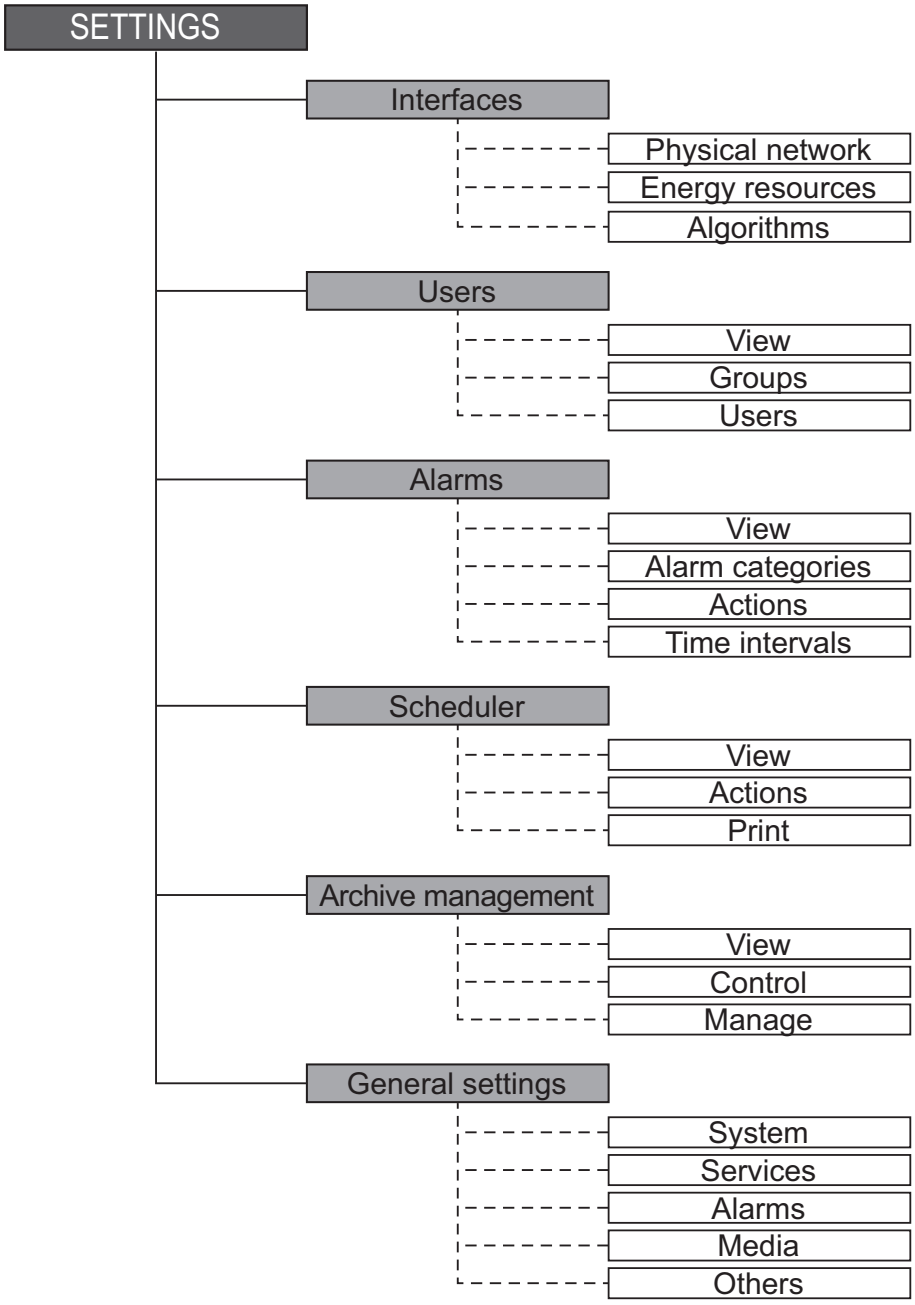
# Introduction

## Description

This section can be used to manage:

- interfaces
- users and groups of users
- alarms (categories, actions, time intervals)
- scheduled actions
- archive configuration
- General settings (Life Test, Alarms, Media, etc.)

## Menu structure



# Adding/editing a fieldbus interface

Go through the following menu sequence:

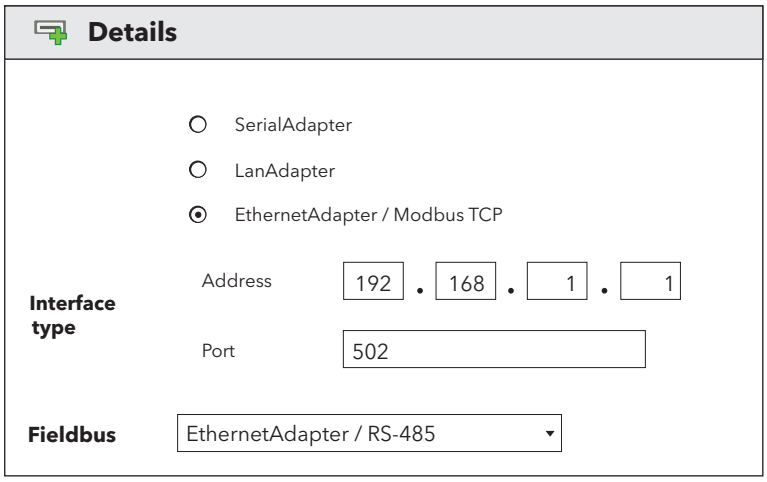
**Settings** > **Interfaces** > **Physical network**

## Adding an interface

To add an interface:

1. click **Add**
2. in the "**Details**" box, select the type of network interface used (**Serial**Adapter, etc.)
3. enter the required information (see below)
4. click **Save**

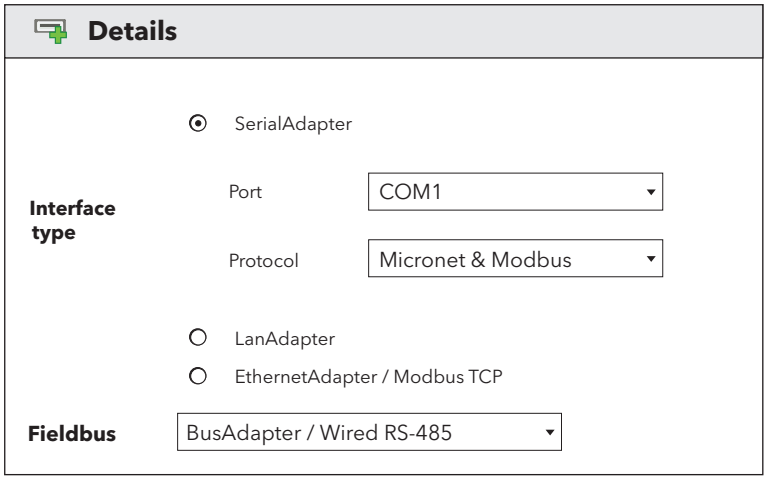
### Modbus TCP / EthernetAdapter




The information on the screen is as follows:

- **Address**: set the IP address for the Modbus TCP interface
- **Port**: communication port for the device or Modbus/TCP gateway
- **Fieldbus**: types of selectable networks.

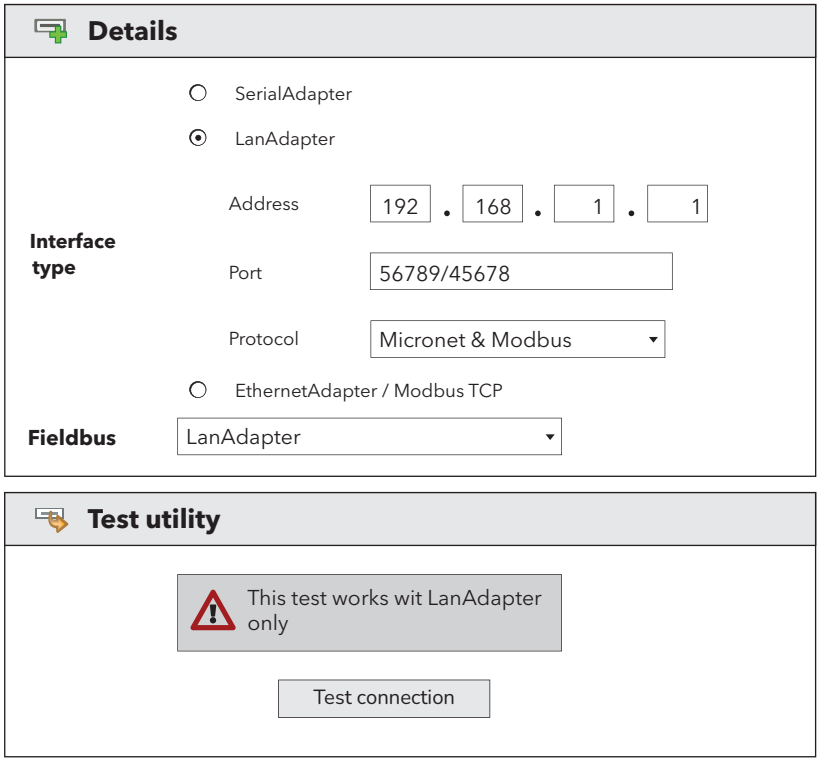
### SerialAdapter




The information on the screen is as follows:

- **Port**: physical communication port used by Televis**Go** v10
- **Protocol**: type of communication protocol.
    1. **Micronet & Modbus**
    2. **Micronet & Modbus with Smart Adapter** (Micronet with Modbus sub-network after a SmartAdapter)
    3. **Modbus** (Micronet & Modbus on the same network)
    4. **Micronet**
- **Fieldbus**: types of selectable networks.

### LanAdapter




The information on the screen is as follows:

- **Address**: set the IP address of the **Lan**Adapter
- **Port**: physical communication port used by Televis**Go** v10
- **Protocol**: type of communication protocol.
    1. **Micronet & Modbus**
    2. **Micronet & Modbus with Smart Adapter** (Micronet with Modbus sub-network after a SmartAdapter)
    3. **Modbus** (Micronet & Modbus on the same network)
    4. **Micronet**
- **Fieldbus**: types of selectable networks.

**Note**: we recommend you always use the “Test connection” button to check communication between Televis**Go** v10 and the **Lan**Adapter interface device.

## Fieldbus settings

The fieldbus type settings selects the values and times indicated in the table below:

| Fieldbus | Time-out response (ms) | Inter-polling time (ms) | Retries | Ignored communication faults before No-Link | Usual Interface Type |
|---|---|---|---|---|---|
| **Bus**Adapter / **Wired RS485** | 300 | 0 | 2 | 2 | SerialAdapter |
| **Radio**Adapter | 800 | 0 | 5 | 2 | SerialAdapter |
| **Smart**Adapter | 600 | 0 | 2 | 2 | SerialAdapter |
| **Lan**Adapter | 2000 | 500 | 2 | 2 | LanAdapter |
| **Lan**Adapter Wi-fi | 2000 | 500 | 2 | 2 | LanAdapter |
| **Lan**Adapter (**Radio**Adapter) | 3000 | 800 | 2 | 2 | LanAdapter |
| **Ethernet**Adapter / **RS485** | 1500 | 100 | 2 | 2 | EthernetAdapter / Modbus TCP |
| Modbus TCP | 1500 | 100 | 2 | 2 | EthernetAdapter / Modbus TCP |

## Editing an interface

To edit an interface:

1. in the '**Interfaces**' box, select the network to edit
2. click **Edit**
3. update the data for the physical network
4. click **Save**

## Removing an interface

To remove an interface:

1. in the '**Interfaces**' box, select the network to remove
2. click **Remove**
3. followed by "**OK**"

## Buttons and selectors

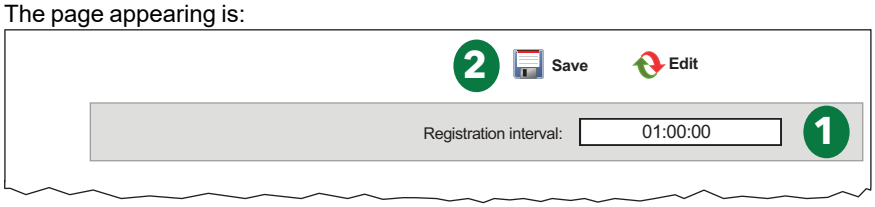
| Icon | Function | Description |
|---|---|---|
| | Add | Used to add a new interface |
| | Remove | Used to remove an interface |
| | Edit | Enables edit mode for an interface |
| | Save | Save the changes made to the interface |
| | Cancel | Cancels and exits without saving the changes made. |
| | Back | Takes you back to the Equipment > Add device page |

## Selecting energy resources

Televis**Go** v10 allows you to treat the resources of some devices as energy utilities, i.e. measuring the electricity consumption of a plant. The resources recorded will be saved in a dedicated database that is separate from the one with saved historical data, and with a separate registration interval.
In the following menu:

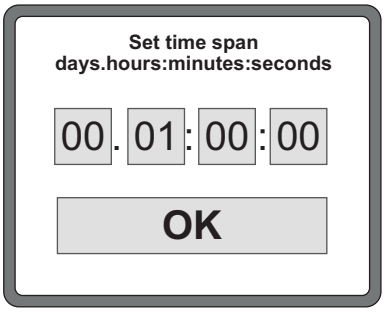
**Settings** > **Interfaces** > **Energy Resources**

The page appearing is:




The different parts of the screen are:

1. **Registration interval**: used to set the calculation period for data relating to energy resources. To define the interval select the box. The following window will open:




Set the days, hours, minutes and seconds required and confirm with "**OK**". The minimum interval that can be set is 15 minutes.

2. **Control bar**: see Buttons and Selectors.

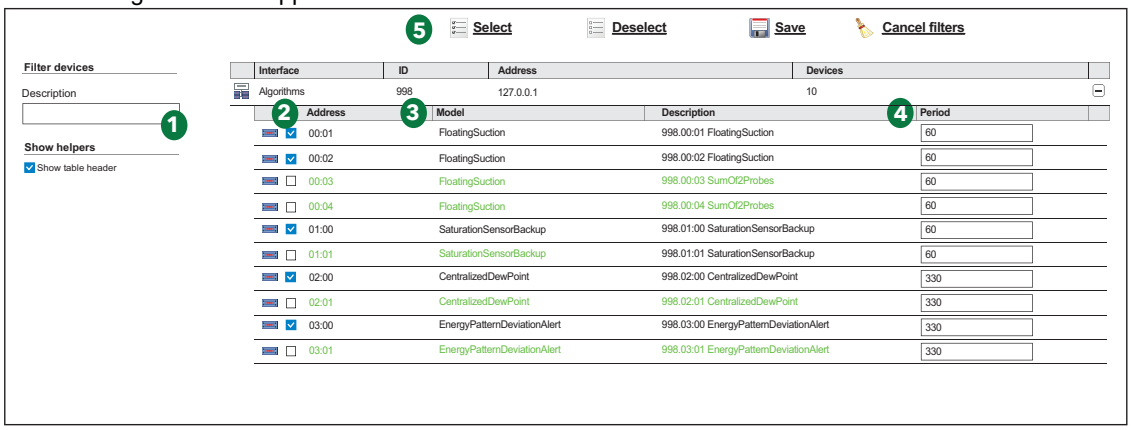
**Example**: if you set a period of 1 hour, the system will calculate the corresponding consumption of the energy resource for every hour.

## Selecting algorithms

In the following menu:

**Settings > Interfaces > Algorithms**

The following screen will appear:




This page shows the list of algorithms previously loaded on Televis**Go** v10 (see "Updating the system") and relevant settings.
The different parts of the page are:

1. **Description**: used to filter by description. The instances of an algorithm all implement the same logic, but should be applied to different input/output data. The number of instances replicated is a pre-set parameter in the algorithm:
   - The maximum number of algorithms managed at the same time by Televis**Go** v10 is **16**
   - The maximum number of instances managed at the same time by Televis**Go** v10 is **16**
   - The maximum number of instances per algorithm is **10**
2. **Address**: represents the address linked to each instance and is assigned automatically by the application.
3. **Model**: the model of each algorithm is set in the programming phase.
4. **Period**: represents the current cycle period of the instance. The period is expressed in seconds, it can take a value between 60 (1 minute) and 86400 (1 day).
5. **Control bar**: see Buttons and Selectors.

The colors of the rows that will appear have the following meanings:

- **BLACK**: virtual device selected
- **GREEN**: virtual device available but not selected

Select the instances to be enabled on the virtual interface by ticking the relevant check box near the address (**2**) and press the **Save** icon to store the algorithm instance configuration.

**Notes**:

- Before using an algorithm, consult the relevant manual which is available to download from the website www.eliwell.com
- **Algorithm**: model containing a specific programming code
- **Instance**: use of the model associated with one or more controllers according to algorithm operation
- When the user loads an algorithm, Televis**Go** v10 (see Updating algorithm drivers), automatically enters the maximum number of instances anticipated for that algorithm without activating them
- Selecting the box on the left-hand side of an algorithm instance activates it.

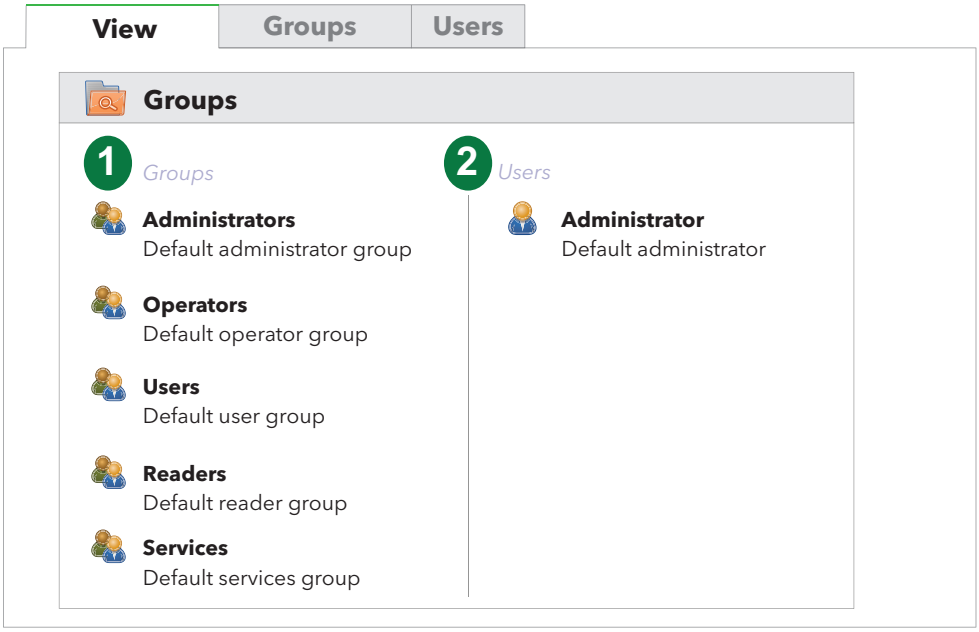
# User management

## Viewing groups and users

In the following menu:

**Settings > Users > General view**

The following screen will appear:




The different parts of the page are:

1. **Groups**: list of all groups recorded in the system.
2. **Users**: list of all users recorded in the system, divided by group.

**Note**: On first start-up, the following are present:

- 5 pre-registered groups
- 1 "Administrator" user.

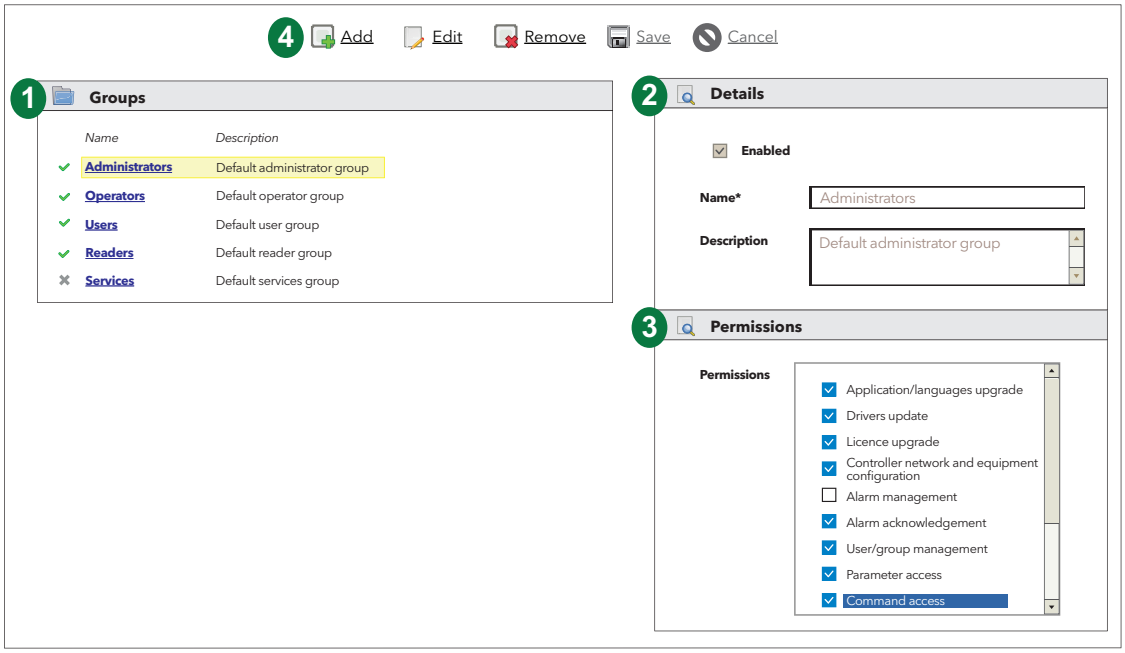
Various users will therefore need to be created with the relevant permissions and belonging to specific groups.

## Group management

In the following menu:

**Settings > Users > Groups**

The following screen will appear:




The different parts of the page are:

1. **Groups**: lists all groups recorded in the system.
2. **Details**: used to set the name and description of a group (active only after pressing **Add** or **Edit**).
3. **Permissions**: used to set the permissions associated with the specific group, enabling/disabling the option of updating/configuring one or more functions (active only after pressing **Add** or **Edit**).
4. **Control bar**: see Buttons and Selectors.

To edit the Group Permissions, you must be logged in as Administrator or have the necessary authorization credentials for User/group configuration.

The first time it is accessed, the following groups are present, with the corresponding permissions:

- **Administrators**: administrators
- **Operators**: operators
- **Users**: users
- **Readers**: readers
- **Services**: general services

For example: if we set the option "**Layouts - Writing permissions**":

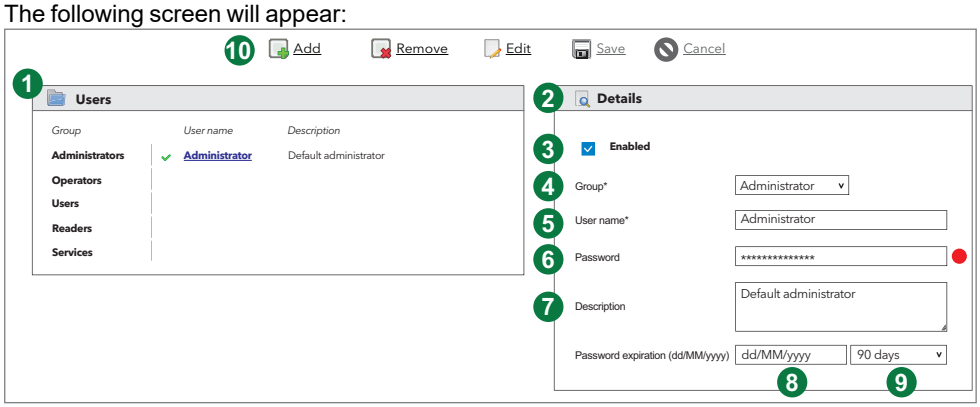
- Check box ticked: users belonging to the group will have full control of the layout pages (they can change the values of variables, perform commands, etc.)
- Check box not ticked: users belonging to the group can only view the layout pages.

## User management

In the following menu:

**Settings > Users > Users**

The following screen will appear:




The different parts of the page are:

1. **Users**: lists all users recorded in the system, divided by group.
   When first accessing the page, only the “Administrator” user will be present.
2. **Details**: view/edit a user’s data
3. **Enabled**: the tick enables the user
4. **Group**: select the group in which to enter the user. The group should already have been created.
5. **User name**: set the name assigned to the user.
6. **Password**: set the password assigned to the user.
   The password must contain:
   - 8 characters
   - 1 numerical digit (0, 1, ... , 9)
   - 1 uppercase letter (A, B, ... , Z)
   - 1 lowercase letter (a, b, ... , z)
   - 1 special character (\|¬¦`!" £$%^&*()_+-=[]{};:'@#~<>,./?)

   To the left of the password box is an indicator:
   - **RED**: indicates that the password does not meet the minimum requirements
   - **GREEN**: indicates that the password is valid
   - **GREY**: indicates that the password has not been changed
7. **Description**: enter any notes relating to the user. The 3 lines in the bottom right-hand corner can be used to enlarge the text box.
8. **Expiration**: after saving the user, this shows the expiry date of the password in dd/MM/yyyy format. If set not to expire, it will show “never”.
9. **Expiry period**: selects the password expiry period.
   The pre-set periods are:
   - 90 days
   - 180 days
   - 1 year
   - never
10. **Control bar**: see Buttons and Selectors.

**NOTE**: Only an administrator (**Administrator**) can add, edit or remove users and groups.

**NOTE**: Each user can change their own password by selecting "Change password" from the current user menu (see Status bar).

**NOTE**: When the password expires, the user will be redirected straight to the change password page (see Changing the password). Once it has been changed, they will be taken to the “Home” page.

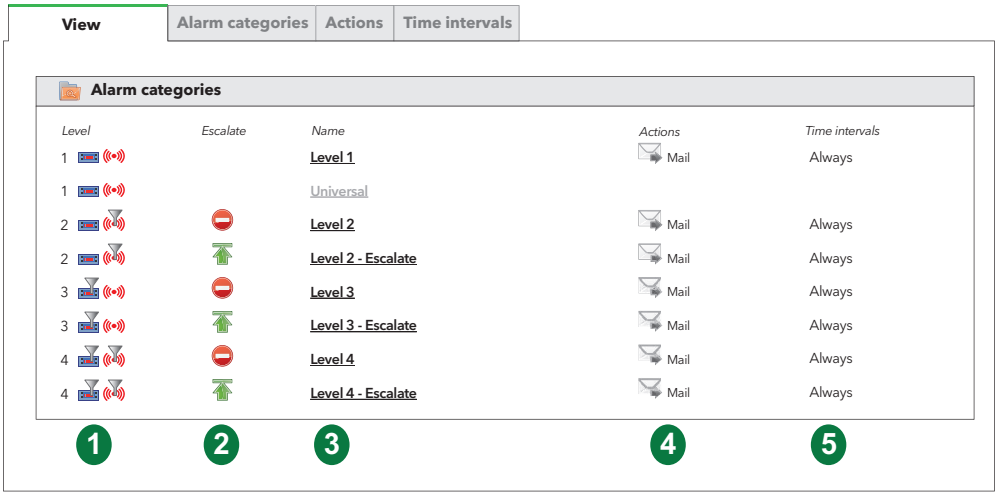
# Alarm configuration

## Overview

In the following menu:

**Settings > Alarms > View**

The following screen will appear:




The different parts of the page are:

1. **Level**: identifies the level assigned to the alarm category
2. **Escalate**: enable or disable the checking of higher levels:
   - = escalate to higher levels active
   - = escalate to higher levels deactivated.
3. **Name**: view the name assigned to the alarm category.
4. **Actions**: lists the alerts activated for the alarm category.
5. **Time intervals**: lists the time intervals in which the alarm category is active.

## Alarm management rules

Alarms are categorized to allow association of a series of actions within specific time intervals
In the event of an **Alarm**, the system will check whether it is managed, on which device it occurred, whether it belongs to a valid category and if it was activated during a valid interval. If all conditions have occurred, the actions set in the valid alarm categories will take place in accordance with a level-based system.
Televis**Go** v10 sends an alarm alert to all correctly configured and enabled recipients.
The methods used by Televis**Go** v10 to send alarms are guided by the concepts of “Level” and “Escalate” (see Alarm categories).

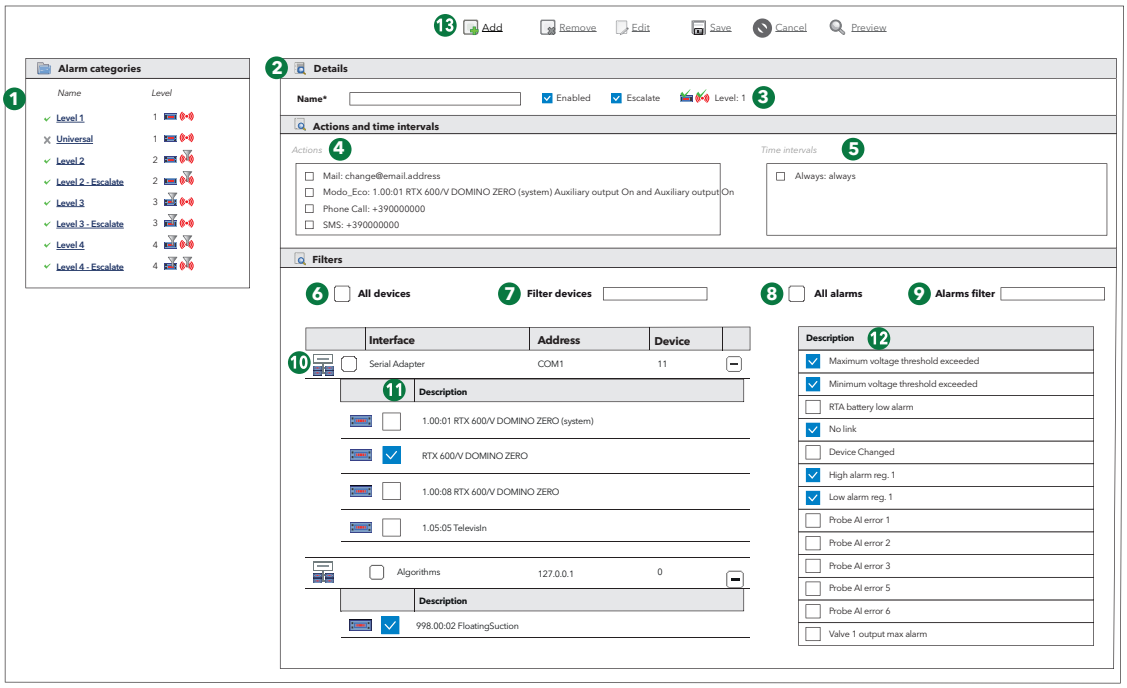
| Level | Expected behavior |
|---|---|
| **Level x (where x=4,3,2,1)** | The software checks the alarm categories starting from Level **x**, and runs the notifications for all those which satisfy the criteria. |
| **Level x – Escalate (where x=4,3,2,1)** | If at least one of the alarm categories in the previous point is marked as “Escalate”, the software proceeds to check the higher level (from 4 to 1). |

## Alarm categories

To set the alarm categories, go through the following menus:

**Settings > Alarms > Alarm categories**

The following screen will appear:




The different parts of the page are:

1. **Alarm categories**: view the set “Alarm categories”.
2. **Name**: set the name to be assigned to the alarm category.
3. **Setting**: used to set the following characteristics:
   - **Enabled**: enable/disable "Alarm category".
   - **Escalate**: enable or disable the checking of higher levels.
   - : the “All devices” check box has been selected.
   - : a list of specific devices was selected.
   - : the “All alarms” check box has been selected.
   - : a list of specific alarms has been selected.
   - **Level**: Depending on what has been set in points (**6**), (**7**), (**8**) and (**9**), the "Alarm Category" is assigned a level from 1 to 4 according to:

| Level | Level 1 | Level 2 | Level 3 | Level 4 |
|---|---|---|---|---|
| Select devices | All | All | Select | Select |
| Select alarms | All | Select | All | Select |

4. **Actions**: used to select which actions to execute.
5. **Time intervals**: used to select when to execute the selected actions. By default only 'Always: always' is present. The set time intervals are listed as an addition (see Time intervals)
6. **All devices**: select all network devices.
7. **Filter devices**: used to filter the devices to which the actions are applied by description.
8. **All alarms**: select all network alarms.
9. **Alarms filter**: used to filter the alarms by description.
10. **Interface**: select all the devices in a network interface.
11. **Select devices**: select one or more devices from the list.
12. **Select alarms**: select one or more alarms from the list.
13. **Control bar**: see Buttons and Selectors.

Televis**Go** v10 always and exclusively takes set categories into account, and always begins at Level 4, where present. If there are several categories at the same level, the device will run them all.

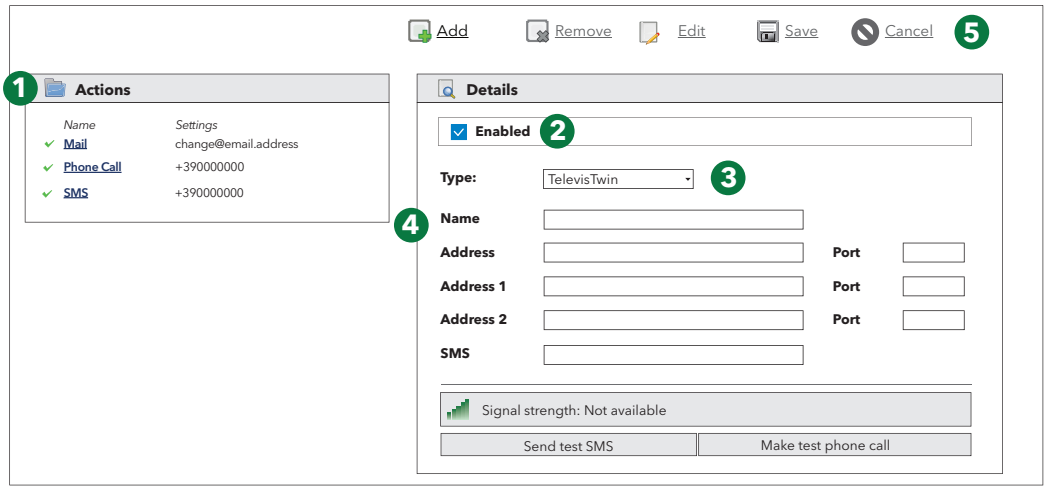
Once the Level 4 category actions are complete (if applicable), if at least one Level 4 category has the '**Escalate**' flag selected, the system will check for Level 3 categories and carry out the procedures. The same applies to the other levels.
If the '**Escalate**' flag is selected in a Level 4 category is selected, the system will check for the first configured category of a higher level and carry out the procedures, regardless of whether the level is 3, 2 or 1.
To select an alarm you must first select the device for which you wish to view the alarms, or select all devices to view the list of all alarms.
If several time intervals are associated with the same category, they are considered as grouped together (except in the case where one of the intervals is 'Always = always', which becomes 'always').

## Actions

To set the actions to be performed in the event of an alarm, go through the following menus:

**Settings > Alarms > Actions**

The following screen will appear:




The different parts of the page are:

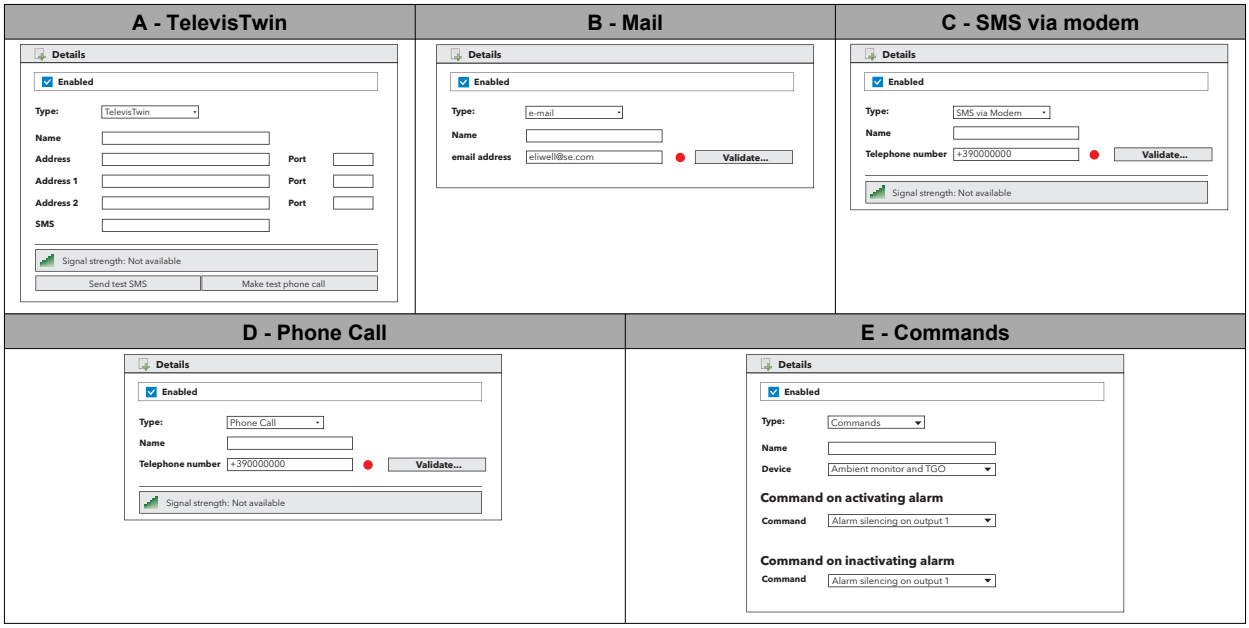
1. **Actions**: all set "Actions" are shown.
2. **Enabled**: tick the check box to Enable/Disable the execution of the selected action.
3. **Type**: used to set the type of action being set.
4. **Name**: used to set the action. The field sequence varies according to the “Type” selected in point (**3**).
5. **Control bar**: see Buttons and Selectors.

5 different types of action may be created:

- **TelevisTwin**: enter the IP addresses of a TelevisTwin to which any alarm messages should be sent
- **Mail**: enter an email address to which any alarm messages should be sent
- **SMS via modem**: enter the telephone number you want SMS messages to go to in the event of an alarm
- **Phone Call**: enter the telephone number you want to call in the event of an alarm
- **Commands**: set the commands to be sent to one or more devices in the event of an alarm.

Selecting from the drop-down menu (**3**) will vary the dependent controls (**4**).
Actions are only active when entered in an alarm category.

One of the following windows opens:




Once all selections have been made, click **Save** to save the changes or **Cancel** to cancel them.

A. **TelevisTwin**:

- Name: enter the name assigned to the action
- Address: enter the IP address of the device (for example: 192.168.0.23) and the corresponding port (for example: 8080)
- Address 1: enter an alternative IP address 1 and the corresponding port
- Address 2: enter an alternative IP address 2 and the corresponding port
- SMS: enter the telephone number you want SMS messages to go to (for example: +39 333 7600000)
- Signal strength: indicates the signal strength of the modem connected to Televis**Go** v10 (as a %)
- Send test SMS: sends a test text message to the entered number
- Test telephone call: tries to call the entered telephone number.

B. **Mail**:

- Name: enter the name assigned to the action
- e-mail: enter the email address to which alarm alerts should be sent
- Validate: is used to validate the email address. If it is correct, the LED turns **GREEN**.

C. **SMS via Modem**:

- Name: enter the name assigned to the action
- Telephone number: enter the telephone number you want SMS messages to go to (for example: +39 333 7600000)
- Validate: is used to validate the telephone number. If it is correct, the LED turns **GREEN**
- Signal strength: indicates the signal strength of the modem connected to Televis**Go** v10 (as a %).

D. **Phone Call**:

- Name: enter the name assigned to the action
- Telephone number: enter the telephone number to be called (for example: +39 333 7600000)
- Validate: is used to validate the telephone number. If it is correct, the LED turns **GREEN**
- Signal strength: indicates the signal strength of the modem connected to Televis**Go** v10 (as a %).

E. **Commands**:

- Name: enter the name assigned to the action
- Device: indicates which device within the network is to be targeted

- Command on activating alarm: indicates what the device has to do if an alarm is activated
- Command on inactivating alarm: indicates what the device has to do after an alarm has been deactivated.

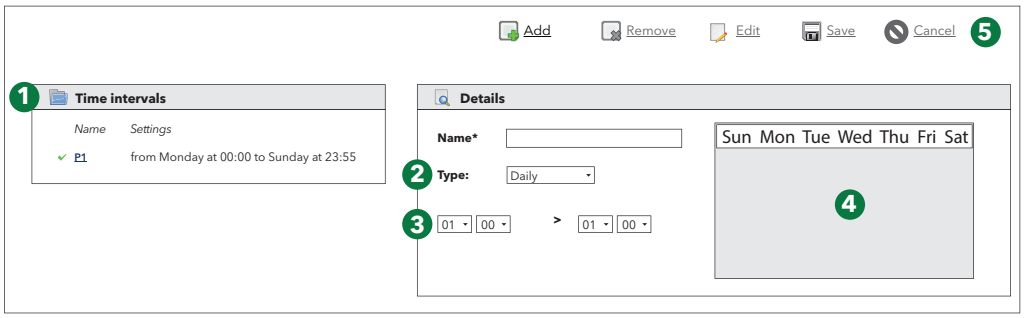
Remember to enter the international dialing code of the Recipient before the telephone number, for both telephone calls and SMS messages (for example: for ITALY enter +39).

## Time intervals

To set the time intervals, go through the following menus:

**Settings > Alarms > Time intervals**

The following screen will appear:




The different parts of the page are:

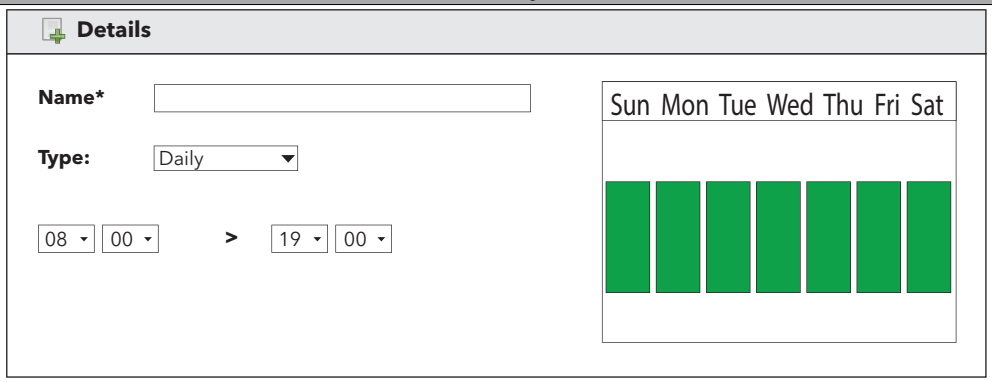
1. **Time intervals**: shows all the set “Time Intervals”.
2. **Type**: used to set the type of time interval.
3. **Period**: used to set the time period associated with the interval (the fields vary according to the type of interval selected).
4. **Chart**: chart representing the set time interval.
5. **Control bar**: see Buttons and Selectors.

3 different types of time interval can be created:

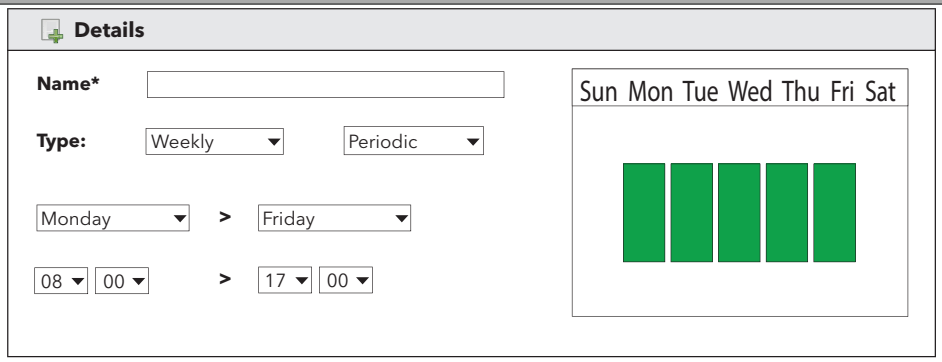
- **Daily**
- **Weekly**
- **Monthly**

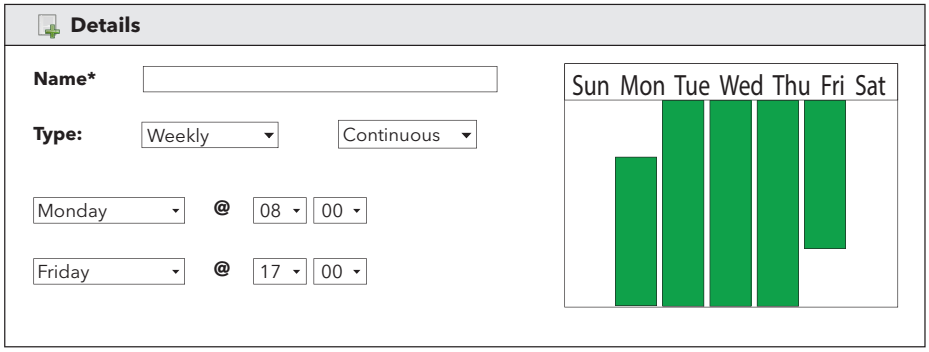
Selecting from the drop-down menu will vary the dependent controls.
Depending on the type of interval selected, the following windows open:

**A - Daily**

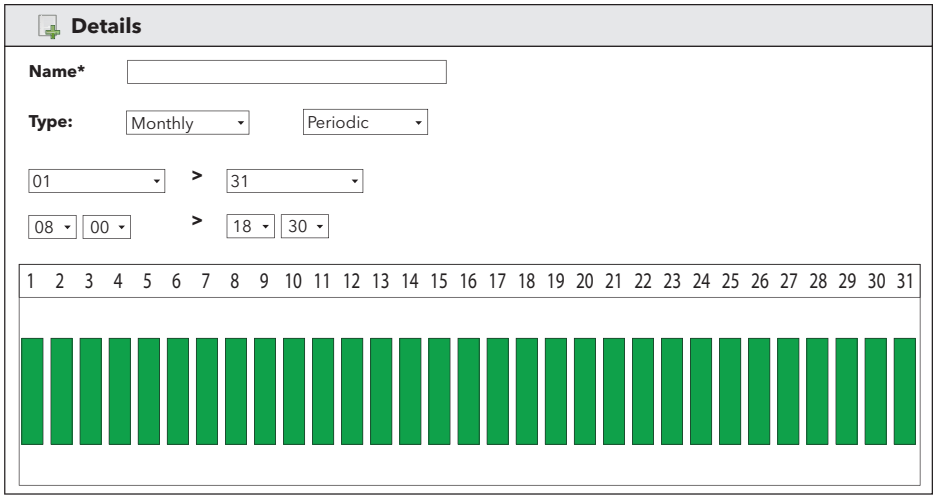


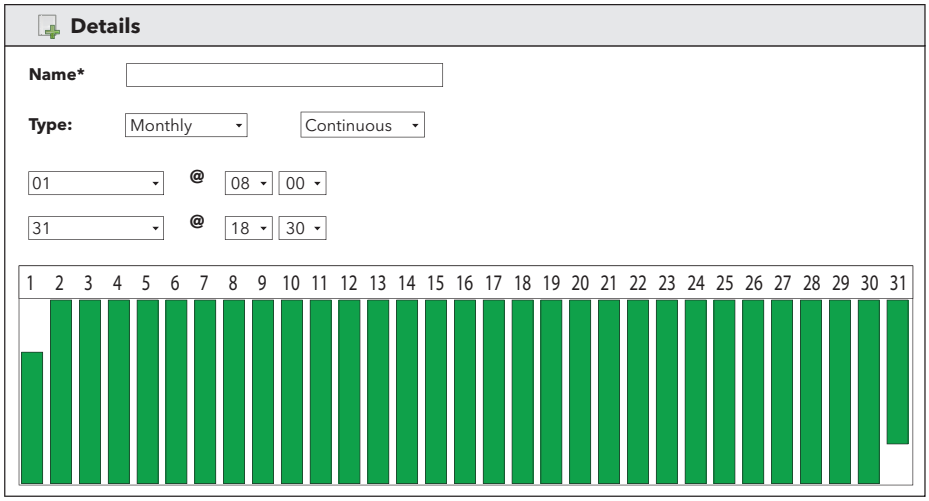
## B - Weekly



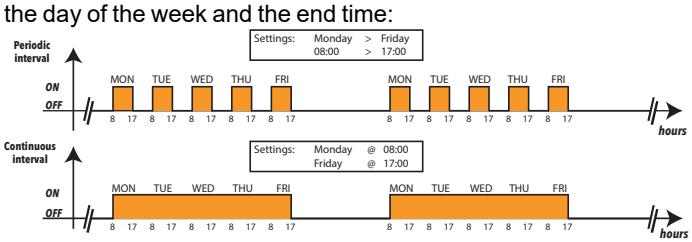

## C - Monthly



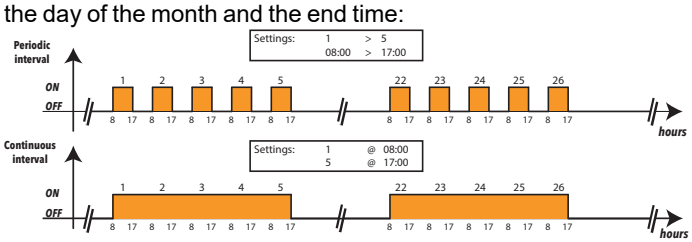



A. **Daily time period:**
- Name: to enter the name assigned to the interval
- Interval: the 2 selection boxes are used to set the start and end time valid for every day (example: **08.00 > 19.00** indicates from 08.00 in the morning to 7.00 in the evening; **19.00 > 06.00** indicates from 7.00 in the evening to 06.00 the following morning)

B. **Weekly time period**:
- Name: to enter the name assigned to the interval
- Periodic: here you should set:
  - the days of the week involved (from → to)
  - the time period involved (from → to) on each day
- Continuous: here you should set:
  - the day of the week and the start time
  - the day of the week and the end time:




C. **Monthly time period**:
- Name: to enter the name assigned to the interval
- Periodic: here you should set:
  - the days of the month involved (from → to)
  - the time period involved (from → to) on each day
- Continuous: here you should set:
  - the day of the month and the start time
  - the day of the month and the end time:




**NOTE**: the "ALWAYS" time interval is pre-set as part of the system and cannot be deleted (it selects 24 hours for all days of the week).

# Scheduler

## Introduction

Televis**Go** v10 can automatically run actions that have been scheduled by users in line with a programmable time schedule.
There are three types of scheduled activities:

- Send command to one or more devices.
- Write parameters to one or more devices.
- Data export

Scheduled activities can have one of three types of frequency:

- Periodic: the action is carried out periodically, with the frequency defined by the user
- Daily: the action is carried out every **n** days at one or more times during the day
- Weekly: the action is carried out every **n** weeks, on specific days and at one or more times during the day.

Each scheduled action has a validity interval, defined by a start date and an end date.

The action is therefore performed in accordance with the set schedule. If the action fails, Televis**Go** v10 continues to attempt to execute it at user-defined intervals up to a maximum time, as set by the user. If the maximum duration is set to **0** or if it is less than the re-attempt interval, no further attempts will be made.

The scheduled actions apply to a selection of devices in the current configuration and are used to optimize activity.

If the user sets many actions to be carried out frequently, it may cause delays in the transmission of signals and/or malfunctioning. Similarly, generating frequent exports may cause an excessive number of files to be created which, in time, may slow the machine down or lead to malfunctions if they are not moved from the folder inside the Televis**Go** v10 to an external network folder.

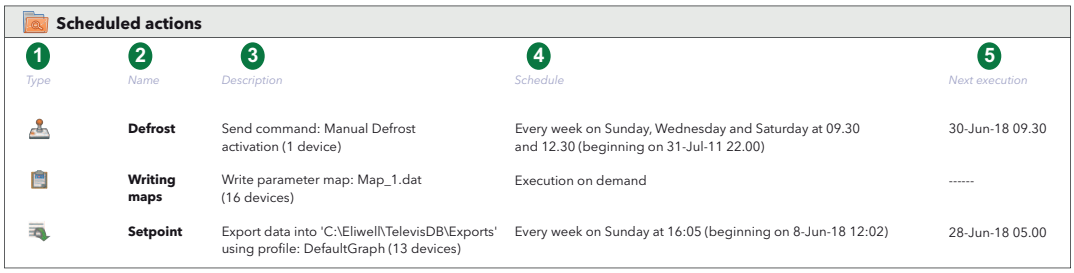
| ***NOTICE*** |
| --- |
| **INOPERABLE DEVICE**<br>• Do not use the “Scheduled actions” function to manage critical actions.<br>• Set up a network folder outside the TelevisGo v10 if you anticipate a lot of data exports being generated.<br>**Failure to follow these instructions can result in equipment damage.** |

## General view

In the following menu:

**Settings > Scheduled actions > Summary**

The following screen will appear:




The different parts of the page are:

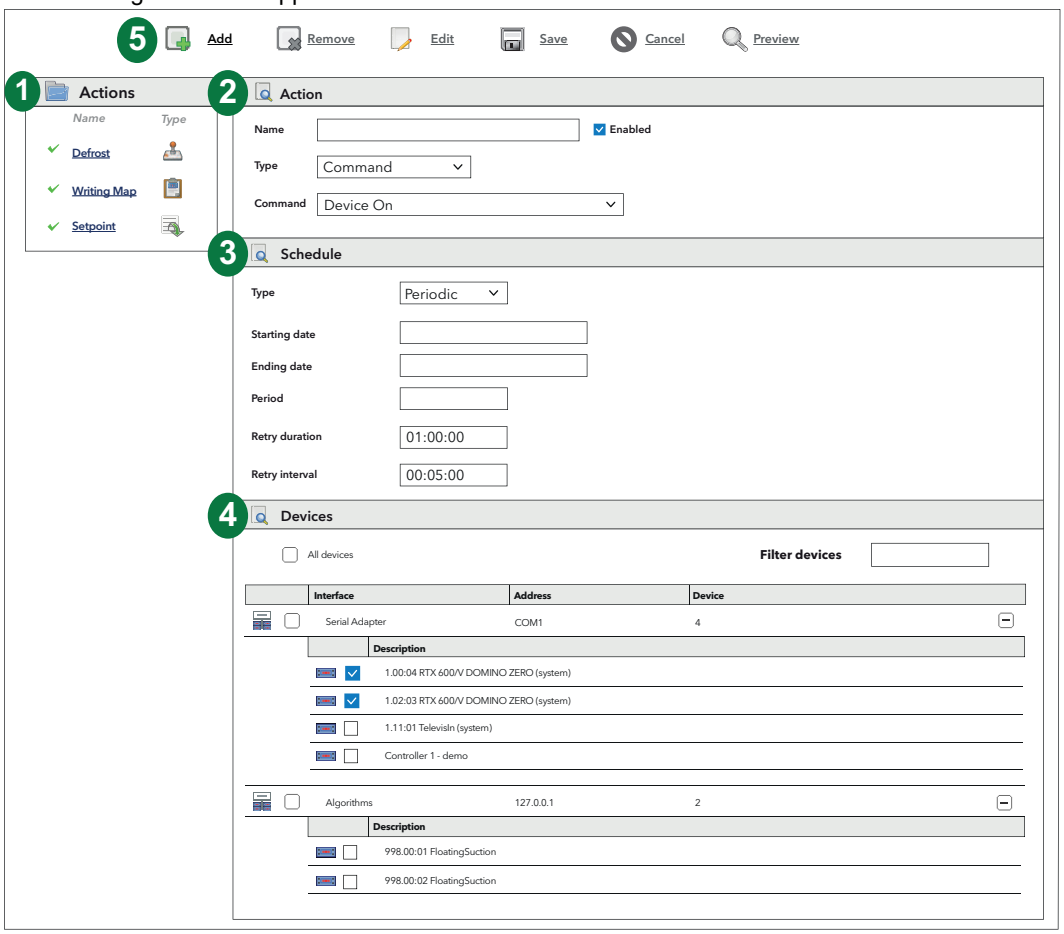
1. **Type**: identifies the type of scheduled action:
   - = Sending a command
   - = Writing parameters
   - = Data export
2. **Name**: is a user-defined label.
3. **Description**: describes the activity that will be performed; the number of devices it will be applied to is given in brackets.
4. **Schedule**: describes the frequency of the activity.
5. **Next execution**: states the next day/time the activity will be performed.

## Managing scheduled actions

To edit the scheduled actions, enter the following menus in sequence:

**Settings > Scheduled actions > Actions**

The following screen will appear:




The different parts of the page are:

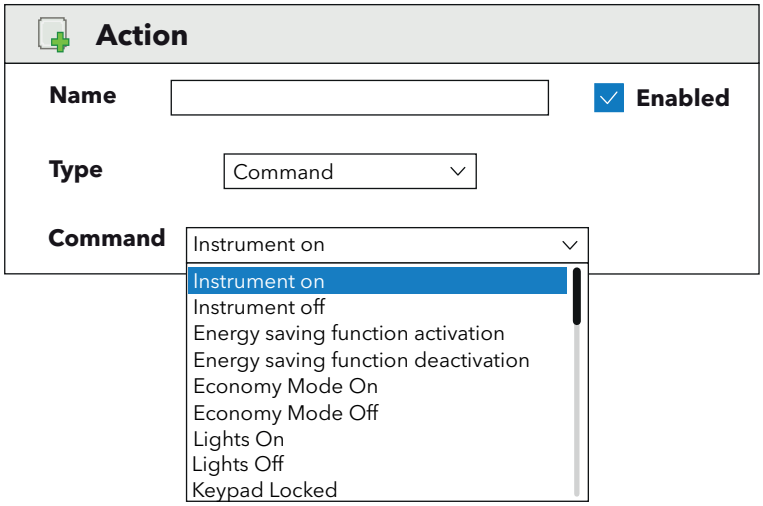
1. **Actions**: list of actions.
2. **Action**: section for creating/editing an action.
3. **Schedule**: section for setting when to run an action.
4. **Devices**: section for selecting the devices on which the actions will run.
5. **Control bar**: see Buttons and Selectors.

The part on the right is split into 3 sections:

### Action

The **Action** section allows you to set the **Type** of action to be performed.

**Type of action: Command**

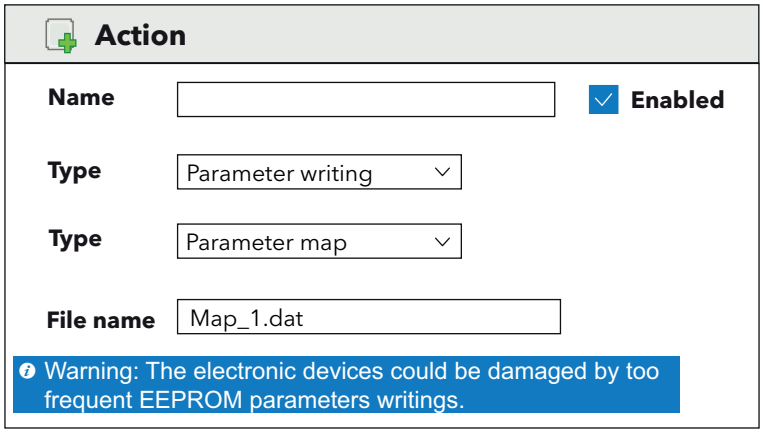



Used to set the type of **command** to run on the devices selected by the filter:

- **Name**: name associated with the action
- **Type**: Action = Command
- **Command**: drop-down menu displaying the complete set of commands for all the devices in the network configuration.

To make the action effective, click on "**enabled**".

**Type of action: Parameter writing**



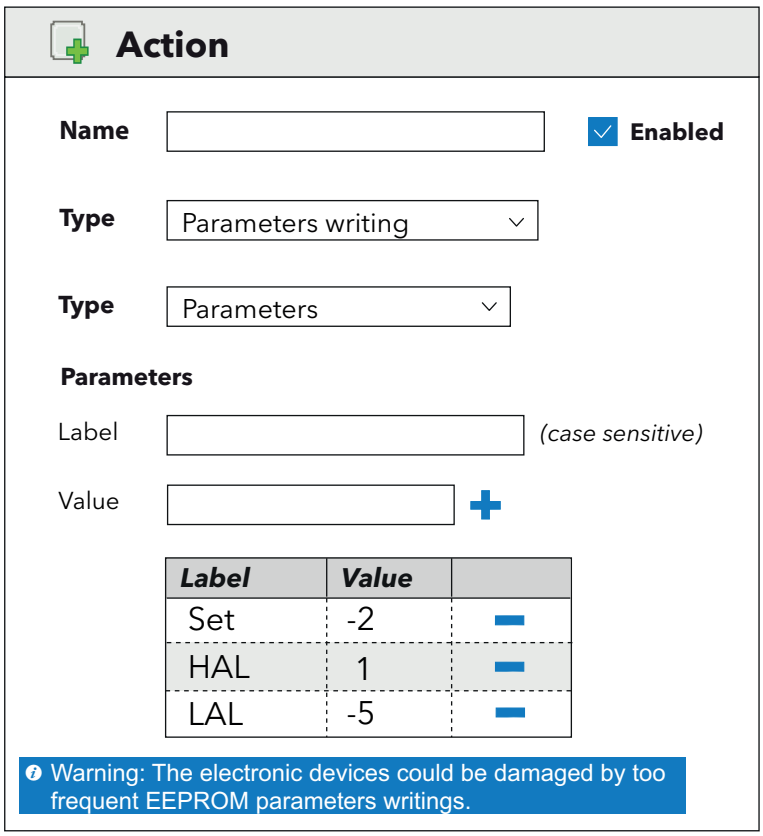

Used to set the name of the map file to apply to each execution of a **parameter map writing** action.

- **Name**: identifies the name associated with the action
- **Type**: Action = Writing parameters
- **Type**: Parameters map
- **File name**: name of the file containing the map to be uploaded.

For the Televis**Go** v10 to be able to perform the operation, the map file must be uploaded from the system update page.

**⚠ WARNING**

**UNINTENDED EQUIPMENT OPERATION**
Frequent writing of EEPROM parameters can damage the system memory.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**




Used to manually enter the list of parameters to write and their value at each execution of the individual **parameter writing action**. At least one parameter must be entered.

- **Name**: identifies the name associated with the action
- **Type**: Action = Writing parameters
- **Type**: Parameters
- **Label**: name of the parameter to be uploaded
- **Value**: value to write in the parameter

To enter a new parameter, fill in the Label and Value fields and click . The label/value pair will be added to the list below.

If a label ??? is shown in the table (Label not recognized), the Televis**Go** v10 will overwrite it as soon as another pair of values is entered.

Televis**Go** v10 checks for label duplications. Values associated with duplicated labels will be overwritten.

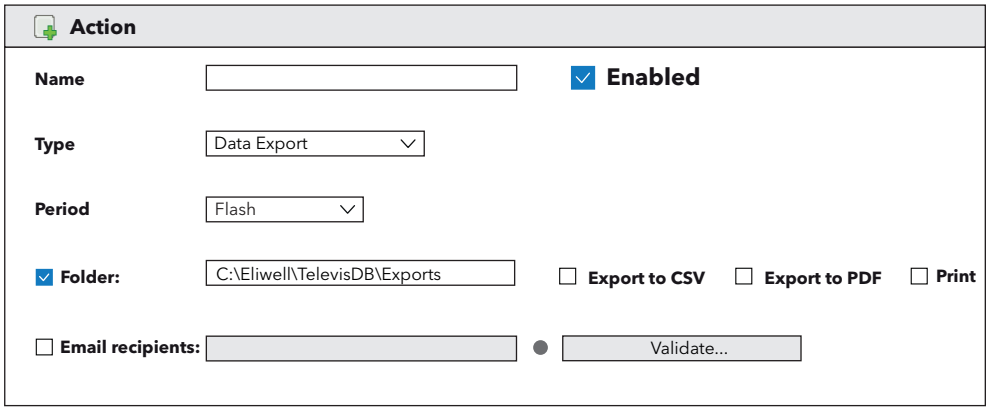
To remove a previously inserted label/value pair from the list, click the button.

**NOTE**: for the Televis**Go** v10 label there is a distinction between uppercase and lowercase letters (case-sensitive).

**WARNING**

**UNINTENDED EQUIPMENT OPERATION**
Frequent writing of EEPROM parameters can damage the system memory.
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

**Type of action: Data export**

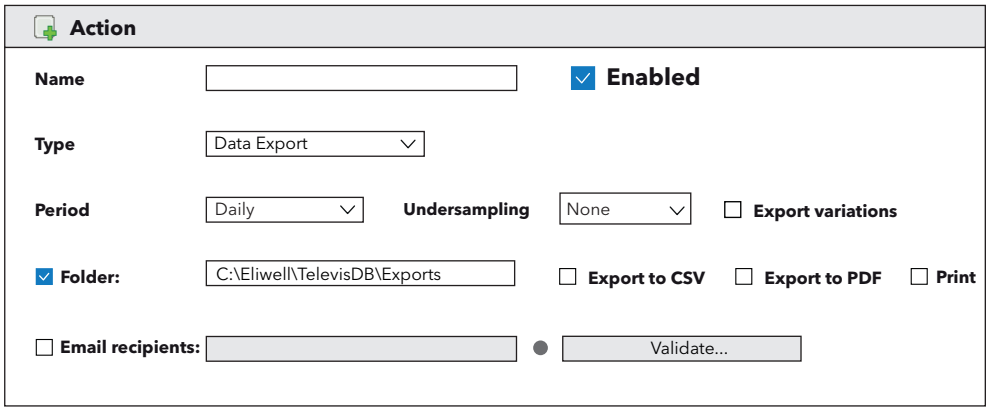



Used to export data from the previous day (from 00:00 to 24:00) as selected via the filter.

- **Name**: identifies the name associated with the action
- **Type**: Action = Data export
- **Period**: immediate
- **Programming**: daily

One or more of the following actions can be set:

- **Folder**: the folder in which to save the data and its format (.csv, .pdf or both).
- **Print**: print data
- **Email recipients**: the emails to which the data should be sent. When an email is entered, it must be validated. If it is correct, the LED turns **GREEN**.

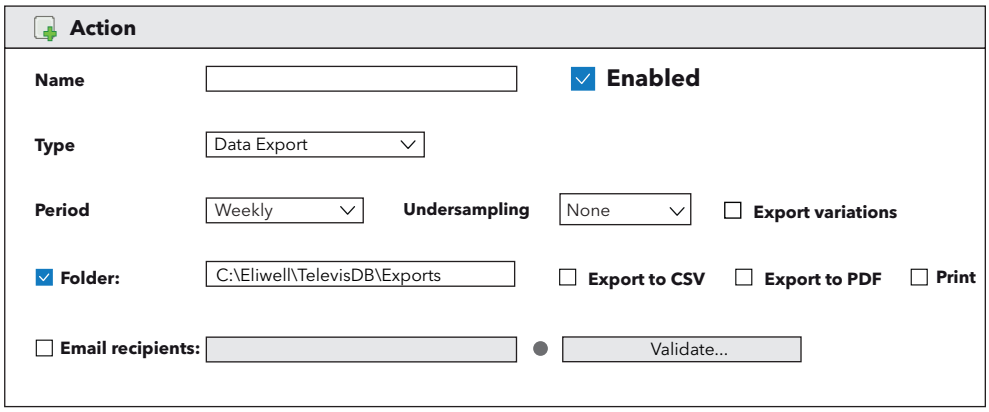



Used to export data from the previous day (from 00:00 to 24:00) as selected via the filter.

- **Name**: identifies the name associated with the action
- **Type**: Action = Data export
- **Period**: Daily
- **Programming**: daily
- **Undersampling** : if the value is **None**, all data from the previous day will be exported (from 00:00 to 24:00). If its **x** value is different, only the data read every **x** minutes/hours will be exported (where **x** = 5 min, 15 min, 30 min, 1h, 2h, 3h, 4h, 6h and 12h).
- **Export variations**: if selected, events (variations of the values) that have taken place at times other than those programmed will also be exported.

One or more of the following actions can be set:

- **Folder**: the folder in which to save the data and its format (.csv, .pdf or both).
- **Print**: print data
- **Email recipients**: the emails to which the data should be sent. When an email is entered, it must be validated. If it is correct, the LED turns **GREEN**.




Used to export data from the previous week (from 00:00 Monday to 24:00 the following Sunday) as selected via the filter.

- **Name**: identifies the name associated with the action
- **Type**: Action = Data export
- **Period**: Weekly
- **Programming**: Weekly
- **Undersampling** : if the value is **None**, all data from the previous day will be exported (from 00:00 to 24:00). If its **x** value is different, only the data read every **x** minutes/hours will be exported (where **x** = 5 min, 15 min, 30 min, 1h, 2h, 3h, 4h, 6h and 12h).
- **Export variations**: if selected, events (variations of the values) that have taken place at times other than those programmed will also be exported.

One or more of the following actions can be set:

- **Folder**: the folder in which to save the data and its format (.csv, .pdf or both).
- **Print**: print data
- **Email recipients**: the emails to which the data should be sent. When an email is entered, it must be validated. If it is correct, the LED turns **GREEN**.

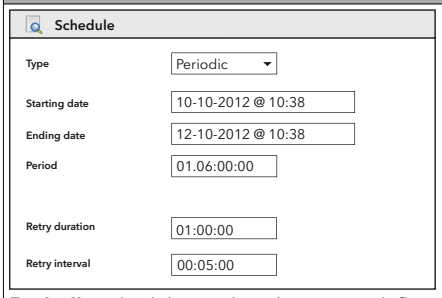
**NOTES**:

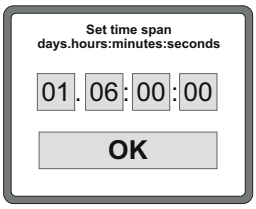
- multiple email addresses should be separated by ";"
- The profile for the exported data can be created/edited using the "Historical data" function
- The default is "System_HACCP" which exports the values of the first probe and defrost status of the instruments in the network.

### Programming:

The **Schedule** section is used to define the **Type** of schedule.

**Type of scheduling: Periodic**



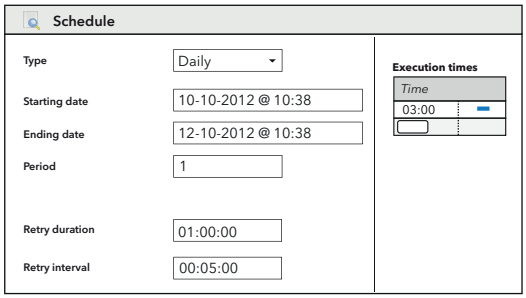

**Periodic** schedule requires the user to define:

- **Type**: type of schedule
- **Start date**: start date and time of the schedule
- **Start date**: end date and time of the schedule
- **Period**: how often to carry out the action (days:hours:minutes:seconds). A window opens (top left-hand corner) in which to enter the period, followed by clicking OK
- **Retry duration**: maximum duration of the action retry attempts in the event that an action fails
- **Retry interval**: how long to leave before performing the action again in the event that an action fails.

This type of event will be carried out for the first time at the time set in the **Start date** box.

In the example, the action will be carried out every day plus 6 hours (30 hours).

**Type of scheduling: Daily**







**Daily** schedule requires the user to define:

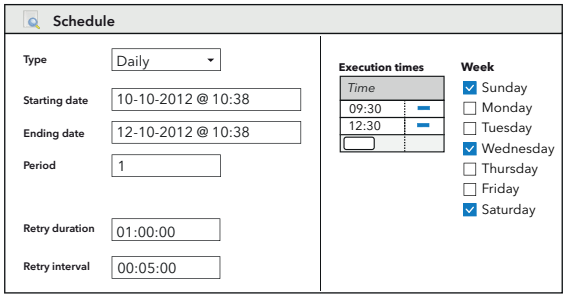
- **Type**: type of schedule
- **Start date**: start date and time of the schedule
- **Start date**: end date and time of the schedule
- **Execution times**: one or more times during the day when the action must be executed. A window opens (top left-hand corner) in which to enter the time, followed by clicking OK. The time will be added to the list. Repeat the procedure to add new times.

  To remove a time added to the list, click the button 
- **Period**: how often in days the action must be executed
- **Retry duration**: maximum duration of the action retry attempts in the event that an action fails
- **Retry interval**: how long to leave before performing the action again in the event that an action fails.

This type of event will be carried out at the first available time, on the date and at the time set in the **Start date** box.

In the example, the action will be carried out every day at 3:00.

**Type of scheduling: Weekly**







**Weekly** schedule requires the user to define:

- **Type**: type of schedule
- **Start date**: start date and time of the schedule
- **Start date**: end date and time of the schedule
- **Execution times**: one or more times during the day when the action must be executed. A window opens (top left-hand corner) in which to enter the time, followed by clicking OK. The time will be added to the list. Repeat the procedure to add new times.

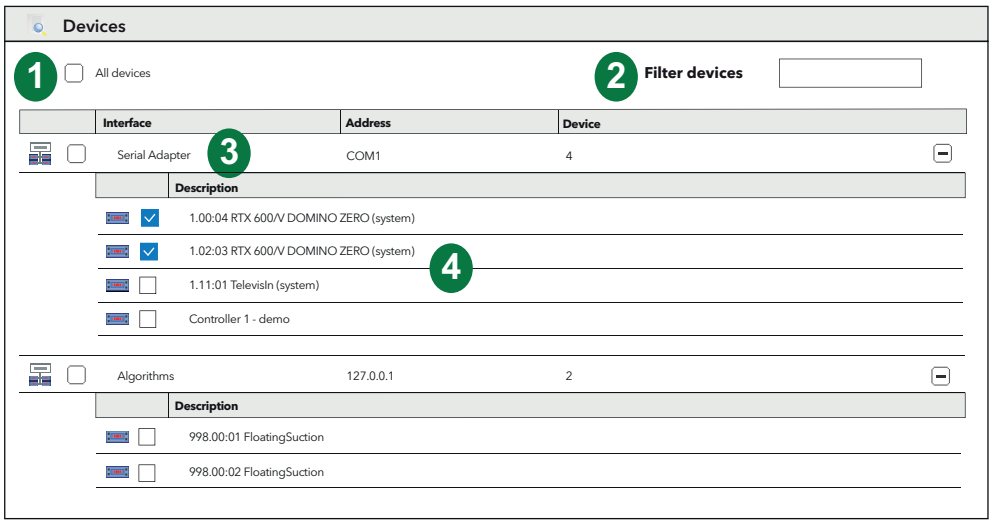
  To remove a time added to the list, click the button 
- **Week**: on which days of the week the action is to be executed. If no day is selected, on saving, Televis**Go** will automatically select Sunday.
- **Period**: every how many weeks the action must be executed
- **Retry duration**: maximum duration of the action retry attempts in the event that an action fails
- **Retry interval**: how long to leave before performing the action again in the event that an action fails.

This type of event will be carried out at the first available time, on the date and at the time set in the **Start date** box.

In the example, the action will be performed every week on Sunday, Wednesday and Saturday at 9:30 and 12:30.

### Devices

The **Devices** section is used to select the devices belonging to the network to which the action being set is to be applied.




The different parts of the page are:

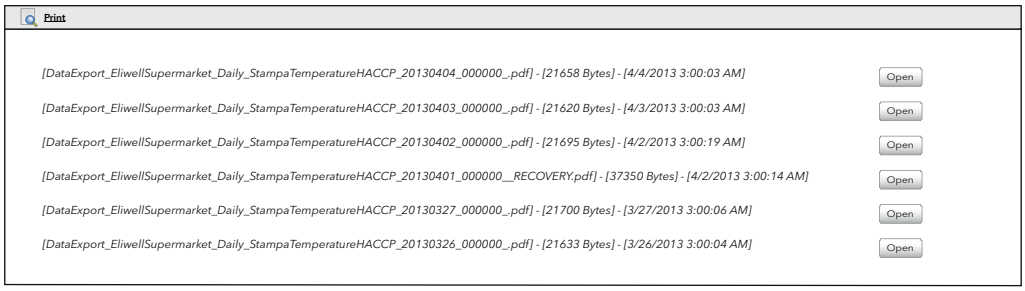
1. **All devices**: select all network devices.
2. **Filter devices**: used to filter network devices by description. The page shows only the devices which satisfy the filter.
3. **Interface**: used to select all devices with the same interface by ticking the relevant check box.
4. **Devices**: used to select the individual devices on an interface by ticking the relevant check box.

## Printing exported data

To view a list of the **Data Export** procedures performed, enter the following menus in sequence:

Settings > Scheduled actions > Print

The following screen will appear:



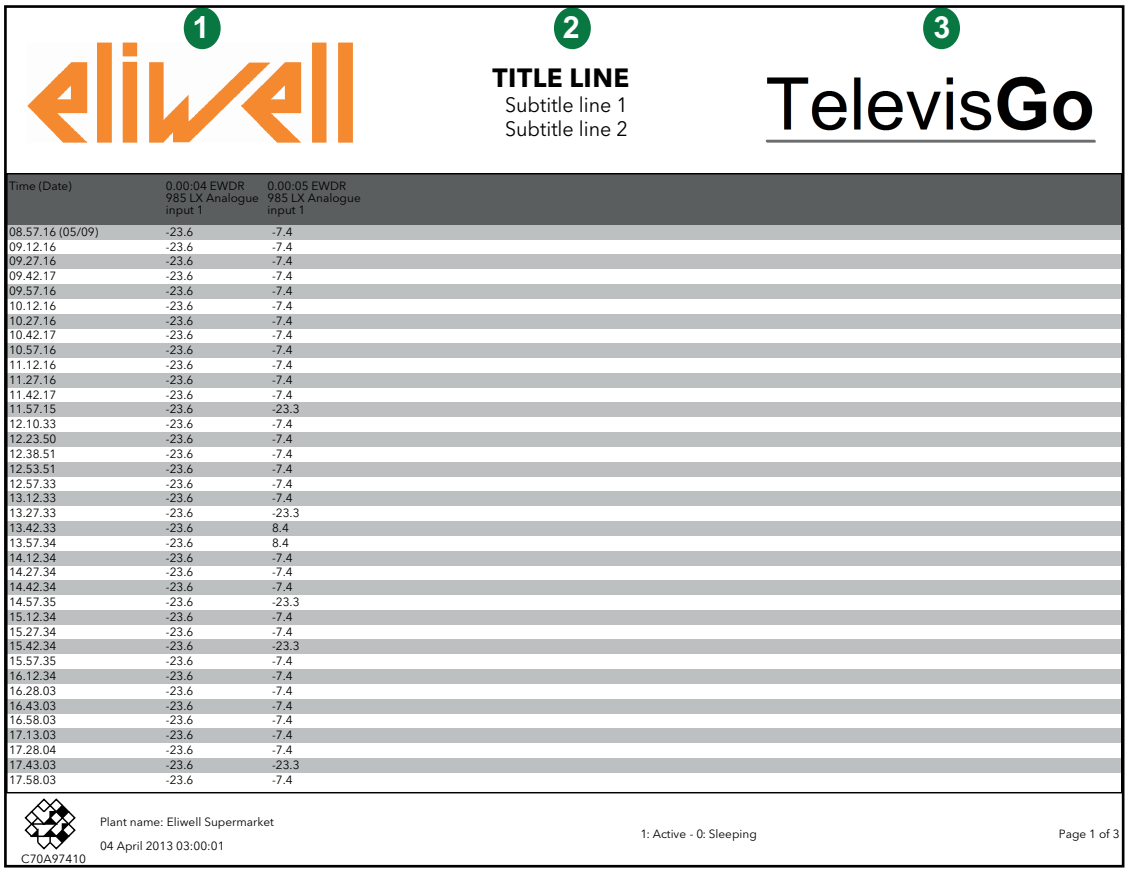

In the figure above, Televis**Go** v10 shows a list of previously saved **Data Export** files and their details.

## Customizing reports

The reports have no headings, unless this is expressly specified by the user.
The orientation of the report changes according to whether real-time data or historical data is being printed:

- **Real-time data**: the report will be in portrait
- **Historical data**: the report will be in landscape

Headings use the same graphic elements (logos, images, titles).
The following is an example of an historical report with the heading shown:




| Time (Date) | 0.00:04 EWDR 985 LX Analogue input 1 | 0.00:05 EWDR 985 LX Analogue input 1 |
|---|---|---|
| 08.57.16 (05/09) | -23.6 | -7.4 |
| 09.12.16 | -23.6 | -7.4 |
| 09.27.16 | -23.6 | -7.4 |
| 09.42.17 | -23.6 | -7.4 |
| 09.57.16 | -23.6 | -7.4 |
| 10.12.16 | -23.6 | -7.4 |
| 10.27.16 | -23.6 | -7.4 |
| 10.42.17 | -23.6 | -7.4 |
| 10.57.16 | -23.6 | -7.4 |
| 11.12.16 | -23.6 | -7.4 |
| 11.27.16 | -23.6 | -7.4 |
| 11.42.17 | -23.6 | -7.4 |
| 11.57.15 | -23.6 | -23.3 |
| 12.10.33 | -23.6 | -7.4 |
| 12.23.50 | -23.6 | -7.4 |
| 12.38.51 | -23.6 | -7.4 |
| 12.53.51 | -23.6 | -7.4 |
| 12.57.33 | -23.6 | -7.4 |
| 13.12.33 | -23.6 | -7.4 |
| 13.27.33 | -23.6 | -23.3 |
| 13.42.33 | -23.6 | 8.4 |
| 13.57.34 | -23.6 | 8.4 |
| 14.12.34 | -23.6 | -7.4 |
| 14.27.34 | -23.6 | -7.4 |
| 14.42.34 | -23.6 | -7.4 |
| 14.57.35 | -23.6 | -23.3 |
| 15.12.34 | -23.6 | -7.4 |
| 15.27.34 | -23.6 | -7.4 |
| 15.42.34 | -23.6 | -23.3 |
| 15.57.35 | -23.6 | -7.4 |
| 16.12.34 | -23.6 | -7.4 |
| 16.28.03 | -23.6 | -7.4 |
| 16.43.03 | -23.6 | -7.4 |
| 16.58.03 | -23.6 | -7.4 |
| 17.13.03 | -23.6 | -7.4 |
| 17.28.04 | -23.6 | -7.4 |
| 17.43.03 | -23.6 | -23.3 |
| 17.58.03 | -23.6 | -7.4 |

C70A97410
Plant name: Eliwell Supermarket
04 April 2013 03:00:01
1: Active - 0: Sleeping
Page 1 of 3

To **customize** a report heading, access the following folder in Televis**Go** v10:

**C:\Eliwell\\CustomReports**

Once the editing/customization of one or more files in the list is performed, it is necessary to **restart the service** to apply the changes.
This folder contains the following files:

A. **logo-left.png:**: contains the logo that will appear to the left of the heading (**1**).
B. **logo-right.png:**: contains the logo that will appear to the right of the heading (**3**).
C. **ReportTemplate.xml**: this is the report template and can be used to set the three lines of text (**2**).

### Editing PNG files (files A & B)

Replace the PNG files with the logos or images that need to be inserted in the report title.
The positions will be as follows:

- **logo-left.png**: logo/image that will appear to the left of the header (**1**)
- **logo-right.png**: logo/image that will appear to the right of the header (**3**)

The default files contain the Eliwell logo and the Televis**Go** v10 (see example).

The images will be sized to adapt them on the report header.

The images will not be displayed if files are removed or if the file names do not correspond to the content in the template (file C).

### Editing XML files (file C)

Edit the file using a text editor (for example: Notepad++).
There are two parts of the code that should be customised: one for real-time data reports and one for historical data reports.

**1) Historical data**

Edit the following text (line 4 of the file) (optional):

---

<historical gap="5" margin="20">
<customHeader logoLeft="**logo-left.png**" logoRight="**logo-right.png**" titleLine1="**TITLE LINE**" titleLine2="**Subtitle line 1**" titleLine3="**Subtitle line 2**"/>
<customValues>

---

Editable values in bold (see example image):

- **logo-left.png**: name of the image file to place to the left of the header (**1**).
- **logo-right.png**: name of the image file to place to the right of the header (**3**).
- **TITLE LINE**: text on the first line at the centre of the header (**2**), in bold.
- **Subtitle line 1**: text on the second line at the centre of the header (**2**).
- **Subtitle line 2**: text on the third line at the centre of the header (**2**).

If all boxes are left empty, the report will be produced without a header.

**2) Real-time data (realTime)**

Edit the following text (line 28 of the file) (optional):

---

<realTime gap="5" margin="20" orientation="portrait">
<customHeader logoLeft="**logo-left.png**" logoRight="**logo-right.png**" titleLine1="**TITLE LINE**" titleLine2="**Subtitle line 1**" titleLine3="**Subtitle line 2**"/>
<customValues>

---

Editable values in bold (see example image):

- **logo-left.png**: name of the image file to place to the left of the header (**1**).
- **logo-right.png**: name of the image file to place to the right of the header (**3**).
- **TITLE LINE**: text on the first line at the centre of the header (**2**), in bold.
- **Subtitle line 1**: text on the second line at the centre of the header (**2**).
- **Subtitle line 2**: text on the third line at the centre of the header (**2**).

If all boxes are left empty, the report will be produced without a header.

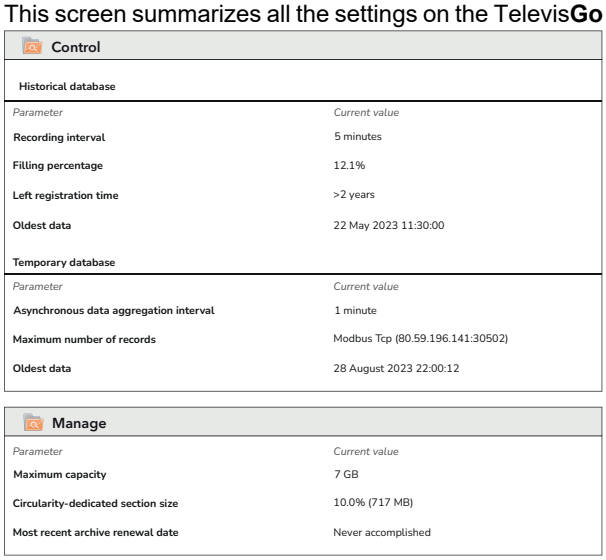
# Registration interval settings

## Contents

In the following menu:

**Settings** > **Archive management** > **Summary**

This screen summarizes all the settings on the Televis**Go** v10 relating to data storage.



Control

Historical database

| Parameter | Current value |
|---|---|
| Recording interval | 5 minutes |
| Filling percentage | 12.1% |
| Left registration time | >2 years |
| Oldest data | 22 May 2023 11:30:00 |

Temporary database

| Parameter | Current value |
|---|---|
| Asynchronous data aggregation interval | 1 minute |
| Maximum number of records | Modbus Tcp (80.59.196.141:30502) |
| Oldest data | 28 August 2023 22:00:12 |

Manage

| Parameter | Current value |
|---|---|
| Maximum capacity | 7 GB |
| Circularity-dedicated section size | 10.0% (717 MB) |
| Most recent archive renewal date | Never accomplished |

The settings for the following values are listed:

**Historical database**

- Recording interval
- Filling percentage
- Left registration time
- Oldest data

**Temporary database**

- Asynchronous data aggregation interval
- Maximum number of records
- Oldest data

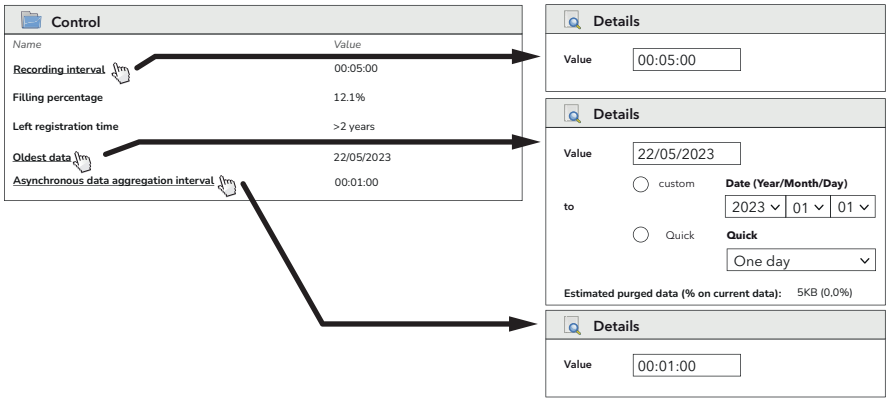
**Manage**

- Maximum capacity
- Circularity-dedicated section size
- Most recent archive renewal date

## Control

In the following menu:

**Settings > Archive management > Control**




The recording interval set (between 1 minute and 2 hours inclusive) is the storage interval (sample) for the values of the selected resources.

On this screen, press the **Edit** icon to set:

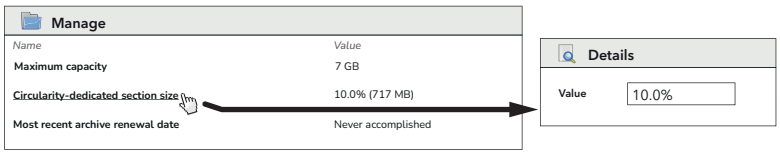
- **Recording interval**: enter the value (hours:minutes:seconds) and press the **Save** icon.
  **NOTE**: This interval does not apply to **Machine states**, **Alarms** and **Digital resources**. In these cases, only changes in the variables themselves are recorded, and not in relation to the interval set.
- **Oldest data**: enter the desired date and press the **Save** icon.
  **NOTE**: if set, all data prior to the date entered will be deleted.
- **Asynchronous data aggregation interval**:enter the value and press the **Save** icon.
  **NOTE**: The allowed values are as follows: 00:00:01 (1 second), 00:00:15 (15 seconds), 00:00:30 (30 seconds), 00:01:00 (1 minute).

**NOTE**: access to this screen and editing the settings for controlling the data archive is reserved for system administrators and any authorized groups of users.

## Manage

In the following menu:

**Settings > Archive management > Manage**




On this screen, press the **Edit** icon to set:

**Circularity-dedicated section size**: enter the value and press the **Save** icon.
**NOTES**:

- The adjustable value must fall between 5 % and 30 %. Values outside the range will generate an error.
- If "0.1" is entered, "10 %" will be saved; if "0.155" is entered, "15.5 %" will be saved; if a value with the "%" symbol is entered (for example, "15.5 %"), the value saved will be the same as the one entered ("15.5 %" in the example).
- access to this screen and editing the settings for managing the data archive is reserved for system administrators and any authorized groups of users, as it can affect system performance.

# System general settings

**⚠ WARNING**

**UNINTENDED EQUIPMENT OPERATION**

- Install TelevisGo v10, SerialAdapter and EthernetAdapter in an environment in which EMC disturbance is below the limits specified in standard EN61000-6-1 (residential, commercial and light industry environments).
- Configure the "LifeTest" function to make sure the TelevisGo v10 is active. Non-receipt of the periodic email indicates a malfunction of the TelevisGo v10 or the email sending service.

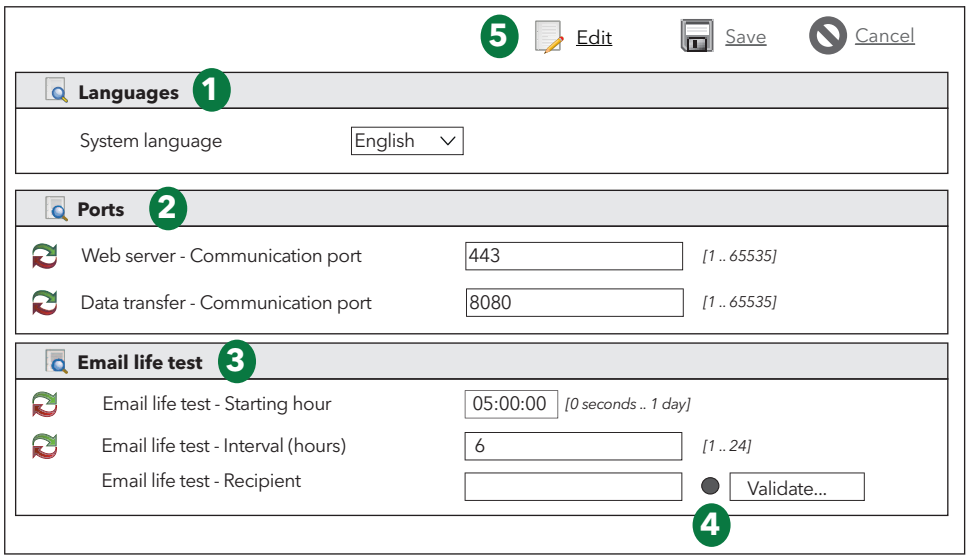
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

### System

This page is used to set the system language, the communication ports and the system life test notification sending times.
In the following menu:

**Settings > General settings > System**

The following screen will appear:




The different parts of the page are:

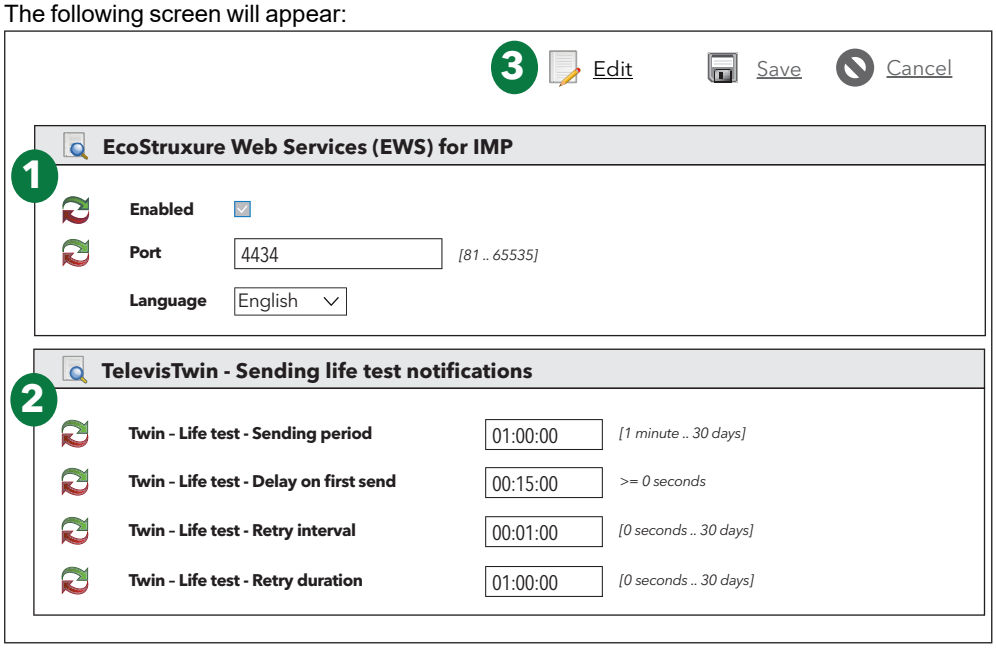
1. **Languages**: set the language used in creating the alarm messages and communication with systems external to Televis**Go** v10 (TelevisTwin or third-party systems). The system language setting impacts information relating to periodical exporting (.csv and .pdf files).
2. **Ports**: used to set the following ports:
   - **Web server**: identifies the port to be used for the WEB connection (example 443).
   - **Data transfer**: identifies the port to be used for data downloads (example: 8080).
3. **Email life test**: manages information relating to the sending of emails:
   - **Starting hour**: indicates what time the test should be carried out (example 05:00:00).
   - **Interval (hours)**: indicates the test execution interval expressed in hours (example 6).
   - **Recipient**: indicates recipient/s to whom the test should be sent. If there are several recipients, separate addresses with ';'.
4. **Validate...**: once the email addresses have been entered, the LED will turn **RED** to show that they have not been validated. Click "**Validate...**".
   (**NOTE**: a mail server must have been configured in the section Alarm management/Actions). In the window that opens, enter the code received via email; the LED will turn **GREEN**. If one of the sending attempts fails, the LED will change color to **YELLOW**.
5. **Control bar**: see Buttons and Selectors.

### Services

In the following menu:

**Settings > General Settings > Services**

The following screen will appear:




The different parts of the page are:

1. **EcoStruxure Web Services (EWS) for IMP**: Manages the information of the EWS service:
   - **Enabled**: sets whether the EWS service is enabled or not
   - **Port**: Sets the connection port of the EWS service
   - **Language**: allows setting the language used in the data communication towards IMP.
2. **Sending life test notifications:**: manages sending information for the Twin - Life test:
   - **Sending period**: indicates how often the life test should be carried out (example: 01:00:00).
   - **Delay on first send**: indicates how long to wait after start-up before sending a life report in hours (example: 00:15:00).
   - **Retry interval**: indicates the interval between 2 consecutive life report sending retries.
   - **Retry duration**: indicates the maximum interval within which life report sending attempts are made.
3. **Control bar**: see Buttons and Selectors.

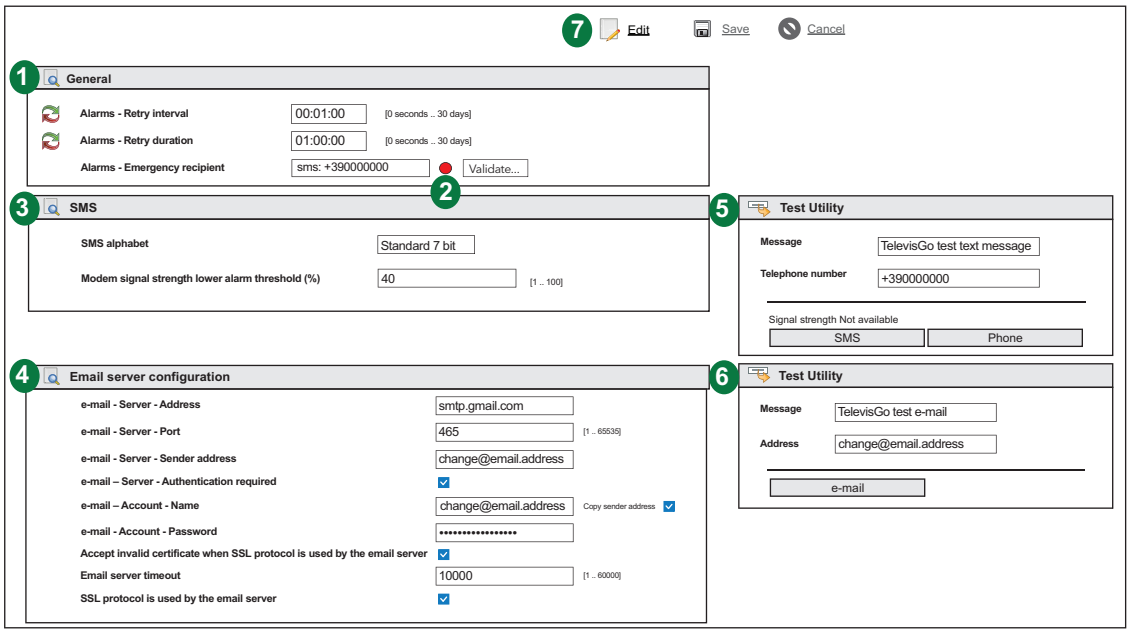
The life test will be sent to TelevisTwin if at least one "TelevisTwin" type action is configured on the system (see "Alarm management/Actions").

### Alarms

In the following menu:

**Settings > General Settings > Alarms**

The following screen will appear:




The different parts of the page are:

1. **General**: used to set up the sending of alarms (see "Alarm management"):
   - **Retry interval**: set the interval between 2 consecutive alarm sending retries.
   - **Retry duration**: set the maximum alarm sending retry interval.
   - **Emergency recipient**: set the telephone number to be called (for example: +390000000) and/or the email address (example: change@email.address) to set the telephone number to which an emergency message will be sent should the Televis**Go** v10 database become corrupted and the recipients set by the user are no longer available. If several recipients are entered, they should be separated with “;”.

| ***NOTICE*** |
| --- |
| **INOPERABLE DEVICE**<br>• Set the emergency recipient to receive notifications relating to any TelevisGo v10 database malfunctions.<br>• Use a SIM card with an unlimited data plan for sending SMS messages and/or emails.<br>**Failure to follow these instructions can result in equipment damage.** |

2. **Validate...**: once the telephone number has been entered, the LED will turn **RED** to show that it has not been validated. Click “Validate...”. In the window that opens, enter the code received via SMS; the LED will turn **GREEN**.
   If one of the sending attempts fails, the LED will change color to **YELLOW**.
3. **SMS**: used to set the set up the sending of SMS messages:
   - **SMS alphabet**: sets the type of alphabet to be used when sending SMS messages: **Standard 7 bit** (default) or **UCS-2** (Universal Character Set) or **Russian 7 bit**.
   - **Modem signal strength lower alarm threshold (%)**: sets the minimum modem signal threshold (as a percentage) which must be reached before a "Modem signal insufficient" alarm is activated.
4. **Email server configuration**: used to set the email server (**e-mail - Server**):
   - **Address**: set the email server address.
   - **Port**: set the email server connection port.

- **Sender address**: set the sender's email address.
- **Authentication required**: tell the system whether authentication is required.
- **Name**: sets the user name (if authentication is required).
- **Password**: sets the user password (if authentication is required).
- **Accept invalid certificate when SSL protocol is used by the email server**: used to allow invalid certificates when the SSL protocol is active.
- **Email server timeout**: sets the maximum interval for attempting to communicate with the server before generating an error (timeout).
- **SSL protocol is used by the email server**: sets whether the email server uses the SSL protocol.

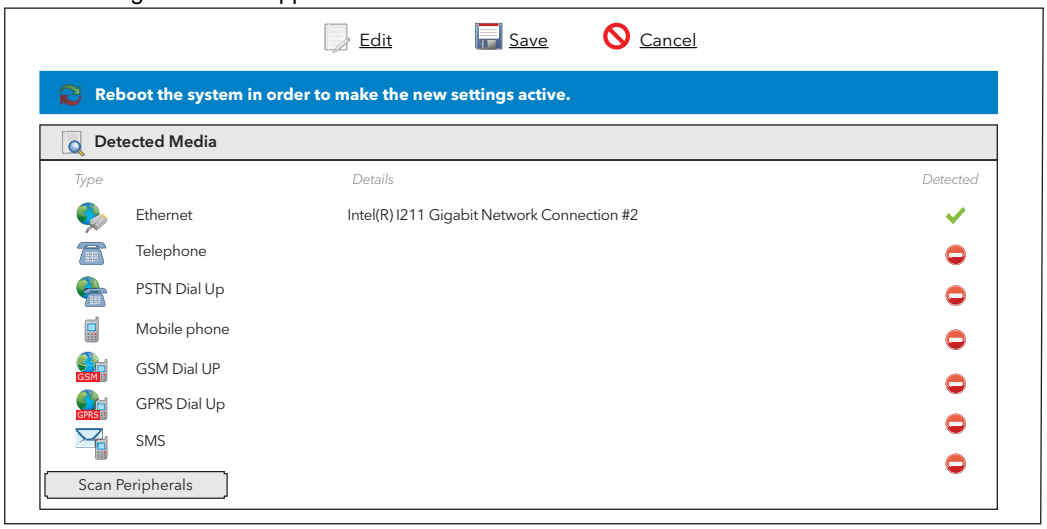
5. **Test Utility**: used to instantly check that the settings entered are correct and operational by sending an SMS message.
6. **Test Utility**: used to instantly check that the settings entered are correct and operational by sending an email.
7. **Control bar**: see Buttons and Selectors.

## Media

Televis**Go** v10 automatically detects the connectivity devices connected to it (MEDIA e.g. a LAN network or a GSM modem) and uses them to send alarm messages.
In the following menu:

**Settings > General Settings > Media**

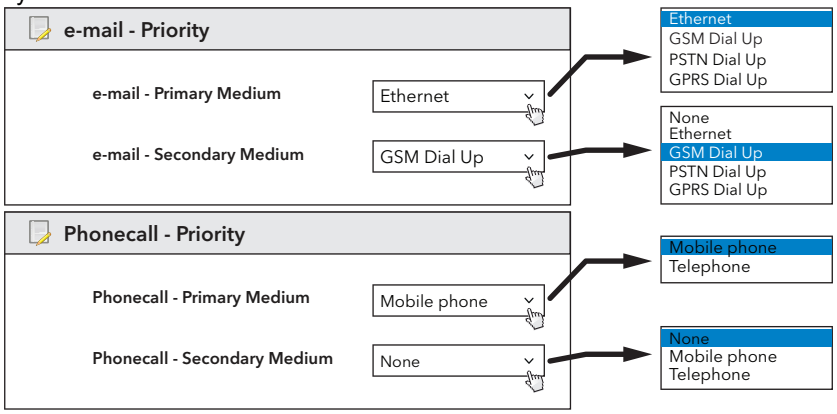
The following screen will appear:




- The **Detected Media** box lists all elements located and the type of connection.
- The **Details** column shows the corresponding description.
- The **Detected** column indicates whether the specified media has been detected.

On clicking **Scan Peripherals**, the system starts scanning for media devices connected to Televis**Go** v10.

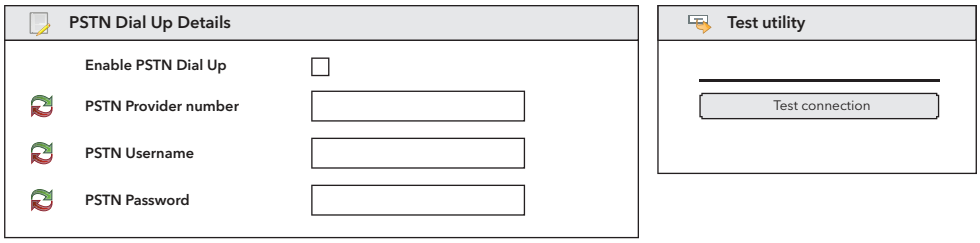
Televis**Go** v10 has a backup mechanism for alarm messages sent. From this page, you can decide in which order the system should sent alerts in.

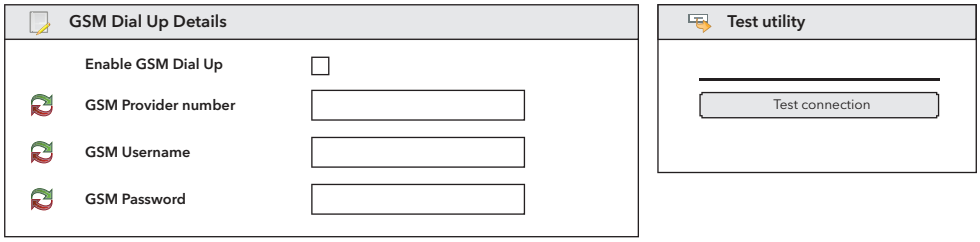



For example, in the “e-mail - Priority” box, the primary medium to send alarm alerts via email to can be selected (Ethernet in the example provided). If there is no Ethernet connection, Televis**Go** v10 will try to send the email using the secondary medium (a GSM modem in this case).
The order of priority for phonecall alarm messages is established in the same way.
**Note**: entering a secondary "Medium" is not compulsory.
**Note**: the drop-down menus list all media found for the type of notification, even if the specific one is not currently enabled.
**PSTN**, **GSM** and **GPRS** connections can also be configured from this page. Each of the three types of connection can be activated from the corresponding drop-down menu.

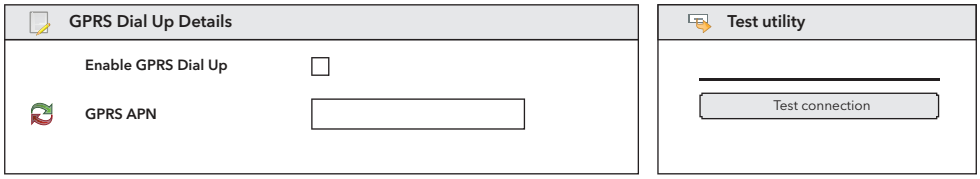
For PSTN and GSM connections, the following must be entered:

- Number of telephone provider with international dialing prefix (for example, **+39** for Italy)
- Dial-up connection user
- Dial-up connection user password.




For GPRS connections, the service Access Point Name (APN) is required (for example, internet.mnc012.mcc345.gprs).

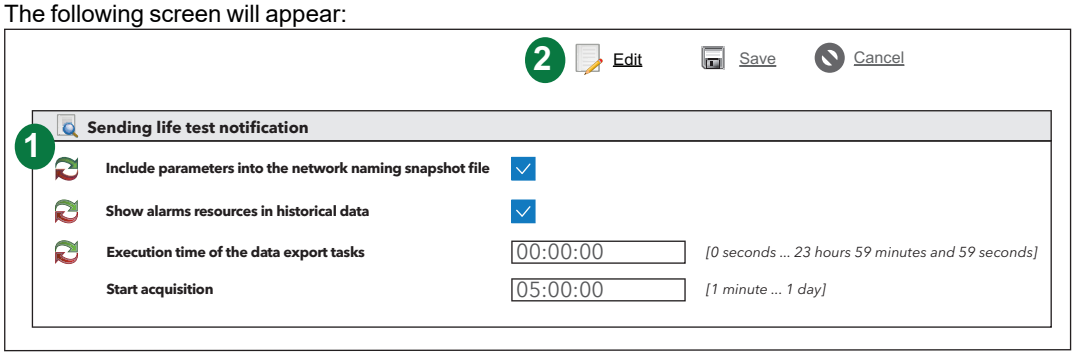


### Others

In the following menu:

**Settings > General Settings > Others**

The following screen will appear:




The different parts of the page are:

1. **Sending life test notification**: manages the life test sending information:
   - Include parameters into the network naming snapshot file
   - Show alarms resources in historical data
   - Execution time of the data export tasks
   - Start acquisition: indicates the period of inactivity after which the acquisitions are restarted automatically.

2. **Control bar**: see Buttons and Selectors.

# Computer

## Contents

This section includes the following topics:

Introduction ..... 157
Device settings ..... 158
Updating the TelevisGo v10 ..... 159
Updating the system ..... 160
Updating algorithm drivers ..... 161
Updating device drivers ..... 162
Reboot ..... 163
License updating ..... 163
System backup/restore ..... 164
Activity logging ..... 165

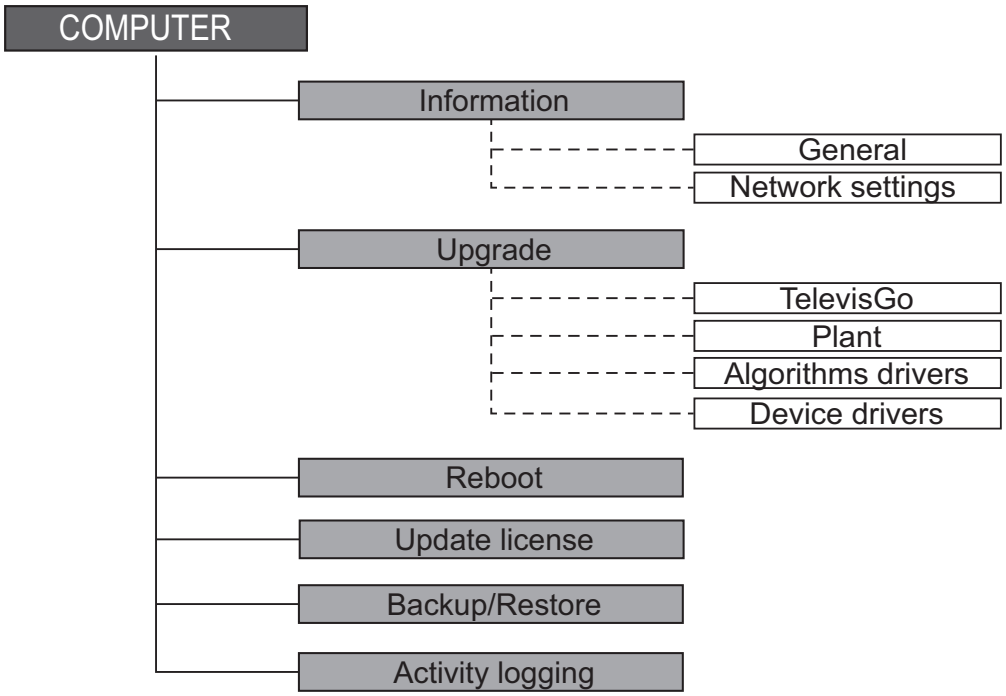
# Introduction

## Description

This section can be used to:

- manage network settings
- update the application, functions and languages
- update parameter maps, layout pages and various settings
- update algorithm and device drivers
- restart the application Televis**Go** v10
- update the license
- backup and restore the system
- view the reports (.TXT) for activities carried out

## Menu structure



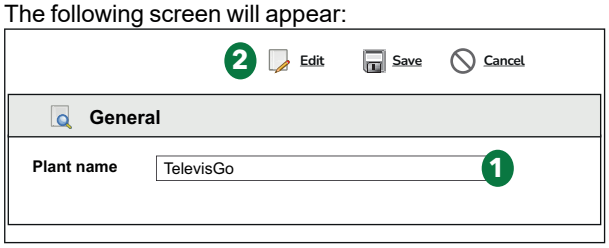
# Device settings

## Setting the system name

In the following menu:

**Computer > Information > General**

The following screen will appear:




The different parts of the page are:

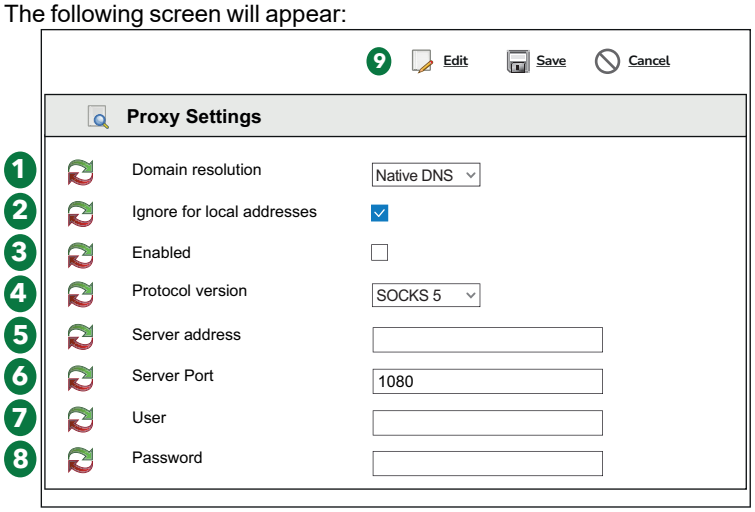
1. **Plant name**: used to set the system name
2. **Control bar**: see Buttons and Selectors.

## Setting up network connections

In the following menu:

**Computer > Information > Proxy Settings**

The following screen will appear:




Contact the network administrator for the network and Proxy data.
The different parts of the page are:

1. **Domain resolution**: Native DNS or Proxy.
2. **Ignore for local addresses**: when selected, Televis**Go** v10 will not use the proxy server to resolve addresses within its own sub-network.
3. **Enabled**: if selected, the SOCKS server will require authentication.
4. **Protocol version**: SOCKS 4, SOCKS 4a, SOCKS 5 or HTTP Proxy.
5. **Server address**: IP address of SOCKS server.
6. **Server Port**: SOCKS server access port.
7. **User**: user name for SOCKS server authentication.
8. **Password**: password for SOCKS server authentication.
9. **Control bar**: see Buttons and Selectors.

**NOTE**: having set the proxy parameters, reboot the system.

# Updating the TelevisGo v10

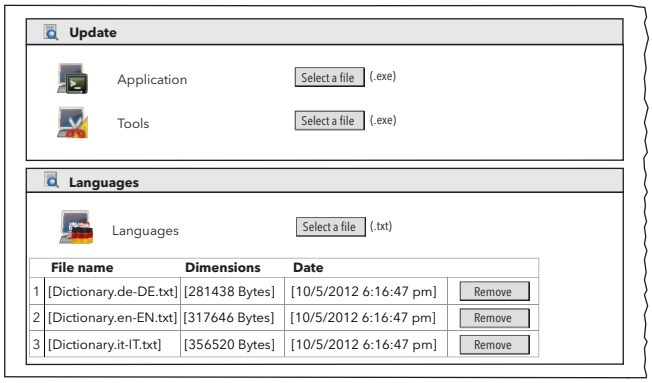
The system can be updated by loading the relative update files.

Download the Televis**Go** v10 update packages from the Eliwell website: www.eliwell.com.

To update the system, go through the following menus:

**Computer > Update > TelevisGo**

The following screen will appear:




In this, the following updates can be made:

- **Application**: update the Televis**Go** v10 application.
- **Functions**: update/upload the software applications "Offline Configurator" and "Layout Designer".
- **Languages**: update/upload the Televis**Go** v10 system glossaries.

The application update package can be downloaded from the website www.eliwell.com and contains updates to device drivers

To update the dictionaries, download the relevant file from the website www.eliwell.com.

**NOTE**: To avoid overwriting local changes and notification message customization files, the dictionaries are not included in application updates.
**NOTE**: if you cannot find the driver for your device, contact Eliwell Technical Support (Technical helpline: **+39 0437 986 300** - email: Techsupp@se.com).

# Updating the system

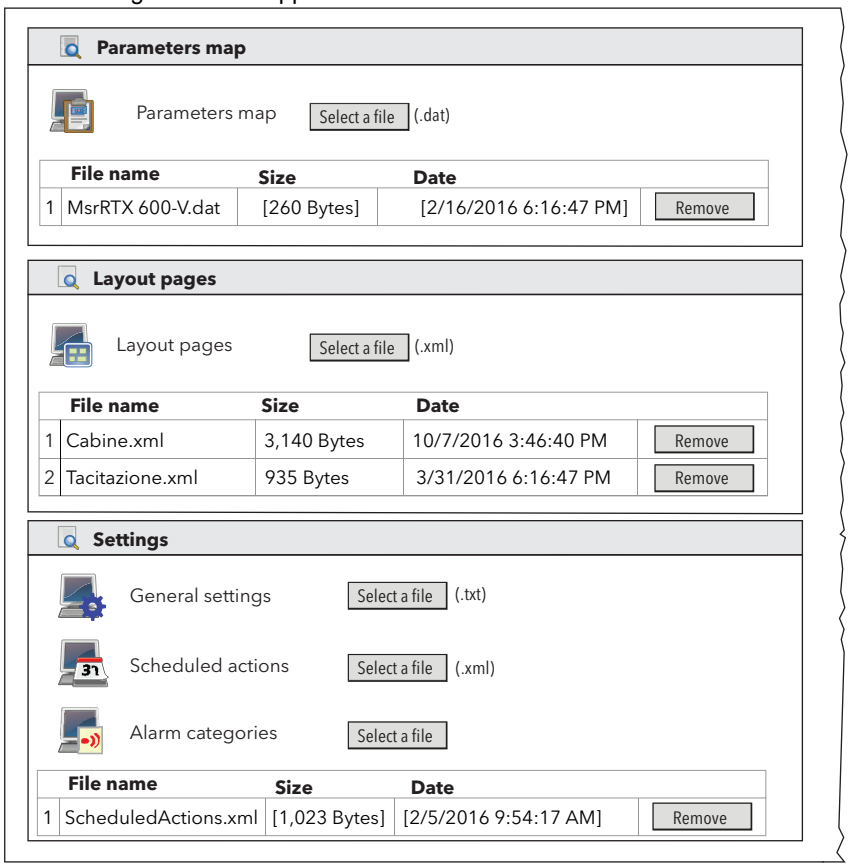
The system can be updated by loading the relative update files.

Download the Televis**Go** v10 update packages from the Eliwell website: www.eliwell.com.

To upgrade the system, go through the following menus:

**Computer > Update > System**

The following screen will appear:




In this, the following updates can be made:

- **Parameters map**: used to upload a map to for scheduled actions
- **Layout pages**: used to upload one or more layout pages (see "Layout")
- **General settings**: the procedure uses the file “Forced_setting.txt”.

# Updating algorithm drivers

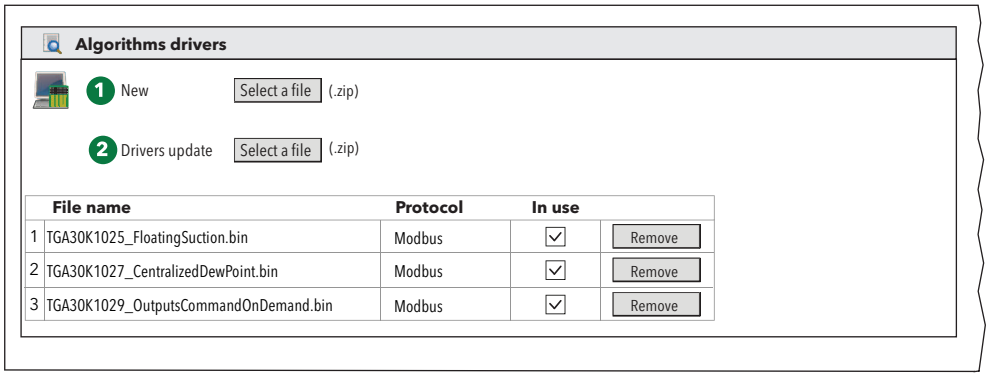
The system can be updated by loading the relative update files.

Download the Televis**Go** v10 update packages from the Eliwell website: www.eliwell.com.

To update the algorithms, go through the following menus:

**Computer > Update > Algorithms drivers**

The following screen will appear:




In this, the following updates can be made:

- **Algorithms drivers**: updates/uploads the algorithms implemented with the FREE Studio Plus programming environment.

**To load a new algorithm (row 1) :**

1. click **Select a file**
2. select the algorithm file (format TGA30K1025_FloatingSuction.bin)
3. click **Run** to load it.

The software will automatically open the Algorithms window

**To update an algorithm (row 2):**

1. click **Select a file**
2. select the algorithm file
3. click **Drivers update**.

The software will automatically open the Algorithms window

**NOTE**: if you are trying to update the algorithm using the **Run** function, the following message will appear on the screen: "**The algorithm is already present**".

# Updating device drivers

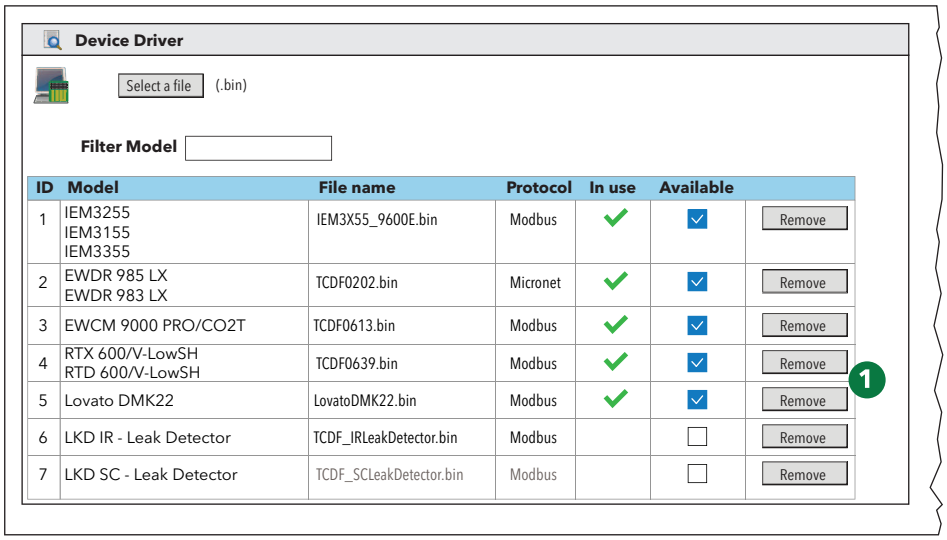
The system can be updated by loading the relative update files.

Download the Televis**Go** v10 update packages from the Eliwell website: www.eliwell.com.

To update the device drivers, go through the following menus:

**Computer > Update > Device drivers**

The following screen will appear:




In this, the following updates can be made:

- **Device drivers**: used to upload/update the device driver.

Updating a driver overwrites any driver that is already present.
Make a backup copy of the driver before carrying the update (see "System backup/restore").

The **Remove** button removes the relevant configuration file/driver.

- (**1**) list of all drivers present on the Televis**Go** v10.

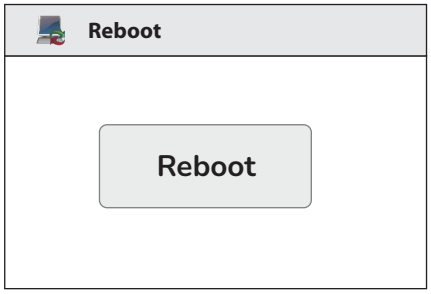
**NOTE**: if you cannot find the driver for your device, contact Eliwell Technical Support.

# Reboot

Having updated the Application or the License, you must reboot the Televis**Go** v10 software to implement the updates. To do so, go to:

**Computer > Reboot**

then press **Reboot**.



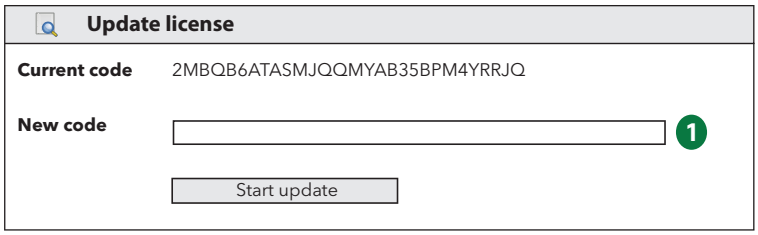

This procedure involves the disconnection of Televis**Go** v10. If the login page does not appear automatically after a few minutes, close and reopen the browser.

# License updating

The license can be updated (for example, to increase the number of connectable devices or activate additional functions).
In the following menu:

**Computer > Update license**

Enter the 'Current code' on the screen, then the 'New code' (1) supplied by Eliwell, and press '**Start update**'. If the entered code is wrong an error message will be created.

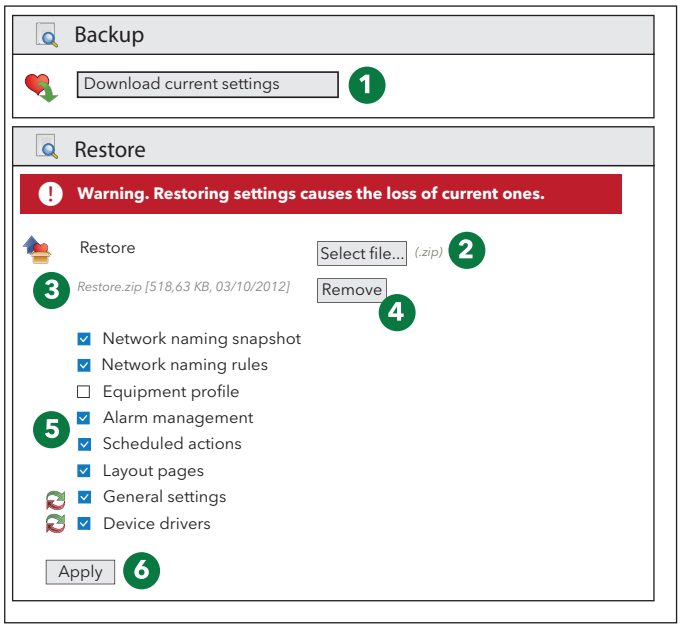


# System backup/restore

The system configuration can be backed up.
In the following menu:

**Computer > Backup/Restore**

The following screen will appear:




## Backup

Click **Download current settings** (**1**); a **.zip** file is created containing the “Equipment profile” and the “Scheduled actions”.
The user must save the file created.
Run a backup as soon as the device network customization and scanning, alarm configuration and scheduled actions setting processes have been completed.

## Restore

Restore is used to load a set of previously archived settings to the Televis**Go** v10.
(**2**) **Select file...**: to open a window and select the backup file to be restored.
(**3**) Once loaded, the name, size and date of the backup file will be visible (but the restore will not yet have been performed).
(**4**) **Remove**: used to cancel the previously uploaded file.
(**5**) Some check boxes above the **Apply** (**6**) button are used to select which settings to restore.
(**6**) **Apply**: the Televis**Go** v10 will be restored according to the contents of the uploaded file (**3**).

The restore function is used to re-apply the backup functions on the same system or replicate the information on different systems.

The restore procedure overwrites the system settings and cannot be canceled (the user is responsible for making a safety backup before carrying out the restore procedure).

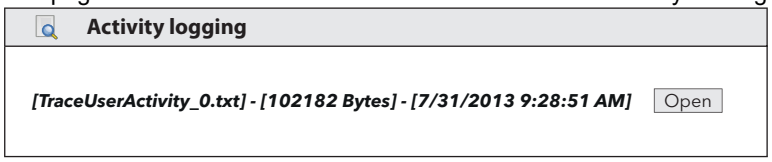
If the restore procedure involves the network name, make sure that the network has been scanned.

# Activity logging

Televis**Go** v10 records the main operations carried out by users:

**Computer** > **Activity logging**

The page shows one or more text files which can be consulted by clicking **Open**.




The text files used to log activities belong to a group of files that are managed in a circular mode (maximum of 10 files), meaning the oldest files are overwritten. The language used to log data in these files is the system language.

Moreover, to facilitate the consultation in case of need, the user activities are tracked and also recorded in the application tracking file using the English language.
Below is a list of the activities that are logged in the files:

- Login - AutoLogin - Logout
- Data acquisition Start / Stop
- Scheduled actions Start / Stop
- Execution of Commands
- Execution of Commands from Parameters page
- Writing of parameters
- RVD access
- Device(s) added to the network configuration
- Device(s) removed from the network configuration
- Edit device configuration
- Device(s) in maintenance
- Device maintenance end
- Editing/creation/removal of Alarm Actions
- Editing/creation/removal of Intervals
- Editing/creation/removal of Scheduled Activities
- Editing and saving of System Names
- Updating: updating of files in the pages
    - Computer Updating
    - Backup / Restore
    - Naming
    - Device profile
    - Drivers
- Reboot
- Updating: file removal
    - Application
    - File name rules
    - Updating
    - Dictionaries
    - Drivers
    - Scheduler
    - Layouts
    - Parameter map file
- License updating
- Backup settings
- Restore settings
- Editing and saving of:
    - General settings > System

        - General settings > TelevisTwin
        - General settings > Alarms
        - General settings > Media
    - Editing and saving
        - Archive management > Control
    - Editing and saving
        - Archive management > Manage
    - Editing and saving
        - Computer > Information > Network settings.

# Configuring HTTPS protocol

## Contents

This section includes the following topics:

Certificates ..... 168
Installing the certificate on other PCs ..... 169
Installing a new certificate ..... 170

# Certificates

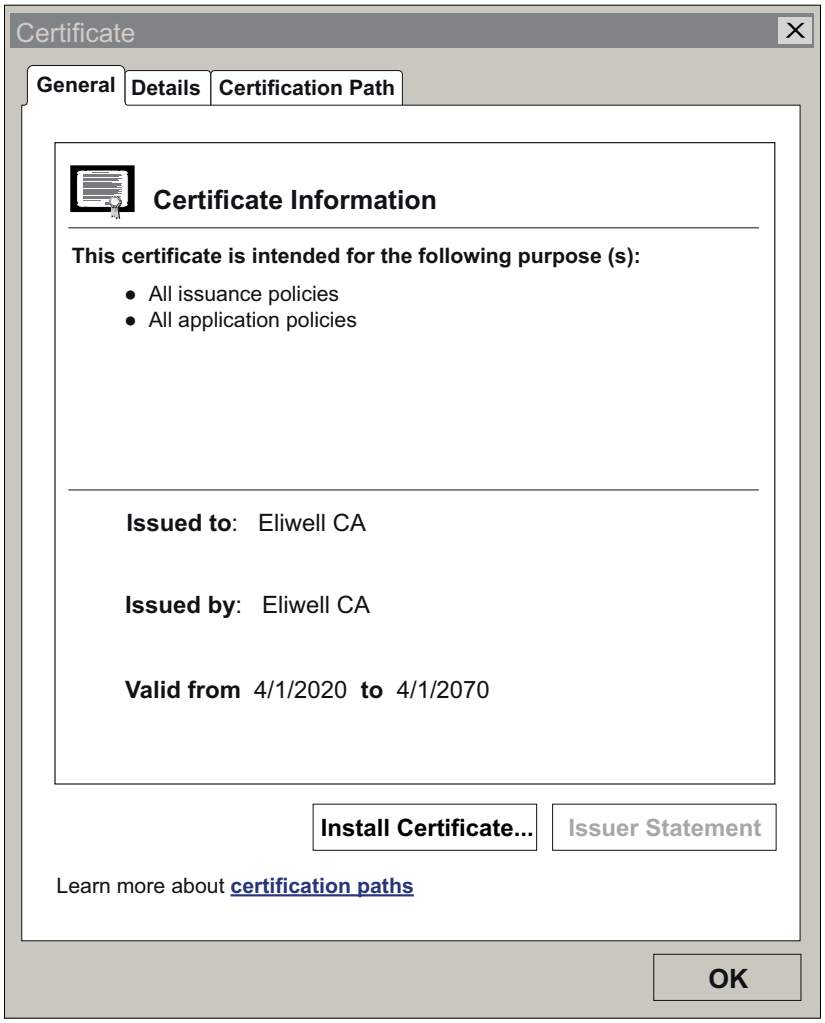
The following image is an example of the structure of the “**Eliwell CA**” certificate installed on the Televis**Go** v10. It is a self-certification and by default is installed in the "**Trusted root Certification Authorities**" folder on the Televis**Go** v10.




Televis**Go** v10 only works in **HTTPS** mode by connecting to the URL: **HTTPS://[Machine name]**.
Operation in **HTTPS** can take place in 2 ways:

1. By installing the “**Eliwell CA**” certificate on each machine that needs to connect to Televis**Go** v10.
   **NOTE**: the certificate is self-signed by Eliwell, not recognized by the browsers, and does not constitute a guarantee of security for the user
   (see "Installing the certificate on other PCs").
2. By purchasing and installing a certificate recognized by browsers and issued by an Authorized Certification Authority (Digicert, Verisign, etc.) on the Televis**Go** v10 (see "Installing a new certificate").

# Installing the certificate on other PCs




At startup, the file **CertificateGo.cer** corresponding to the certificate will be generated in the Televis**Go** v10 folder (see "Certificates").

Install the certificate “**Eliwell CA**”, self-signed by Eliwell and not recognized by the browsers, on each machine that needs to establish a secure remote connection with Televis**Go** v10.

To install it correctly, proceed as follows:

1. Copy the file to the machine on which you want to install the Certificate
2. Double-click on the certificate
3. In the window that opens, click “**Install Certificate...**” to launch the installation wizard
4. Click “**Next >**”
5. Select “Place all certificates in the following store”
6. Click “**Browse...**” and search for the file “Trusted Root Certification Authorities”
7. Click “**Next >**”
8. Click “**Finish**”.

The certificate is now correctly installed on the machine and will allow remote communication with Televis**Go** v10 via **HTTPS**.

# Installing a new certificate

If the client decides to protect themselves further by requesting the issue of a Certificate signed by a recognized authority, to install it correctly on the Televis**Go** v10 proceed as follows:

1. Install the certificate issued by the authority on the Televis**Go** v10, in the “**Personal**” folder.
2. Go to “**Start**” and then “**Run**”
3. Enter “**inetmgr**” in the text box and press enter
4. At this point the **IIS** interface will open
5. Select the following sequence from the menu on the left: **TelevisGo -> Sites -> ReverseProxy**
6. Click “**Bindings...**” in the menu on the right
7. Now select the binding “**HTTPS**” and click “**Edit**”
8. Finally, in the SSL certificate field, open the drop-down menu and select the new certificate you have just installed, then click “**OK**”.

The certificate is now correctly installed and assigned to the Televis**Go** v10.

# Administrative tools

## Contents

This section includes the following topics:

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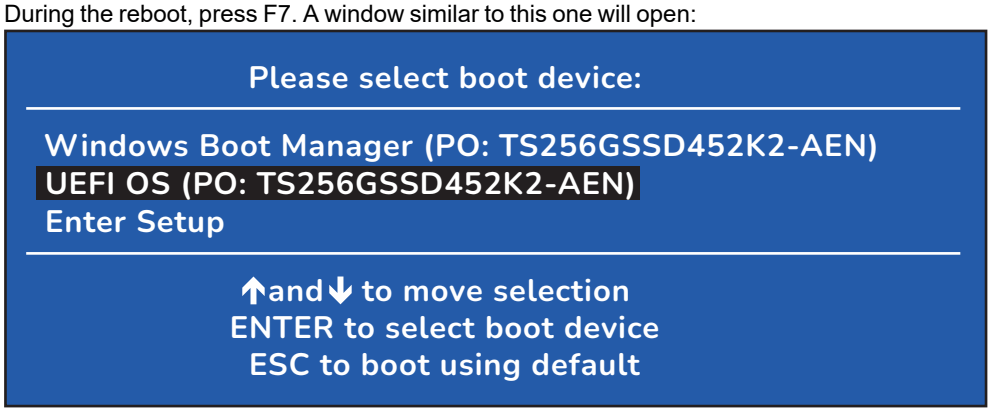
# Restoring the disk image

This function allows you to reinstall the software and the operating system in the event that:

- Televis**Go** v10 operation has been compromised (virus or loss of performance)
- you want to restore the factory settings of the Televis**Go** v10

This procedure will delete the entire contents of the hard disk: software, data and Televis**Go** v10 settings.
To proceed, you need to:

1. In the system file "**C:**", enter an empty file with the name "**enablerestore**".
   **Note**: the file will be deleted at each reboot
2. Reboot the Televis**Go** v10
3. During the reboot, press F7. A window similar to this one will open:

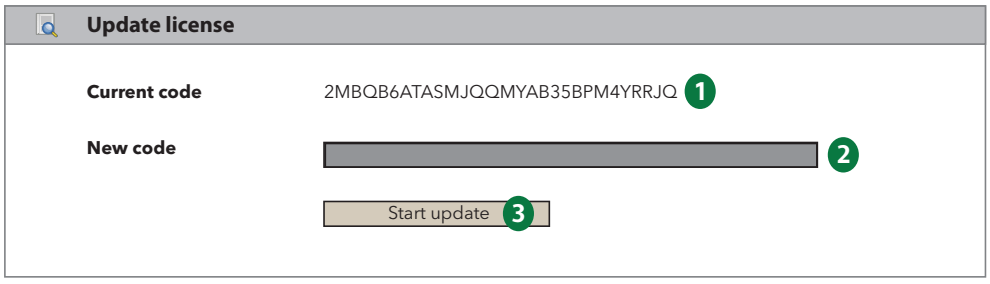



4. Use the Up/Down arrows to select "UEFI OS (PO: TS256GSSD452K2-AEN)" and click ENTER
5. In the next window, enter “eliwell” as the username and click ENTER
6. Then enter “eliwell” as the password and click ENTER.
   The window does not show the password characters entered.

**Note: the process takes 10/15 minutes.**

Once the system reboot is complete, enter the menu:

**Computer > Update license**




a. Send an email to Eliwell Technical Support (techsuppeliwell@se.com) with subject "TELEVISGO LICENSE".
   Indicate the product code and ID code (**1**) shown in the picture to calculate the new license code and the type of license to activate (LE or standard and the size).
b. Eliwell Technical Support will email you the new license code to enter in the gray box (**2**).
c. Click "Start update” (**3**).

**NOTE**: the factory settings may contain outdated versions of the software and/or operating system; check whether they need updating.

# Downloading files

A .zip file containing information on the status of the system and its configuration can be downloaded in order to diagnose any problems.
To do so simply open a browser and enter:

**Https://<Static IP address>/debug.rix**

The Televis**Go** v10 address is the one used for the normal web interface use (e.g.: 192.168.1.50 or 198.168.1.51).

# Remote data access protocol

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# Data protocol

Televis**Go** v10 allows third-party clients to extract data saved in their own files and run remote procedures on the system using the TCP/IP communication protocol.
For further information, contact Eliwell Technical Support.
**NOTE**: information is only available in English.

# FAQs

## Contents

This section includes the following topics:

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# FAQs

- **Function busy message**: to avoid blocking Televis**Go** v10 DP functions, always use the logout button to exit the application. If you don't do this, the functions will remain busy until the work session times out (20 minutes), preventing them from being used by other users.
- **Device description**: the screens used to select devices/resources for accessing various system functions (parameters, RVD, etc.) offer the option of applying filters, which act on the “Description” of the device/resource). To simplify selection by applying filters, we recommend assigning easily recognizable descriptions.
  Device naming as follows:
  - Frozen food cabinet **1**
  - Frozen food cabinet **2**
  - ⋮
  - Frozen food cabinet **n**
  - Vegetable cabinet **1**
  - Vegetable cabinet **2**
  - ⋮
  - Vegetable cabinet **m**
  - Positive temperature controller
  - Negative temperature controller

  makes it easy to identify all devices within a group (for example: frozen food cabinets) simply by entering the string "**frozen**" in the filter; controllers can be identified using the string “**Controller**". The same concept can be extended to the naming of individual device resources/alarms.
- **Alarm detail: why is there an action when an alarm occurs, and not the action associated with the alarm reset?**
  This happens when a category or action connected to the same alarm management category is removed. The system is no longer able to perform the activity associated with resetting that alarm.
- **Why does the system carry out an action associated with an alarm category, even if the validity period has elapsed?**
  This happens if an alarm instance starts within a validity period.
  Management also continues through alarm reset periods, even if this occurs outside the validity period.
- **Why are some strings missing sometimes when I update drivers?**
  This happens because updating drivers does not update dictionaries as well. To update dictionaries, go to the updates page and update dictionaries (see "Updates").

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