TelevisGo Windows 10 64-bit

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

User Manual

10/2023



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www.eliwell.com

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SAFETY INFORMATION

IMPORTANT INFORMATION

Notices

Read these instructions carefully and visually inspect the equipment to familiarize yourself with the device before attempting to install it, put it into operation or service 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” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



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 which, if not avoided, **will result** in death or serious injury.

⚠ WARNING

WARNING indicates a 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.

Please Note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric and Eliwell for any consequences arising out of the use of this material.
A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

Personnel qualification

Only appropriately trained persons who are familiar with and understand the contents of this manual and all other pertinent product documentation are authorized to work on and with this product.
The qualified person must be able to detect possible hazards that may arise from parameterization, modifying parameter values and generally from mechanical, electrical, or electronic equipment.
The qualified person must be familiar with the standards, provisions, and regulations for the prevention of industrial accidents, which they must observe when designing and implementing the system.

Intended use

The device must be installed and used in accordance with the provided instructions and in particular, in normal conditions, dangerous energized parts must not be accessible.
Televis**Go** is a supervisor for the monitoring, recording and processing of data and the remote viewing and maintenance of connected devices for refrigeration systems used in the processing, storage and distribution of foodstuffs.
It must be suitably protected against water and dust based on the application and must also be accessible only with the use of a keyed or tooled locking mechanism.

Prohibited use

Any use other than what is permitted is in fact prohibited.

Any protection devices indicated by product regulations or suggested as a result of common sense with regard to obvious safety must be implemented outside of the device.

Liability and residual risks

The liability of Schneider Electric and Eliwell are limited to the proper and professional use of this product under the guidelines contained in the present and other supporting documents, and does not extend to damages caused by (but not limited to):

- 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 allow access to dangerous parts without the aid of a keyed or tooled locking mechanism;
- product tampering and/or alteration;
- installation/use on equipment that does not comply with the regulations in force in the Country of installation.

Disposal



The appliance (or the product) must be disposed of separately in compliance with the local standards in force on waste disposal.

INFORMATION ABOUT...

AT A GLANCE

Document scope

This document describes the Televis**Go** supervisor for the monitoring, control and remote management of commercial refrigeration systems and its software, as well as installation and wiring information.

Use this document to:

- Install and use the Televis**Go** device
- Familiarize yourself with the functions of the TelevisGo device you will be using

NOTE: Read this document and all related documents carefully before installing, operating or servicing the device.

Validity Note

This document applies to the Televis**Go** device.

The characteristics that are presented in the present document should be the same as those characteristics that appear online. In line with our policy of constant improvement, we may revise content over time to improve clarity and accuracy. If you see a difference between the document and online information, use the online information as your reference.

Available Languages of this Document.

This document is available in the following languages:

- Italian (TGO00-01IT)
- English (TGO00-01EN)
- Spanish (TGO00-01ES)
- German (TGO00-01DE)
- French (TGO00-01FR)
- Russian (TGO00-01RU)

Related documents

Document title	Reference code
Manual TelevisGo Modbus_TCP BMS Config Tool - IT Manual TelevisGo Modbus_TCP BMS Config Tool - EN	9MA00270 9MA10270
Instruction Sheet TelevisGo Windows 10 6L	9IS54762
Instruction Sheet TelevisGo Windows 10 AR	9IS54763
Instruction Sheet SerialAdapter 6L	9IS64615
Instruction Sheet TelevisGo Spare SSD 6L	9IS64599

You can download these technical publications and other technical information from our website at **www.eliwell.com**.

Product related information

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION 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 restoring the power supply, replace and secure all covers, hardware components and cables.
- For all the devices requiring it, make sure there is an effective ground connection.
- Use only the specified voltage when operating this equipment and any associated products.

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

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

POTENTIAL FOR EXPLOSION

- Install and use this device in non-hazardous locations only.
- Do not use this device in applications which could produce hazardous atmospheres, such as applications 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

LOSS OF CONTROL

- Perform a new network scan every time the type, configuration or number of controllers monitored changes.
- The system 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 restart.
- Redundant control circuits separate from the TelevisGo must be provided for critical control functions.
- The control circuits may involve communication apparatus 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 prevention and local applicable safety directives.
- Every implementation of this equipment must be tested individually and completely in order to check its proper operation before it is commissioned.

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

Communication between Televis**Go** and **Serial**Adapter is susceptible to electromagnetic interference and the transmission of alarm signals may be impossible.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

- Use appropriate safety interlocks where personnel and/or equipment hazards exist.
- Do not use this equipment in safety-critical machine functions.
- Do not disassemble, repair, or modify this equipment.
- Do not connect wires to unused terminals and/or terminals indicated as “No Connection (N.C.)”.
- Install the TelevisGo and SerialAdapter in an environment in which the EMC disturbance level is below the limits specified by standard EN61000-6-1 (residential, commercial and light industry environments).
- Configure the “LifeTest” function to make sure the TelevisGo is active. If regular emails are not received, something has caused the TelevisGo or email transmission service to malfunction.
- The equivalent load of all RS-485 bus hubs must not exceed 30 Unit Loads.
  (For the definition of Unit Load, refer to standard TIA/EIA-485-A).
- When connecting the supervision system, use a special 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

POTENTIAL OF OVERHEATING AND/OR FIRE

Install and use the equipment only in a protected site, to avoid direct exposure to sunlight and atmospheric agents.

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

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

We recommend always using a secure protocol (HTTPS) when installing a TLS certificate generated by a reliable CA (Certification Authority).

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

Only use software approved by Eliwell for use with this equipment.

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

Suitable care and precautions must be taken when using this product as a control device, to avoid unforeseen consequences deriving from the operation of the controlled machine, variations in the state of the controller or the modification of the data memory or machine operating parameters.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

- Before trying to control the application remotely, it is indispensable to be fully familiar with the application and the machine.
- Take the necessary precautions to ensure that the remote operations are performed on the required machine, producing clear documentation to identify the application and the respective remote connection.

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

Eliwell work to the best practices in the sector to develop and implement control systems.
This includes a “Defense-in-Depth” approach to guarantee an industrial control system.
This approach protect the controller with one or more firewalls to limit access solely to authorized personnel and protocols.

⚠ WARNING

UNAUTHENTICATED ACCESS AND SUBSEQUENT NETWORK INTRUSION

- Assess whether environment or machines are connected to critical infrastructure, and in this case, take the appropriate prevention measures, based on defense-in-depth, before connecting the automation system to any network.
- Minimize the number of devices connected to a network.
- Isolate your industrial network from other networks in your company.
- Protect any network from unintentional accesses using firewalls, VPNs or other proven security measures.
- Monitor the activities in the systems.
- Prevent direct access or direct connection to the devices by unauthorized persons and unauthenticated actions.
- Prepare a recovery plan including the backup of the system and the process information.

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

Before starting

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 and the corresponding automation equipment on a device which does not have work area protection.

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 system integrator will be aware of all the conditions and factors present during the preparation, operation and servicing of the machine and can therefore decide which automation equipment and corresponding safety devices and interlocks can be used properly.

When choosing the automation and control equipment, and corresponding software, for a particular application, you must also take account of all applicable local and national standards and/or regulations. Furthermore, the manual for the prevention of incidents by the National Safety Council (nationally recognized in the United States of America) provides some very useful information.

Before commissioning the equipment, make sure that all suitable safety devices and mechanical/electrical interlocks relating to the work area have been installed. All the interlocks and safety devices relating to work area protection must be coordinated with the corresponding automation and software programming tools.

Startup and testing

Before using the electrical control and automation equipment for normal operation after its has been installed, the system must undergo a startup test, conducted by a qualified member of staff, to ensure the equipment is working properly.
It is important that preparations for this check are made and that the time required to perform it in a full and satisfactory manner is taken into account.

⚠ WARNING

DANGER WHEN OPERATING THE EQUIPMENT

- Make sure that all installation and preparation procedures have been completed.
- Before carrying out operational tests, remove all locks or other temporary restraint elements used when shipping all device components.
- Remove all tools, measuring instruments and rubbish from the equipment.

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

Carry out all the startup tests recommended in the equipment documentation.
Keep the documentation relating to all equipment so that it may be consulted at a later date.

Custom software must be tested in both simulated and real environments.

Make sure that the completed system is free from short-circuits and the temporary groundings not installed in compliance with local regulations (e.g. the National Electrical Code in the U.S.A).
If it is necessary to carry out tests at high potential, observe the recommendations provided in the equipment documentation in order to avoid accidentally damaging the equipment.

Before connecting the equipment to the power supply:

- Remove all tools, measuring instruments and rubbish from the equipment.
- Close the cover on the equipment casing.
- Remove all temporary groundings from the incoming power lines.
- Carry out all the startup tests recommended by the manufacturer.

CHAPTER 1
INTRODUCTION

1.1. DESCRIPTION

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

Televis**Go** can be used to record data, manage alarms and remotely access data for the devices in the network, allowing the management of HACCP data and maintenance work.

It has the following connectivity systems:

- Ethernet communication interface (integrated)
- GSM modem (external – see **“1.7. COMPATIBILE MODEMS” on page 17**)
- USB ports

Televis**Go** can be accessed remotely via a web browser without requiring the installation of additional software (see **“1.5. SUPPORTED BROWSERS” on page 15**).

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 later on.

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

The license allows management of up to 224 devices and 3000 acquisition points.

The system can be controlled as Administrator via remote access
(see **“1.9. TELEVISGO CONFIGURATION” on page 18**).

1.2. AVAILABLE ACCESSORIES

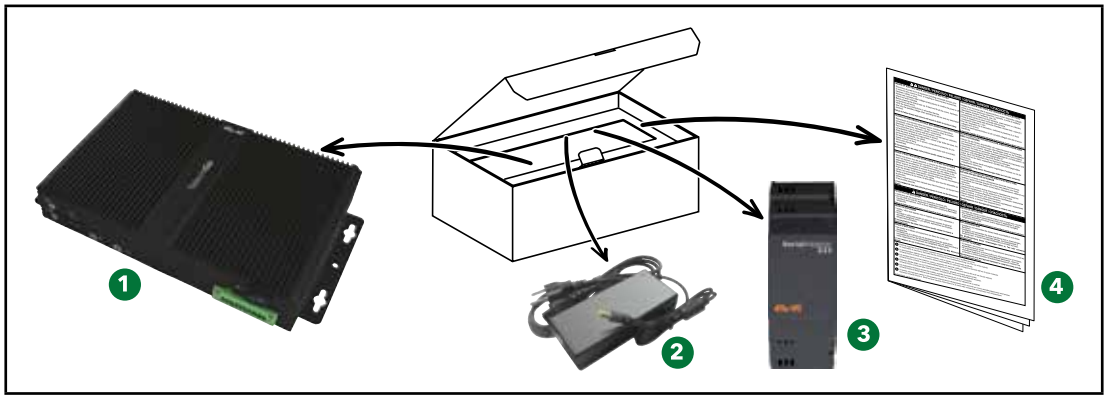
Depending on your application requirements, the following accessories are available to purchase separately:

Accessory	Description
GSM MODEM	GSM modem with RS232 interface based on SIEMENS type TC35 technology or “four faith F1103” model (product code SAMGPRS35AL00). It should be connected to **COM3** or **COM4**.
SerialAdapter	Module with RS232 / RS485 interface. It should be connected to **COM1** or **COM2**.
LanAdapter	Module with Ethernet / RS485 interface. **Lan**Adapter supports networks of devices with Micronet or Modbus protocol.
Wi-Fi Lan ADAPTER	As for **Lan**Adapter but with Wi-Fi / RS485 interface.
BusAdapter	Device with TTL/RS485 communication interface to allow connection of Eliwell devices to the RS485 fieldbus.
RadioAdapter	Device with TTL/RS485 wireless communication interface to allow connection of Eliwell devices to the RS485 fieldbus.

Contact the Eliwell Sales Office for product codes.

1.3. BOX CONTENTS

The box of a Televis**Go** device contains:



Label	Description
1	Televis**Go** device
2	Power supply and Power cable
3	**Serial**Adapter device (depending on model)
4	Televis**Go** Instruction Sheet

1.4. SUPPORTED LANGUAGES

The following languages are currently supported by the software:

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

1.5. SUPPORTED BROWSERS

The Televis**Go** has been checked with the following browsers and the corresponding versions:

- Mozilla Firefox 100 (or later versions)
- Google Chrome 100 (or later versions)

APPLICATION UPDATE

The cache settings may affect how the new system version loads.

NOTICE

INOPERABLE DEVICE

Clear the history for all browsers used to access the system after an application update.

Failure to follow these instructions can result in equipment damage.

1.6. TYPE OF NETWORKS MONITORED

Communication between Televis**Go** and **Serial**Adapter is susceptible to electromagnetic interference and the transmission of alarm signals may be impossible.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

- Install the TelevisGo and SerialAdapter in an environment in which the EMC disturbance level is below the limits specified by standard EN61000-6-1 (residential, commercial and light industry environments).
- Configure the “LifeTest” function to make sure the TelevisGo is active. If regular emails are not received, something has caused the TelevisGo or email transmission service to malfunction.
- The equivalent load of all RS-485 bus hubs must not exceed 30 Unit Loads.
  (For the definition of Unit Load, refer to standard TIA/EIA-485-A).
- When connecting the supervision system, use a special shielded “twisted-pair” cable (for example: BELDEN cable, model 8762).

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

The Televis**Go** is certified for operation with:

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

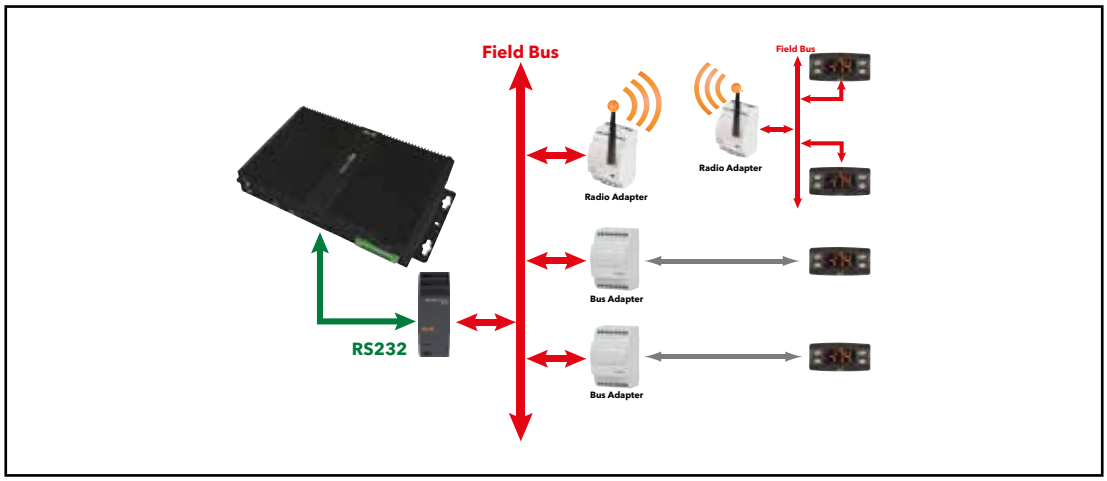
NOTICE

INOPERABLE DEVICE

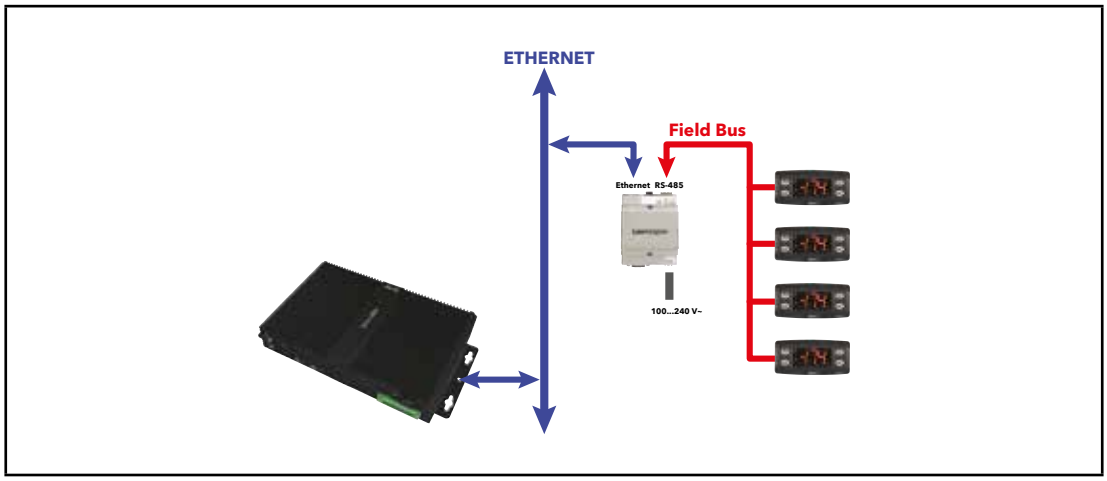
Eliwell guarantees the correct operation of networks that use a maximum of 10 LanAdapters.

Failure to follow these instructions can result in equipment damage.

Below are some examples of networks that can be used:



Example of RS232 / RS485 network



Example of Ethernet / RS485 network

In an Ethernet network the propagation of a signal depends on the traffic in the bus, meaning **Lan**Adapter access times are not determinist and may influence the time it takes Televis**Go** to access various resources with possible No-links.

1.7. COMPATIBILE MODEMS

The Televis**Go** is compatible with the GSM Modems with RS232 interface:

- based on SIEMENS type TC35 technology.
- “four faith F1103” model (product code SAMGPRS35AL00).

NOTICE
INOPERABLE DEVICE Make sure you have disabled the PIN code for the modem SIM card. **Failure to follow these instructions can result in equipment damage.**

The GSM modem can be connected directly via RS232.

1.8. COMPATIBLE DEVICES

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

1.9. TELEVISGO CONFIGURATION

Pay particular attention to the following considerations:

- The preset time zone is **GMT+1**.
- The preset password for the **Administrator** user is **0** (**zero**); the user is responsible for changing (and remembering) the password to guarantee secure and reserved access to the system.
- Remove the USB sticks after every maintenance procedure.

Change the preset password the first time you use it. You should also consider the implications of allowing other people to access it.

⚠ WARNING

UNAUTHORIZED ACCESS

- Immediately change the preset password with a secure new password.
- Do not communicate the password to unauthorized or otherwise unqualified personnel.

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. Do not exceed 50 characters and use only alphanumeric characters.

NOTE: The password must contain:

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

NOTE: The Windows password for the Televis**Go** Administrator is "Blank". This ensures that connection via the "Remote Desktop" application is not possible.

The Televis**Go** is dedicated exclusively to the implementation of the pre-installed application. The installation of any other type of application may have a negative impact on the running of the entire system. The only permitted installation is an anti-virus program.

NOTICE

INOPERABLE DEVICE

- Do not install any software on the TelevisGo except an anti-virus program.
- Do not leave USB sticks connected as doing so may prevent the computer from restarting properly.
- Verify that the installed anti-virus program does not block TCP/UDP ports used by the TelevisGo.
- Verify that the installed anti-virus program does not create a conflict with the TelevisGo.
- Verify that the actions of the anti-virus program may not affect system performance.
- Do not block active TelevisGo 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 an anti-virus program to install.

1.10. TELEVISGO CYBERSECURITY

1.10.1. OVERVIEW

Your Eliwell product is equipped with cybersecurity-enabling features.
These features arrive in a default state and can be configured for your installation needs.

NOTE: disabling or modifying settings within the scope of these individual features can impact the overall security robustness of the device and ultimately the security posture of your network in either positive or negative ways.

Following system hardening best practices is also necessary to help ensure your overall system security.

For more information, see the “Recommended Cybersecurity Best Practices” (Cybersecurity Hardening Best Practices) (English only).

Eliwell work to the best practices in the sector to develop and implement control systems.
This includes a “Defense-in-Depth” approach to guarantee an industrial control system.
This approach protect the controller with one or more firewalls to limit access solely to authorized personnel and protocols.

⚠ WARNING

UNAUTHENTICATED ACCESS AND SUBSEQUENT NETWORK INTRUSION

- Assess whether environment or machines are connected to critical infrastructure, and in this case, take the appropriate prevention measures, based on defense-in-depth, before connecting the automation system to any network.
- Minimize the number of devices connected to a network.
- Isolate your industrial network from other networks in your company.
- Protect any network from unintentional accesses using firewalls, VPNs or other proven security measures.
- Monitor the activities in the systems.
- Prevent direct access or direct connection to the devices by unauthorized persons and unauthenticated actions.
- Prepare a recovery plan including the backup of the system and the process information.

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

1.10.2. USER MANAGEMENT

User Management allows you to create user groups with configurable permissions.

You can restrict access to features by assigning individual users to a group.

There are 5 default groups:

- **Administrator**: modification rights for all features.
- **Operators/Users/Services**: modification rights for selected features
- **Readers**: Viewing rights for selected features

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

1.10.3. LIST OF PROTOCOLS AND PORT MANAGED

Enabling Protocols or Ports can generate cybersecurity problem. Read the section: “1.10.4. CYBERSECURITY CONFIGURATION RECOMMENDATIONS” on page 20.
The following is a list of enabled security mode:

- Enabled the firewall to lock external access to port 80.
- Disabled the Remote Desktop: port 3389/TCP RDP
- Closed the port 139/TCP NetBios
- Closed the port 137/UDP NetBios
- Closed the port 445/TCP SMB

1.10.4. CYBERSECURITY CONFIGURATION RECOMMENDATIONS

There are some general security configuration recommendations for your device.

- Do not add more users than those who need access, and evaluate your system needs before granting users access to critical pages, for example, **Firewall Management** or **Device Settings**.
- Limit the number of IP addresses that have access to the Televis**Go**.

⚠ WARNING

POTENTIAL COMPROMISE OF SYSTEM AVAILABILITY, INTEGRITY, AND CONFIDENTIALITY

- Change default passwords to help prevent unauthorized access to device settings and information.
- Disable unused ports/services and default accounts, where possible, to minimize pathways for malicious attacks.
- Place networked devices behind multiple layers of cyber defenses (such as firewalls, network segmentation, and network intrusion detection and protection).
- Use cybersecurity best practices (for example: least privilege, separation of duties) to help prevent unauthorized exposure, loss, modification of data and logs, interruption of services, or unintended operation.

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

NOTE: Table below lists risks and best practices associated with unsecure protocols. It is highly recommended to follow these best practices.

Unsecure protocols	Risks	Best Practices
SMTP	• threat of malware • unauthorized access to data • threat of data leakage • email contents transferred in plain-text.	For publication: • select SMTP with either SSL/TLS or SMART TLS configured for publication.
HTTP	• cross site scripting • broken authentication and session management • cross-site request forgery • eavesdropping and tampering.	For network configuration: • disable HTTP • select HTTPS for network connections. For publication: • do not select HTTP • select HTTPS with authentication.
FTP	• FTP brute force attack • packet sniffing • spoof attack • user credentials can be compromised since all authentication is done in clear-text.	For publication: • do not use FTP • select either HTTPS with authentication, or SMTP with either SSL/TLS or SMART TLS configured for publication.
Modbus TCP/IP	• message interception • information capture • arbitrary command issuance • unauthorized users can gather and /or tamper device configurations.	For Modbus device communications: • limit access to Modbus Communications by use of Modbus TCP/IP Filtering • disable the Modbus port for each network interface when not in use.

CHAPTER 2
MECHANICAL INSTALLATION

2.1. BEFORE STARTING

Before starting installation, read this chapter carefully.

Only the user, the machine manufacturer or integrator will be aware of all the conditions and factors present during the installation and setup, operation and servicing of the machine and can therefore decide which automation equipment and corresponding safety devices and interlocks can be used properly.

When choosing the automation and control equipment - and any other related equipment or software - for a particular application, you must also take account of all applicable local, regional or national standards and/or regulations.

In particular, make sure that the safety standards, electrical requirements and legal specifications that apply to the machine are observed.

⚠ WARNING

REGULATORY INCOMPATIBILITY

Make sure that all equipment used and systems designed comply with all applicable local, regional and national laws.

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

2.2. POWER SUPPLY DISCONNECTION

Assemble and install all optional extras 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 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 restoring the power supply, replace and secure all covers, hardware components and cables.
- For all the devices requiring it, make sure there is an effective ground connection.
- Use only the specified voltage when operating this equipment and any associated products.

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

2.3. 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

POTENTIAL FOR EXPLOSION

- Install and use this device in non-hazardous locations only.
- Do not use this device in applications which could produce hazardous atmospheres, such as applications 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 the 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.

2.4. COMMENTS CONCERNING INSTALLATION

⚠ 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.

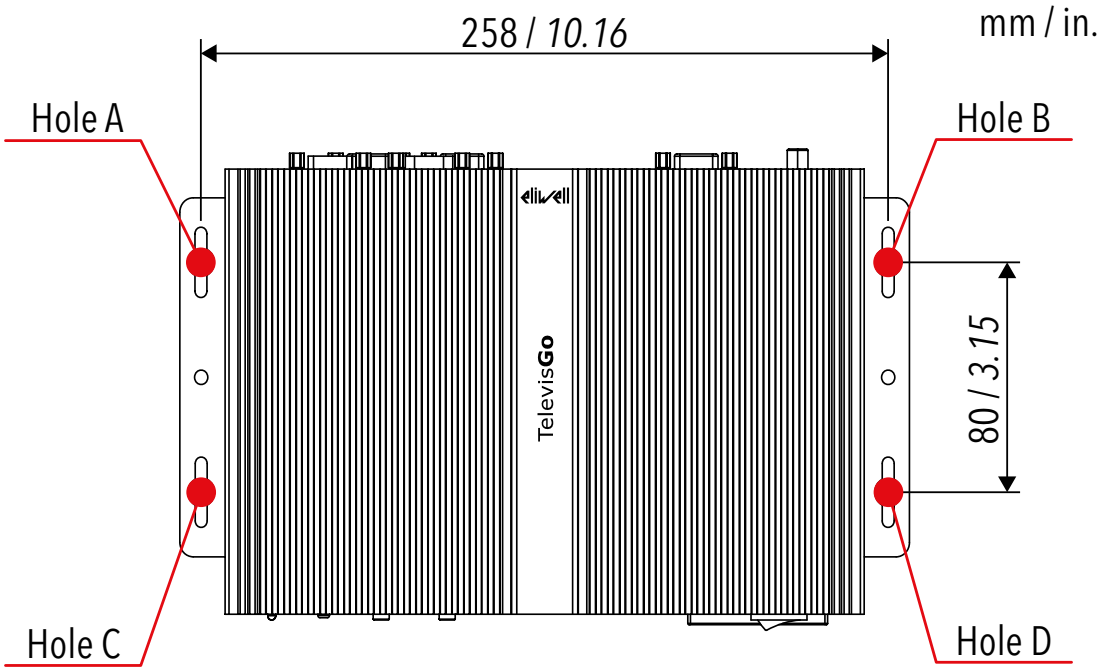
For mechanical dimensions, please refer to **“4.2. MECHANICAL CHARACTERISTICS” on page 32**.

2.5. INSTALLATION

Televis**Go** is designed for wall or panel mounting (on a flat surface).

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

When installing it, secure the apparatus to the wall/panel using 4 screws (not supplied) corresponding with the holes shown in the figure below:



CHAPTER 3
ELECTRICAL CONNECTIONS

3.1. WIRING PRACTICES

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

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION 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 restoring the power supply, replace and secure all covers, hardware components and cables.
- For all the devices requiring it, make sure there is an effective ground connection.
- Use only the specified voltage when operating this equipment and any associated products.

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

⚠ WARNING

RISK OF OVERHEATING AND FIRE

Install and use the equipment only in a protected site, to avoid 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 the TelevisGo and SerialAdapter in an environment in which the EMC disturbance level is below the limits specified by standard EN61000-6-1 (residential, commercial and light industry environments).
- Configure the “LifeTest” function to make sure the TelevisGo is active. If regular emails are not received, something has caused the TelevisGo or email transmission service to malfunction.

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

⚠ WARNING

LOSS OF CONTROL

- Perform a new network scan every time the type, configuration or number of controllers monitored changes.
- The system 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 restart.
- Redundant control circuits separate from the TelevisGo must be provided for critical control functions.
- The control circuits may involve communication apparatus 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 prevention and local applicable safety directives.
- Every implementation of this equipment must be tested individually and completely in order to check its proper operation before it is commissioned.
- Do not disassemble, repair, or modify this equipment.

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

3.1.1. WIRING GUIDELINES

Observe the following standards with reference to the Televis**Go** device wiring:

- Keep the communication wiring separate from the power wiring.
  Lay these two types of cables in separate raceways.
- Make sure 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 correctly grounded shielded wires for communication connections.
If shielded wires cannot be used for these connections, the electromagnetic interference may deteriorate the signal. Deteriorated signals can result in the devices, modules or attached equipment operating incorrectly.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

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

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

3.1.2. CONNECTIONS

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

- 4 x RS232 serial
- 1 x RJ45 Ethernet port

Take extra care when connecting serial lines.
Incorrect wiring may lead to faulty equipment operation, or cause it to stop operating completely.

RS232/RS485

Connection takes place via the **Serial**Adapter module and the system devices must be connected via a cable with wires that have a cross-section of 0.5 mm^2:

- Use a special shielded “twisted-pair” cable for RS485 (e.g.: BELDEN cable, model 9842). When laying cables, follow the indications in standard EN 50174 for I.T. wiring. Take extra care to separate the data transmission circuits from the power lines.
- The length of the RS485 network, which can be connected directly to the device, is 1200 m (in accordance with ANSI TIA/EIA RS-485-A and ISO 8482:1987 (E)).
- Single terminal block with 3 which should all be used (“+” and “-” for the signal; “G” for 0 V signal grounding).
- The network should have BUS DAISY CHAIN topology and termination resistance of 120 Ω - 1/4 W between terminals “+” and “-” at each of the two ends of the BUS or enable those already provided on the devices.

Ethernet

The Ethernet connection allows Televis**Go** communication over an Ethernet network via TCP/IP protocol. The main Ethernet characteristics are:

- Protocol: Modbus TCP/IP
- Type of Connector: RJ45
- Driver: 10 M / 100 M with autonegotiation
- Type of cable: Shielded

3.1.3. SPECIFIC HANDLING CONSIDERATIONS

When handling the equipment, take care to avoid damage caused by electrostatic discharge. In particular, the unshielded connectors and in certain cases the open circuit boards are vulnerable to electrostatic discharge.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION DUE TO ELECTROSTATIC DISCHARGE

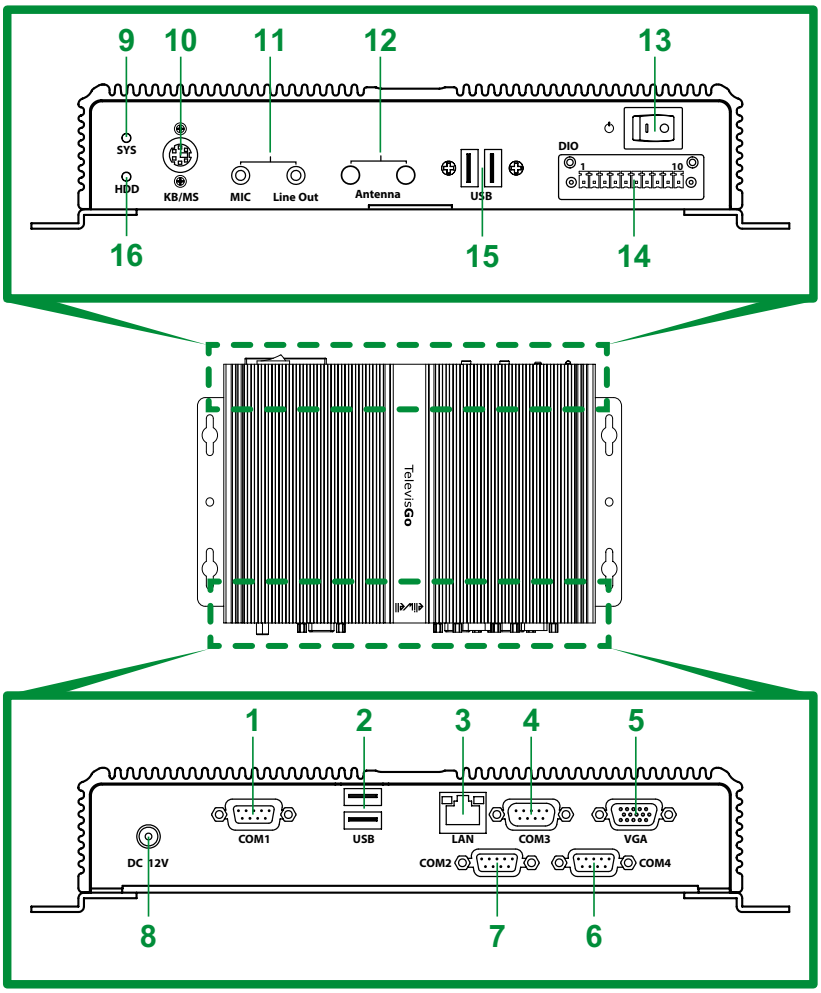
- Keep the equipment in the protective packaging until ready for installation.
- Before handling the equipment, always discharge the static electricity from the body by touching an earthed surface or type-approved antistatic mat.

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

Before carrying out any work, make sure that the device is connected to a suitable external electricity supply. Refer to **“4.3. POWER SUPPLY” on page 32**.

3.2. TELEVISGO WINDOWS 10 64-BIT HARDWARE

The connectors for the Televis**Go** are as follows:



Number	Label	Description
1	COM1	COM1 serial port (RS232) - for **Serial**Adapter
2	USB	2x USB ports
3	LAN	Ethernet port (LAN RJ45)
4	COM3	COM3 serial port (RS232) - for external modem
5	VGA	VGA connector for external monitor connection
6	COM4	COM4 serial port (RS232) - for external modem
7	COM2	COM2 serial port (RS232) - for **Serial**Adapter
8	DC 12V	12 Vdc power supply connector
9	SYS	Power supply LED
10	KB/MS	PS2 connector for external keypad connection
11	MIC - Line out	Audio minijack sockets
12	Antenna	Not used
13	⏻	ON/OFF button
14	DIO	Not used
15	USB	2x USB ports
16	HDD	HDD operation LED

3.3. NETWORK CONNECTION

Modules (**Serial**Adapter, **Lan**Adapter) and system devices must be connected via a cable with wires with a cross-section of 0.5 mm^2 (see **“3.1.2. CONNECTIONS” on page 26**).

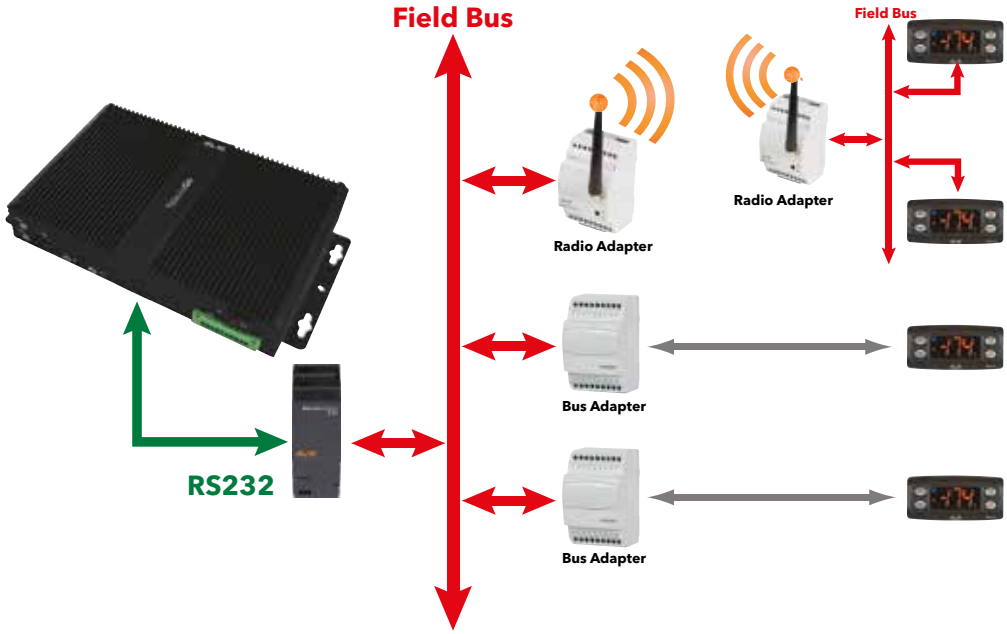
3.3.1. DEVICE CONFIGURATION

Before scanning a network using the Televis**Go**, each device within the system should be assigned a unique code in the context of the serial port or **Lan**Adapter by setting - depending on the on-board device protocol - the following parameters:

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

3.3.2. NETWORK CONNECTED WITH RS232

The connection of an RS232/RS485 network takes place via a **Serial**Adapter as follows:



The following devices were used in the example:

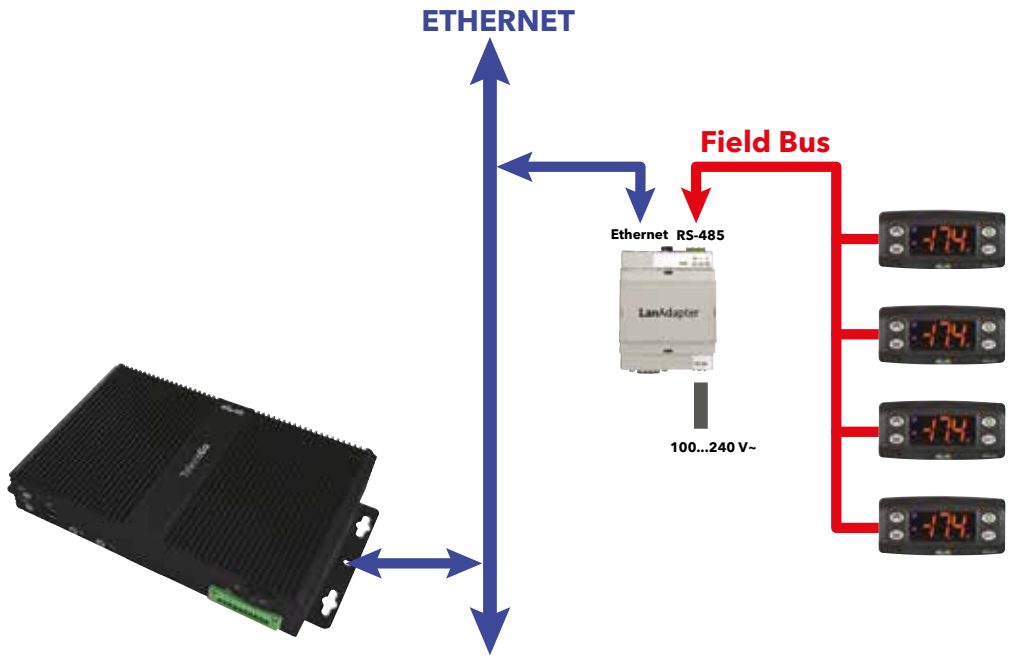
- 1 **Serial**Adapter
- 2 **Bus**Adapters
- 1 **Radio**Adapter
- 4 IDPlus devices

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

NOTICE
INOPERABLE DEVICE Select the serial port suited to the accessory you want to connect. **Failure to follow these instructions can result in equipment damage.**

3.3.3. NETWORK CONNECTED WITH ETHERNET

The connection of an Ethernet/RS485 network takes place via a **Lan**Adapter as follows:



The following devices were used in the example:

- 1 **Lan**Adapter
- 4 IDPlus devices

In an Ethernet network the propagation of a signal depends on the traffic in the bus, meaning **Lan**Adapter access times are not determinist and may influence the time it takes Televis**Go** to access various resources with possible No-links.

NOTICE
INOPERABLE DEVICE If there is a problem with connection, check whether the profile assigned to the network is correct and change it if necessary. **Failure to follow these instructions can result in equipment damage.**

CHAPTER 4
TECHNICAL DATA

4.1. TECHNICAL CHARACTERISTICS

Characteristics	Description
The product complies with the following harmonized Standards:	EN 60950-1
Equipment mobility:	Mobile
Connection to power supply:	Not directly connected to the mains electricity
IP rating:	IP20
Operating conditions:	Continuous
Access to installation area:	Accessible by the operator
Degree of pollution:	2
Power supply:	12 Vdc via external power supply 100...240 Vac (±10%), 50/60 Hz*
Environmental operating conditions:	Temperature: 0...40°C (32...104°F)** Humidity: 10…90% RH (non-condensing) Altitude: ≤ 2000 m
Transportation and storage conditions:	Temperature: -20...60°C (-4...140°F) Humidity: 10…90% RH (non-condensing)

* Only use the power supply unit provided, or an authentic replacement BT111124. (100...240 Vac ±10% 60 W). Contact Eliwell Technical Support for details.

** according to Standard IEC 60068-2-14 with a 0.5 m/s AirFlow.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

Do not exceed any of the rated values specified in the environmental and electrical characteristics tables.

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

FURTHER INFORMATION:

Characteristics	Description
Maximum number of devices that can be connected:	224
Operating system (depending on model):	Windows 10 64-bit IOT Enterprise LTSC 2019 (English) **NOTE**: the license number label is on the instrument.
Connections:	• Ethernet (LAN) • External GSM modem • Integrated USBs
Maximum BaudRate:	9600 baud
Maximum length of the RS485 network:	1200 m - 3937 ft
Equivalent load on the RS485 bus:	0.75 Unit Load
Power supply interruptions:	Non-volatile internal memory, duration 10 years
Recording interval:	Can be configured between 1 minute and 2 hours (preset 15 minutes)*
Recording duration:	1 year of data for 1500 analog entities (if the recording interval is 15 minutes)**
Maximum detection time relative error and time recording error:	< 0.1%
Climatic environment:	'Type A' in air

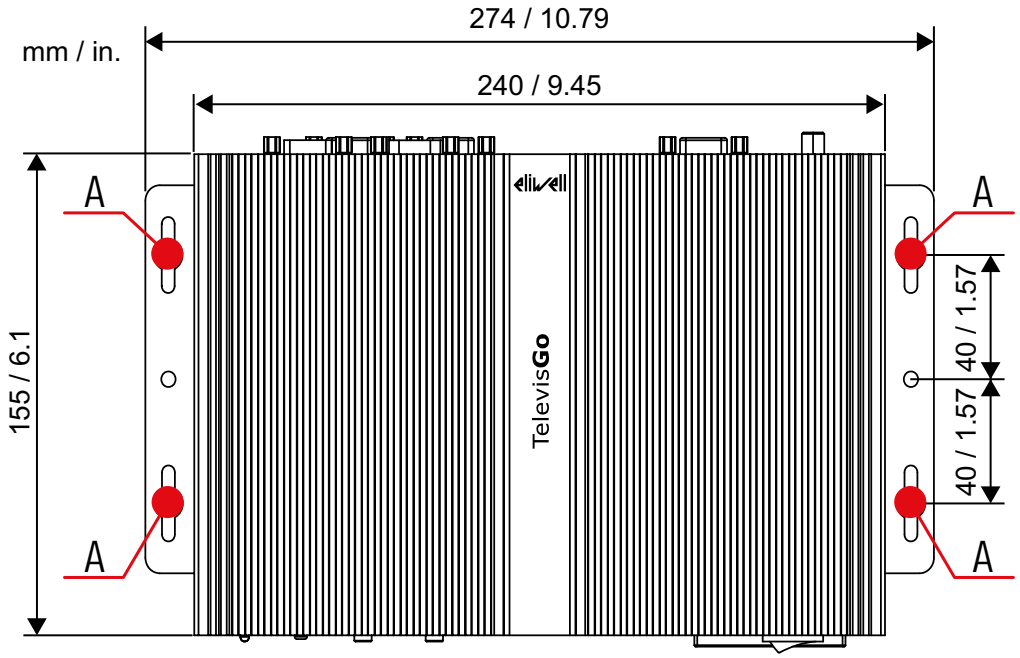
* The minimum interval that can be set to be sure of rereading the values of all resources depends on the network response time. Refer to **"8.1. REAL TIME DATA" on page 86**.

** The presence of digital entities or machine statuses subject to a higher or lower number of variations may change the length of the expected log period.
In this case, refer to the user interface archive management pages to check the storage capacity of your system. (see **"6.4. SYSTEM CONFIGURATION" on page 54**).

4.2. MECHANICAL CHARACTERISTICS

The mechanical characteristics of the Televis**Go** are:

	Length mm / in.	Height mm / in.	Depth mm / in.
Televis**Go**	274 / 10.79	155 / 6.10	52 / 2.05



4.3. POWER SUPPLY

The device is powered at 12 Vdc by means of an external power supply unit 100...240 Vac (±10%) 50/60 Hz.

Depending on the requirements of individual units and/or the country of installation, if the country's mains voltage is within the operating range, the device can be connected directly to the mains power supply.

To avoid switching off the computer accidentally, the ON/OFF button must be pressed for at least 4 seconds to switch it off.

If there is a mains power supply failure, the computer and the application will restart automatically when the power is restored.

CHAPTER 5
USER INTERFACE

5.1. ACCESSING THE USER INTERFACE

Televis**Go** offers an advanced user interface, accessible from any PC via a web browser, for data analysis and full control of the system functions.

To access the WEB interface, the Televis**Go** must be on and connected to the network.

Televis**Go** will automatically open a browser page with the device address.

The factory-set parameters are as follows:

<TelevisGo IP Address> = 192.168.1.50
Subnet mask = 255.255.0.0

For the connection between the computer and the Televis**Go** (Ethernet) to work, the computer should be configured with a compatible IP address and the subnet mask for the Televis**Go** (typically the same Subnet mask and IP Address with a difference only in the fourth block of numbers, which should be different for each element in the same sub-network).

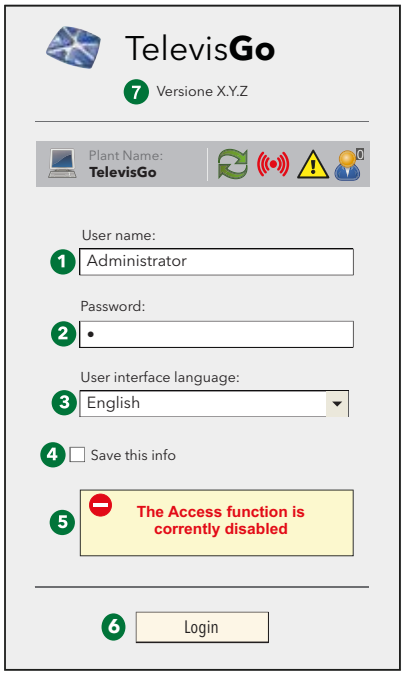
For more detailed information and special implementations, contact the Network Administrator.

Incorrect configuration of the network connection or router parameters may prevent connection to the Televis**Go** and the device network via the web interface.

NOTICE
INOPERABLE DEVICE Make sure the network connection and router are configured properly. **Failure to follow these instructions can result in equipment damage.**

5.2. LOGIN

The LOGIN page can be used to select the user interface display language (by default this is set to the same language as the browser).



There are a few icons concerning system status at the top of the window:

- = System name.
- = Recording status (started, stopped).
- = Alarm status (active, underway, inactive).
- = Indicates that a network scan is required.
- = Number of users connected to the Televis**Go**.
  A maximum of 3 different users can connect to the TelevisGo at the same time.

For further details regarding the icons, please refer to **“5.6. STATUS BAR” on page 36**.

A preset user profile is available, with the following credentials:

(1) User: **Administrator**

(2) Password: **0** (zero)

The following information is also present:

(3) User interface language.

(4) If the box is checked, the system will remember the user name and selected language (if the browser cache is cleared this setting will be lost)

(5) If the user inserts 3 times a wrong password, the following message will appear: “The access function is corrently disabled”:



The user is blocked for 10 minutes. At the end of this period will be possible to login again.

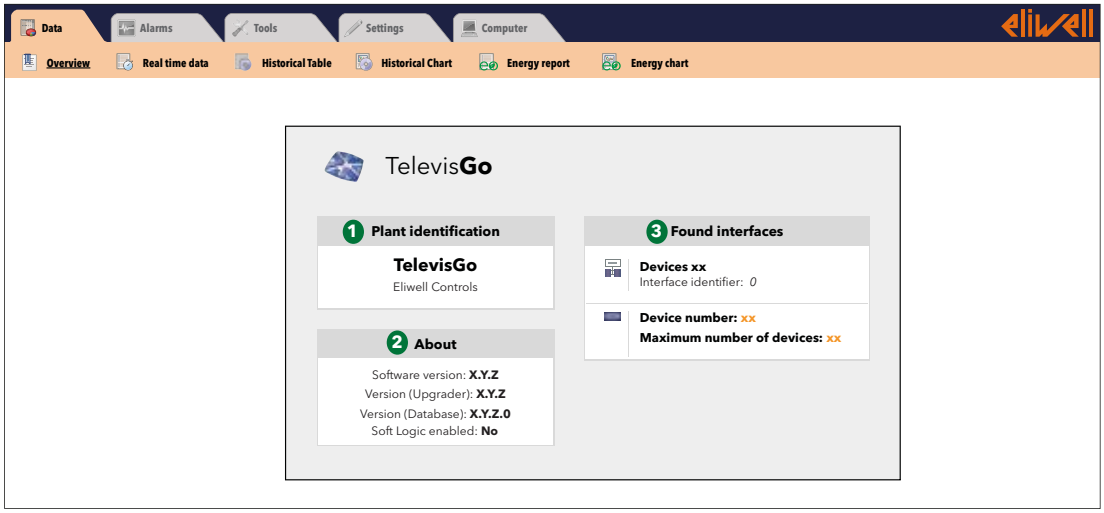
(6) Login. Click to access the software.

(7) Software version.

5.3. WELCOME PAGE

To view the welcome page, enter the following menu sequence:

Data → Overview



The welcome page shows information relating to the current status of the installation:

(1) Plant identification: system name.

(2) About: version of the applications installed on the TelevisGo.

(3) Found interfaces: number of devices detected for each interface.

5.4. PAGE STRUCTURE

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

- Navigation menu at the top.
- Work area in the middle.
- Status bar at the bottom.

5.5. NAVIGATION MENU

At the top of the page is the navigation menu, containing the hypertext links to the various sections of the application:

- Data
- Alarms
- Tools
- Settings
- Computer

Each menu has a series of commands located under the bar (sub-menu), for example: “Overview”, “Real time data”, “Historical Table”, ...).

Clicking on a menu changes the sub-menu contextually but not the current page view.Clicking on a sub-menu entry changes the page view.

5.6. STATUS BAR

The Status bar, which includes some important information regarding the status of the system, is always shown at the bottom of the page.
The Status bar contains text and icons representing the following elements:

- Plant name: system name. The associated icon can be one of the following:
  - = the Televis**Go** is working properly;
  - = the Televis**Go** needs to be restarted.
- Data Acquisition: Indicates the acquisition status of the TelevisGo (active / stopped).
- Alarm Status: The icon assumes the shape corresponding to the current alarm status, as described in the key to icons.
- Network recognition: If this icon appears, it means that a new network scan needs to be carried out, following an update of the system and drivers, for example.
- Offline configuration: Icon shown when the user has chosen to enter offline mode.
  The second line of the description identifies the specific configuration which the user is actually using.
- User (Group): indicates the name of the current user. The indication in brackets refers to the group to which the user belongs. The permissions depend on the group to which the user belongs; each user in a particular group will be assigned the same permissions.
- Start page: shortcut back to the preset page.
- Preset page: identifies that the current page is the preset option.
- Preset page settings: shown on pages that can be selected as preset:
  - Data → Overview
  - Data → Real time data
  - Alarms → Alarm status
  - Tools → Layout (all layout pages, including parametric)

  Clicking the icon causes the current page to become a preset page.
- Exit: terminates the current work session and returns to the login page.

5.7. STATUS ICONS

The user interface features icons that provide a clear and simple indication regarding the status of the system and the network of devices.

Acquisition status	
	Indicates that data acquisition by the Televis**Go** is active.
	Indicates that data acquisition by the Televis**Go** is inactive.
	Information regarding acquisition status is not available.
	In the windows - where present - a pop-up appears allowing you to start/stop acquisition.
Alarm status	
	Indicates that the alarm is active.
	Indicates that the alarm is active and that the user has seen it.
	Indicates that the alarm indication has stopped.
	Indicates that the alarm has never been active.
	Indicates that there is no information available regarding alarm status (check acquisition status).

Entity status	
	Compressor: On / Off.
	Defrost: Active / Not Active.
	Door: Open / Closed.
	Fans: On / Off.
Inputs and regulators	
	Analog entities.
	Digital entities.
	Machine statuses.
	Alarms.
NoLink	
	NoLink: Indicates that the supervisor is not able to contact the device being examined.
Acquisition cycle	
	Graphic representing acquisition cycle updating through the clockwise movement of the ball.
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.
Access to the application	
	Start page: shortcut back to the preset page.
	Preset page: identifies that the current page is the preset option.
	Preset page settings: shown on pages that can be selected as preset (Real time data, Alarm status or Layout). Clicking the icon causes the current page to become a preset page.
	Shown when the user has chosen to enter offline mode. The second line of the description identifies the specific configuration which the user is actually using.
	Exit: terminates the work session and returns to the login page.

5.8. BUTTONS AND SELECTORS

Access to administrative functions	
Edit	Shown inside the screen window for changing/stopping acquisitions. Required when you want to change administrative functions of the Televis**Go**.
Access to real time data	
Start	Shown inside the screen for starting/stopping acquisitions. Required when you want to view data in real time.
Data viewing pages	
Expand	Expands the view of all elements in a list.
Collapse	Collapses the view of all elements in a list.
Select all	Selects all elements in a list.
Deselect all	Deselects all elements in a list.
Print	Exports all the displayed data for printing. The application will save them in a **.pdf** file (this can be viewed using Acrobat Reader or a similar program) which can then be printed.
Confirm	Confirm the selected alarms. The confirmed alarms will change icon type (from red to yellow).
Historical Table	
Update data	Can be used to update data after one or more filters have been changed.
Data archive window	Shows/hides the window used to select the data displayed.
Template window	Shows/hides the window used to load, delete or create a new template.
Load selected template	Once a template has been selected, this command loads it onto the TelevisGo.
Delete selected template	Deletes the selected template.
Save current selection	Saves the selected template.
Time intervals window	Shows/hides the window used to set the time intervals.
Next interval	Displays the data belonging to the interval following the selected interval, which is the same length.
Previous interval	Displays the data belonging to the interval prior to the selected interval, which is the same length.
Resources window	Shows/hides the window used to select the resources to be utilized.
Select resources	Allows manual selection of the devices and resources to be displayed.
Legend window	Shows/hides the window containing the color legend (charts only).
Print/Export window	Shows/hides the window used to print / export the data displayed.
Print	Used to print all the elements displayed.
Export	Used to export all the elements displayed. The application will save them in a **.csv** file (this can be viewed in an electronic sheet, such as in Microsoft Excel), in a location on the Personal Computer selected by the user.
Information entry pages	
Add	Adds a new element (a network, a user, a scheduled action, a time interval, etc.)
Remove	Removes an element (a network, a user, a scheduled action, a time interval, etc.)
Edit	Changes an element (a network, a user, a scheduled action, a time interval, etc.)
Save	Saves the changes made to an element (a network, a user, a scheduled action, a time interval, etc.).

Save as...	Saves the new template created within the Televis**Go**.
Update	Updates the template selected within the Televis**Go**.
/ **Cancel**	Cancel and exit without saving the changes you have made.
Preview	View a new screen showing a preview of the devices on which the selected action will be carried out.
Close	Return to the previous screen.
Network configuration	
Export network configuration	Exports the network (with names, addresses, settings) and imports it to the same Televis**Go** (if used as a backup) or to a new network.
Export offline configuration	Exports Physical Networks (with names, addresses, settings, etc.) in Offline Network format and then imports it to the Offline Configuration section.
Add interface	Adds a new interface to the network.
Add device	Adds a new device to a specific interface.
Apply Configuration	Applies the configuration you have just created.
Go to the physical network	Allows you to return to the physical network at the end of the network scan created in “Offline mode”.
Commands & Parameters	
0.00:04 EWDR 985	Used to select one of the devices in the network, displaying the parameters and the RVD (Remote Virtual Device) (if the function applies to that specific device).
Copy from default	Copies the default values to the “Value input” column.
Copy from device	Copies the values read by the device to the “Value input” column.
Read	Allows you to read the value of the selected parameters from a device.
Write	Allows you to write the values entered in the “Value input” text boxes on the selected device.
Write on...	Allows you to write the values entered in the “Value input” text boxes on one or more selected devices.
View the last operation report	Displays the result of the last parameter writing procedure carried out on the devices in the network.
Save parameter map	Used to save the parameter map with the new input values.
Load parameter map	Loads a parameter map previously saved to disk and selected using the relevant check box.
Cancel filters	Removes all the filters applied, displaying all the elements.
Execute	Sends the selected command to the selected devices.
Apply command filter	Used to hide commands which are not applicable for the selected devices. If activated, the icon will appear.
Remove command filter	Removes the command filter applied previously.
Templates	
Manage templates	Opens a new screen used to create, edit or remove a template.
Export templates	Exports the selected templates.
Layout	
Read parameters	Forces reading of the parameters displayed.
Maximize	For full-screen view.
Restore	Restore normal display.
Rebuild all layouts	Updates the list of layouts loaded on the system update page.

CHAPTER 6
INSTALLATION AND MAINTENANCE

The installation of Televis**Go** requires some preliminary procedures to have been carried out, such as setting up the device and the network of devices to which it is connected.

NOTE: In some screens, to edit the content, click **Edit**.

If you change page without clicking **Save**, the changes you have made will be lost.

When it is plugged in, the Televis**Go** will not switch on immediately, instead performing a series of tests and loading the Software (this will take about 30 seconds).

Before scanning the network using the Televis**Go**, make sure each device has been assigned a unique address using parameters **FAA** and **dEA** (Micronet) or **Adr** (Modbus).

6.1. DEVICE SETTINGS

SETTING THE SYSTEM NAME

Go through the following menu sequence:

Computer → Information → General

The **Control bar**, depending on the procedure, displays a series of buttons.

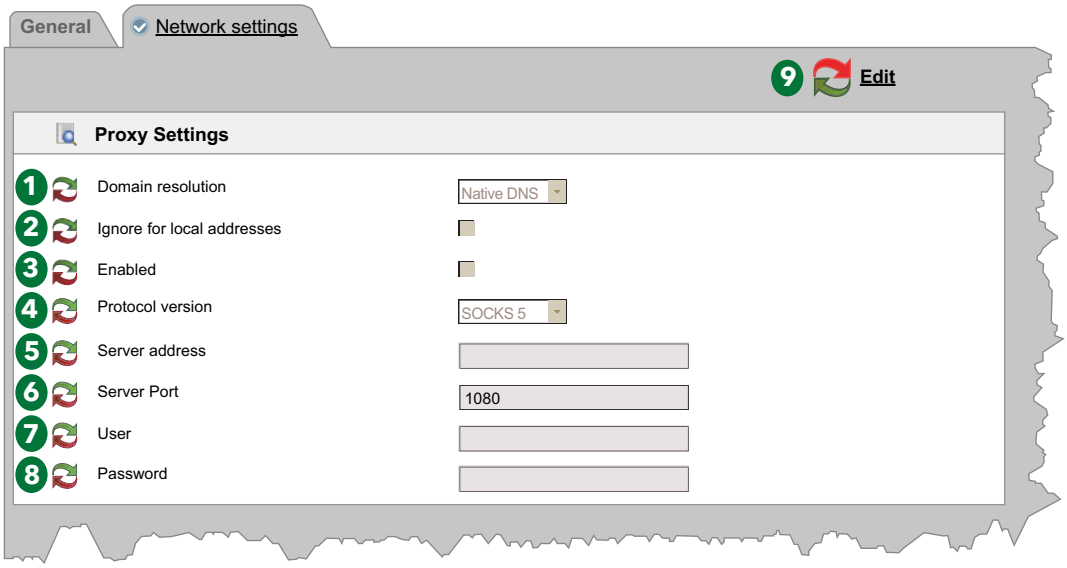
For information regarding the meaning, please refer to **“5.8. BUTTONS and SELECTORS” on page 38**.

SETTING NETWORK CONNECTIVITY

Go through the following menu sequence:

Computer → Information → Network settings

A screen like this will appear:



Contact the network administrator for network and proxy information.

The various screen components are:

(1) Domain resolution: Native DNS or Proxy.

(2) Ignore for local addresses: If selected, the Televis**Go** will not use the proxy server for the resolution of addresses within its sub-network.

(3) Enabled: if selected, the SOCKS server will request authentication.

(4) Protocol version: SOCKS 4, SOCKS 4a, SOCKS 5 or HTTP Proxy.

(5) Server address: IP address of the SOCKS server.

(6) Server Port: access port for the SOCKS server.

(7) User: user with which to implement authentication for the SOCKS server.

(8) Password: password with which to implement authentication for the SOCKS server.

(9) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

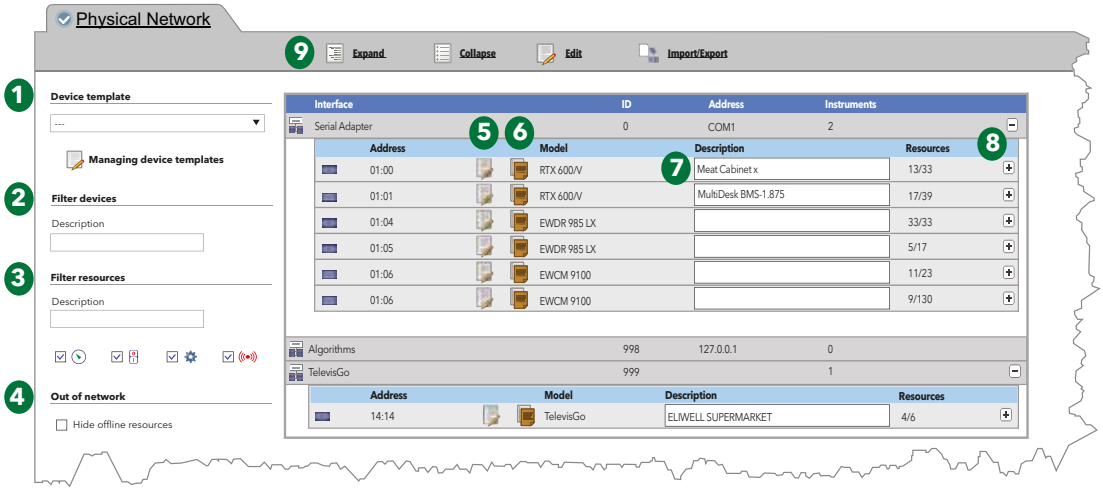
NOTE: after setting the proxy parameters, restart the system.

6.2. VIEWING THE PHYSICAL NETWORK

Go through the following menu sequence:

Settings → Interfaces → Physical network

A screen like this will appear:



The various screen components are:

(1) Device template: drop-down menu which can be used to associate a previously created template to one or more devices in the network.
The button **Managing device templates** opens a new window which can be used to manage the various templates (refer to **"6.2.1. MANAGING DEVICE TEMPLATES" on page 43**).

(2) Filter devices: filters the list of devices based on the text entered in the input box.

(3) Filter resources: filters the list of resources based on the text entered in the input box and on the type of resource by ticking the check box for that specific resource.

(4) Out of network: can be used to display/hide the resources which have not been selected.

(5) Edit: opens a new window used to edit the device information and, if necessary, create/edit templates (see **"6.2.2. TEMPLATE MANAGEMENT" on page 44**).

(6) Copy to: can be used to copy the settings of one device to one or more other similar devices. (see **"6.2.5. COPY TO..." on page 46**).

(7) Description: name assigned to the device by the user.

(8) Resources: used to expand/collapse the list of resources for a device.

(9) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

The interface view shows the following information:

- **Address**: device address.
- **Model**: type of device used.
- **Description**: name of the device.
- **Resources**: number of resources present in the device.

Once the list of resources has been expanded, the following information will be displayed:

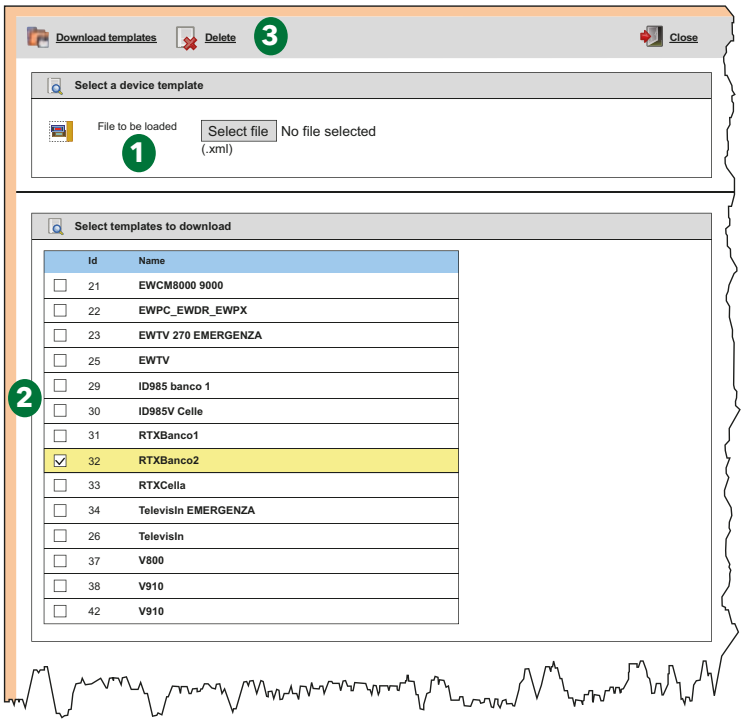
- **Description**: name of the resource; can be changed by the user.
- **Code**: code for the device resource (e.g.: ALM00300).
- **Chart**: color the resource will be when represented in chart form.
- **Delay (minutes)**: alarm activation delay in minutes.

All resources paired with each device are disabled by default.

6.2.1. MANAGING DEVICE TEMPLATES

Referring to **“6.2. VIEWING THE PHYSICAL NETWORK” on page 42**, click **Managing device templates** to manage the templates stored on the Televis**Go**.

A screen like this will appear:



The various screen components are:

(1) File to be loaded: click “Select file” to open the window in which you can select the file to be loaded, containing one or more templates created previously.

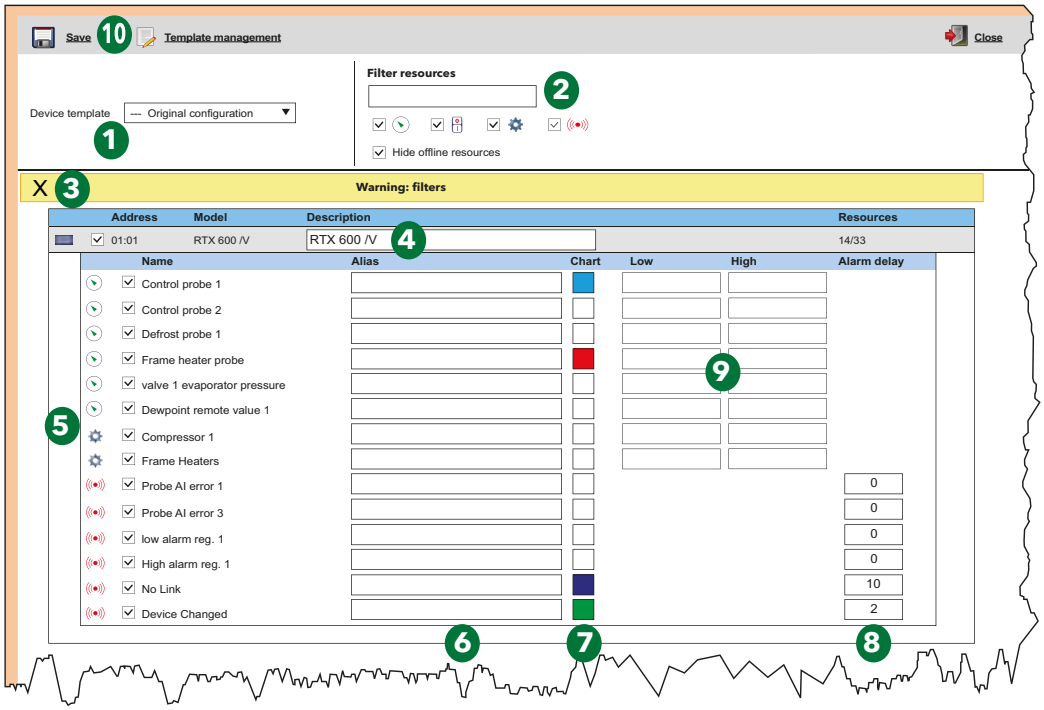
(2) List of templates: list of all the templates loaded on the Televis**Go**.
Tick the boxes to select one or more templates.
Depending on whether you want to export or delete them, press the relevant icon on the control bar.

(3) Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

6.2.2. TEMPLATE MANAGEMENT

Referring to **“6.2. VIEWING THE PHYSICAL NETWORK” on page 42**, click **Template management** to change the device information and if necessary create/edit the template for a specific family of devices (e.g.: RTX 600 /V).

A screen like this will appear:



The various screen components are:

(1) Device template: drop-down menu allowing you to load a previously created template onto the selected device.

(2) Filter resources: filters the list of resources based on the text entered in the input box and on the type of resource selected by ticking the corresponding check box.

(3) Yellow box: reminds the user that there are filters applied.

(4) Description: input box used to assign a customized name to the device.

(5) List of resources: list of all resources for the selected device.
Tick the selection check box for a resource to include or exclude it from the configuration.
2 alarm resources are created for each device or algorithm in the network:

- **No-Link**: if configured, this becomes active when there is no communication with the Televis**Go**
- **Device Changed**: if configured, this becomes active when the Televis**Go** sees the device is different from when the network scan was performed (e.g. one more probe or one less, etc.).

(6) Alias: input box used to assign a customized name to the resource.

(7) Chart: used to select the color the resource will be when represented in chart form. If the selection check box remains white, the resource will not be displayed in chart form.

(8) Delay (minutes): used to set a delay for each type of alarm indication.
If set to **0**, the alarm will be indicated immediately.

(9) Low/High: used to set minimum and maximum thresholds for the analog resources. If a value is entered in the box, when the changes are saved the corresponding high or low temperature alarm is generated. (see **“6.2.3. VIRTUAL ALARMS” on page 45**).

(10) Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

6.2.3. VIRTUAL ALARMS

Referring to **"6.2.2. TEMPLATE MANAGEMENT" on page 44**, if a value is entered in one or both "**low**" (minimum value) and "**high**" (maximum value) boxes corresponding to each analog resource and the value is confirmed with **Save**, the system will generate the corresponding "***virtual alarms***".

If, for example, you set:

Resource	Low	High
Analog input 1	(**A**) 30	(**B**) 60
Analog input 2	-	-
Dew point	-	(**C**) 45
Valve opening percentage	-	-

the following "***virtual alarms***" will be generated:

Resource	Effect
(**A**) Low alarm (Analog input 1)	Activated when the value of analog input 1 is < 30
(**B**) High alarm (Analog input 1)	Activated when the value of analog input 1 is > 60
(**C**) High alarm (Dew point)	Activated when the Dew point value is > 45

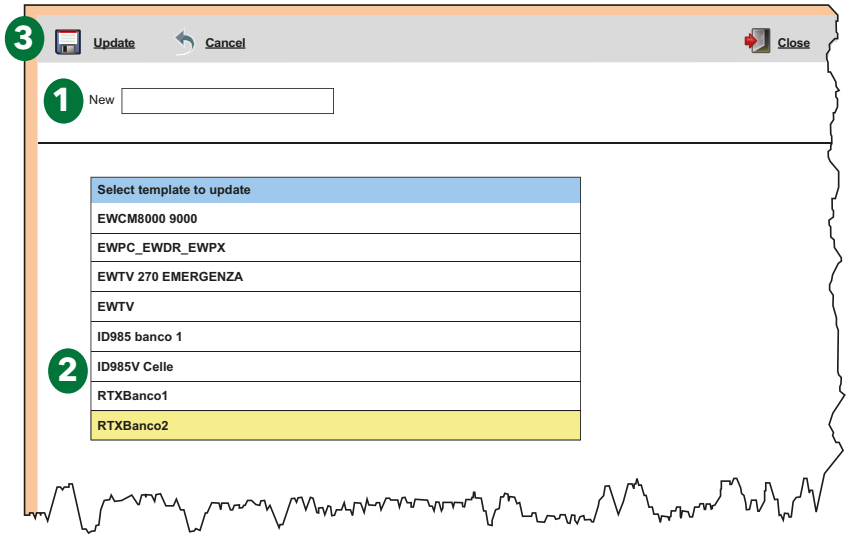
The new alarms will inherit all the properties of the alarms for the device to which they refer (option of making them offline, selecting presence/color on charts and any activation delays).

If, after a new network scan, the analog entity to which the "***virtual alarms***" refers is no longer present, the alarms will be removed.

6.2.4. CREATE/EDIT TEMPLATE

Referring to **"6.2.2. TEMPLATE MANAGEMENT" on page 44**, click **Create/edit template** to manage the templates stored on the Televis**Go**.

A screen like this will appear:



The various screen components are:

(1) New: used to create a new template.

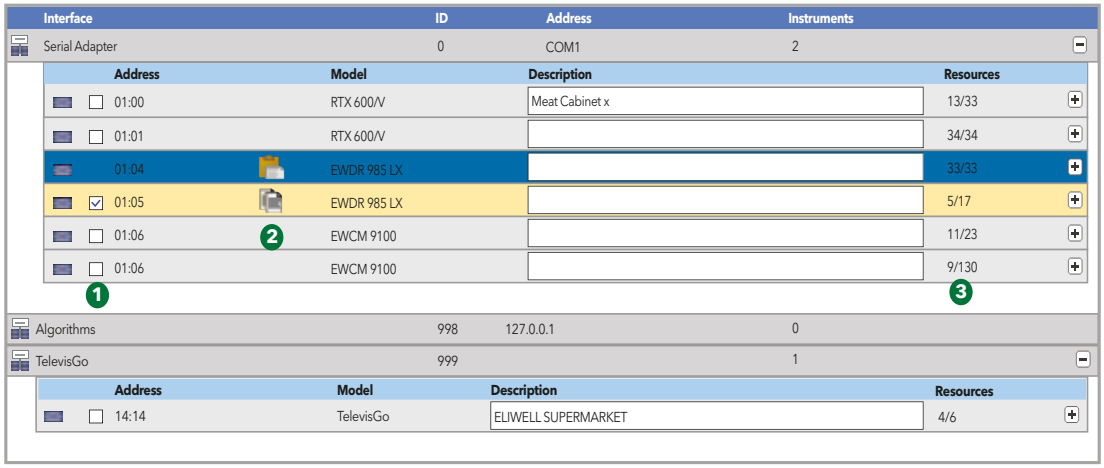
(2) List of templates: list of all the templates loaded on the Televis**Go**.
Click the name of a profile to select it (the row will turn yellow). Depending on whether you want to update, delete or go back, press the relevant icon on the control bar.

(3) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

6.2.5. COPY TO...

Referring to **"6.2. VIEWING THE PHYSICAL NETWORK" on page 42**, click **Copy to** to copy the settings of one device to other devices in the network.

A screen like this will appear:



The various screen components are:

(1) Check box: list of all devices in the Televis**Go** network.
Tick the check box for one or more devices; the selected row(s) will turn yellow. Confirm using **Update** and the selected template will be copied to the selected items.

(2) Selection icons: this column may contain the following icons:

Copy: identifies the selected template to be copied to other devices.

Paste: identifies the devices to which the selected template will be applied.

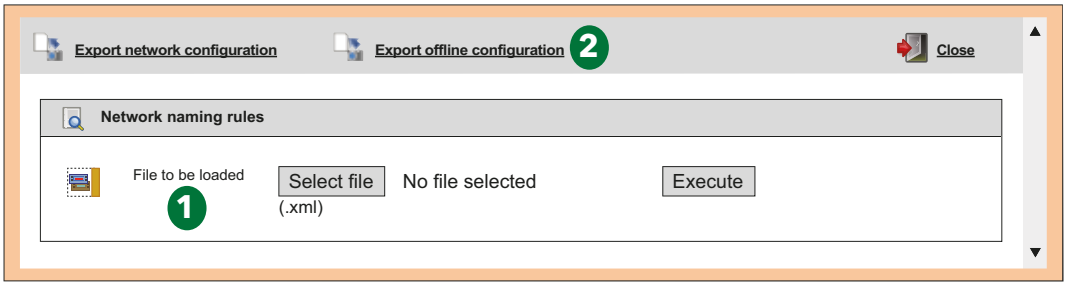
If a row does not contain an icon, it means the device has not been selected.

(3) Resources: identifies the number of resources selected from the total number of resources for the device.
For example, "**5/17**" in row 4 indicates that 5 resources have been selected out of the 17 available.
Once the selected template is applied, the information is updated to reflect the new situation.

6.2.6. IMPORT/EXPORT CONFIGURATION

Referring to **"6.2. VIEWING THE PHYSICAL NETWORK" on page 42**, click **Export network configuration** to import/export the network configuration.

A screen like this will appear:



The various screen components are:

(1) File to be loaded: click "**Select file**" to open the resource explorer window in which you can select the file to be loaded, containing the network configuration saved previously. Once it has been selected, click "**Execute**" to complete the import process.

(2) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38.**

6.3. SCANNING

6.3.1. INTERFACE DEFINITION

Go through the following menu sequence:

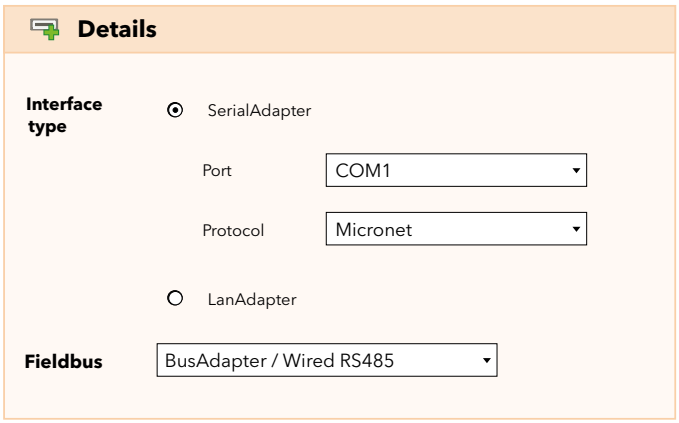
Settings → Interfaces → Discovery

On the new page that opens, click the icon **Manage interfaces**.
A screen will appear allowing you to enter/edit the interfaces.

To add a network, click the icon **Add**.
In the screen that appears, select the network interface type from:

1) **Serial**Adapter
2) **Lan**Adapter

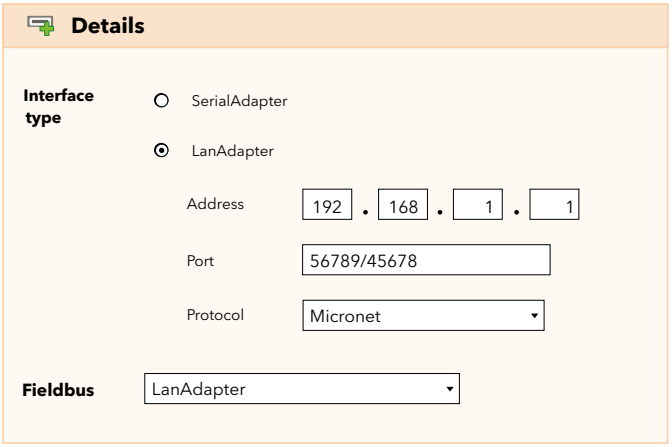
SerialAdapter



The information on the screen is:

- **Port**: physical communication port used on the Televis**Go** (e.g. COM1)
- **Protocol**: type of communication protocol
  1) **Micronet**
  2) **Micronet & Modbus with Smart Adapter**
     (Micronet with Modbus sub-network downstream of a SmartAdapter)
  3) **Micronet & Modbus** (Micronet & Modbus on the same network)
  4) **Modbus**
- **Fieldbus**: types of networks that can be selected:
  1) **Bus**Adapter **/ Wired RS485**
  2) **Radio**Adapter
  3) **Smart**Adapter
  4) **Lan**Adapter
  5) **Lan**Adapter Wifi
  6) **Lan**Adapter (**Radio**Adapter)

LanAdapter



The information on the screen is:

- **Address**: sets the IP address of the **Lan**Adapter
- **Port**: communication port (normally the factory setting)
- **Protocol**: type of communication protocol
  1) **Micronet**
  2) **Micronet & Modbus with Smart Adapter**
     (Micronet with Modbus sub-network downstream of a SmartAdapter)
  3) **Micronet & Modbus** (Micronet & Modbus on the same network)
  4) **Modbus**
- **Fieldbus**: types of networks that can be selected:
  1) **Bus**Adapter **/ Wired RS485**
  2) **Radio**Adapter
  3) **Smart**Adapter
  4) **Lan**Adapter
  5) **Lan**Adapter Wifi
  6) **Lan**Adapter (**Radio**Adapter)

In the case of **Lan**Adapters, we recommend always using the “Test connection” key to check communication between the Televis**Go** and the **Lan**Adapter interface device.

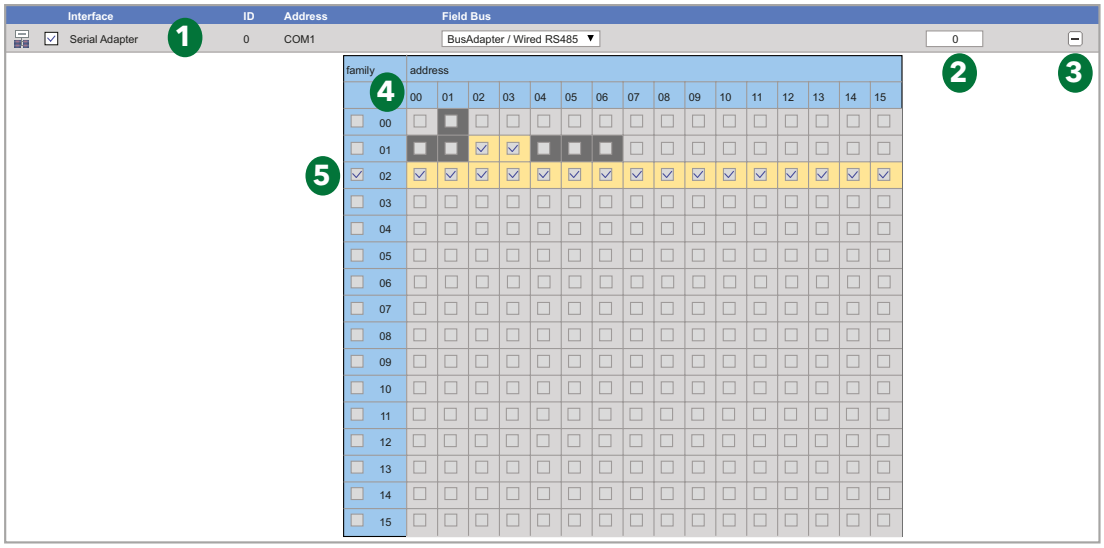
Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

6.3.2. SCANNING THE DEVICE NETWORK

Go through the following menu sequence:

Settings → Interfaces → Discovery

On the page that appears you will see the list of all previously defined interfaces (refer to **"6.3.1. INTERFACE DEFINITION" on page 47**) and the corresponding settings (name, ID, address...).



The address scan may change the network configuration.

> ***NOTICE***
>
> **INOPERABLE DEVICE**
>
> At the end of the procedure, make sure the network of devices connected to the TelevisGo is configured correctly.
>
> **Failure to follow these instructions can result in equipment damage.**

The various screen components are:

(1) Network analyzed: identifies the network analyzed and can be used to set the "Fieldbus" used to perform the scan. The drop-down menu can be used to select one of the following:

- **Bus**Adapter / Wired RS485
- **Radio**Adapter
- **Smart**Adapter

(2) Number of addresses: indicates the number of addresses selected for scanning

(3) The button allows the address matrix for a single network to be expanded/collapsed.

(4) Address matrix: used to select individual network addresses on which to perform the search for devices. The cell colors show:

- = that the address has been selected
- = there are already devices at this address in the physical network
- = in the physical network, this address is free, i.e. no device was detected during the previous network scan

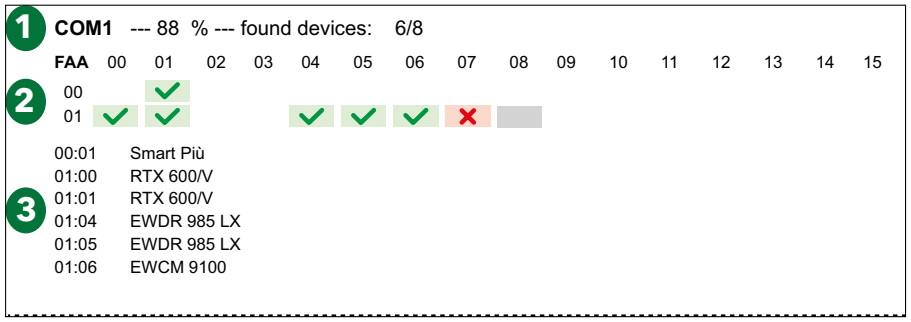
(5) Family addresses: tick the check box corresponding to the family on which you want to perform the scan; all corresponding addresses will be ticked automatically and the cells will be highlighted.

To start scanning the network click . The procedure may take a few minutes.

During the scan, a screen showing scan progress in real time will appear. Initially, all - and only - the boxes corresponding to the addresses selected will be shown in GRAY ( ) and as the scan progresses, for each address it will show whether a device has been found or not, and if so, which model.

If there are several networks, the information relating to all networks on which the scan will be shown on the same screen, along with the results obtained.

Below is an example of the screen:



The various screen components are:

(1) Network: shows the main information relating to the scanned network:

- The port to which the network is connected (COM1)
- The percentage of the scan which has been completed (88%)
- The number of devices found/searched for (6/8)

(2) Addresses: Shows the address matrix with only those to be scanned shown with a GRAY rectangle ( ), along with the result. Gradually, as an address is scanned, the rectangle display changes to reflect the following:

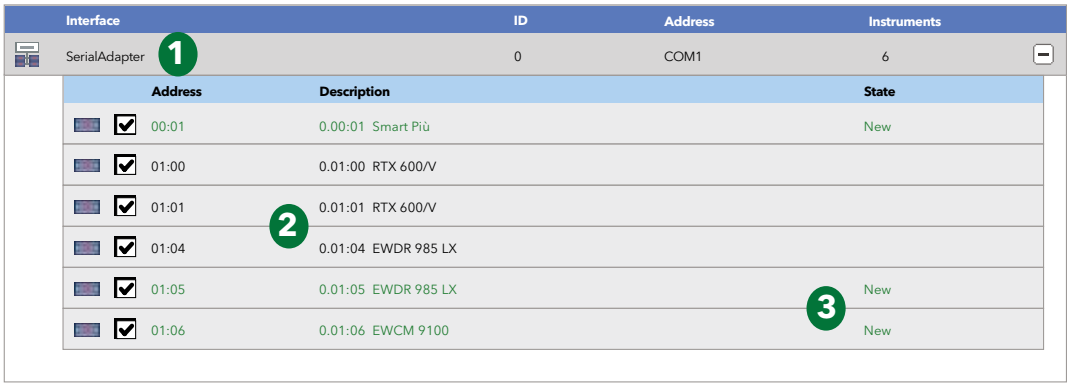
- = Address to be scanned
- = Address scanned and device found
- = Address scanned and no device found

(3) List of devices: shows, in real time, the list of devices found and their network address.

NOTE: If one or more devices in the network are not identified, make sure that:

- the device is properly connected to the network, or
- the device driver has been installed on the TelevisGo, or
- the device configuration is correct (modbus transmission speed, etc.)

Once the scan is complete, a screen like this will appear:



The various screen components are:

(1) Network: shows the main information relating to the scanned network.

(2) List of devices: shows the list of devices found and their network address.

(3) State: shows the Status of each device.

The color of the rows appearing has the following meaning:

- **GREEN**: new device found within the network
- **BLACK**: device which was already present within the network
- **GRAY**: device not detected, present in the old network but may not be present any more
- **RED**: device for which there is no driver within the Televis**Go**.

Once the procedure is complete, click **Save** to store the acquired data.
Once the network has been saved, the interface display page will be shown
(see **"6.2. VIEWING THE PHYSICAL NETWORK" on page 42**).

NOTE: Editing a driver on the Televis**Go**, replacing one or more devices and editing one or more resources for a device requires the network scan to be carried out again.
If the driver for your device is not found, contact Eliwell Technical Support.

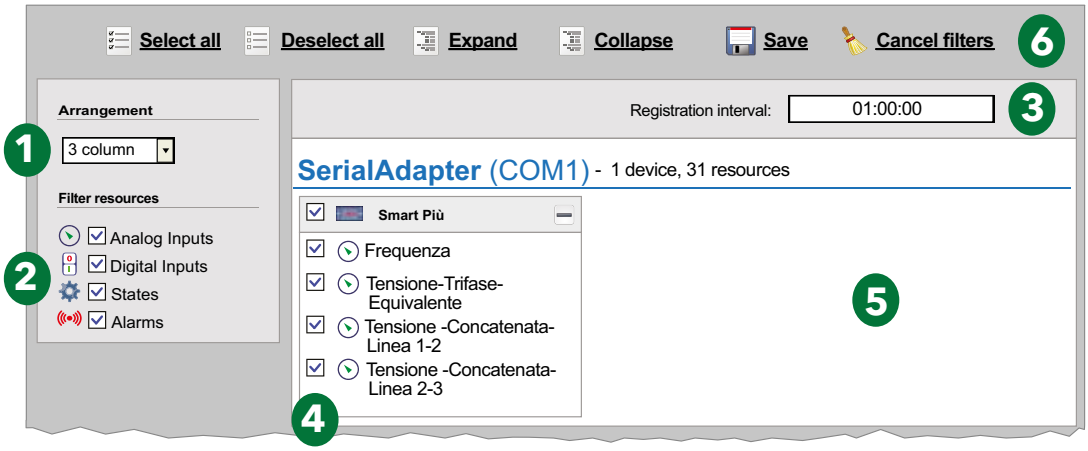
6.3.3. ENERGY RESOURCES SELECTION

The Televis**Go** allows some resources for some devices to be considered as energy resources, i.e. entities measuring the consumption of electricity in a system. Recordings of these entities will be saved in a dedicated database which is independent of the historic information database, and will have a recording interval independent of the historic information recording interval.

Go through the following menu sequence:

Settings → Interfaces → Energy resources

The following page will appear:

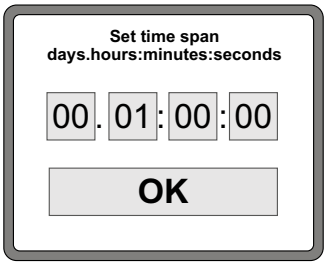


The various screen components are:

(1) Arrangement: used to select the number of columns used to arrange the devices with Energy Resources that can be selected (this can be set from 1 to 5).

(2) Filter resources: filters the resources for the devices based on the type of resource activated by ticking the check box relating to the specific resource.

(3) Registration interval: sets the recording interval for the energy resource data. To establish the interval, select the check box.
The following window opens:



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

(4) Resource selector: used to select the resources for which to collect data.
All resources can be selected by ticking the check box next to the device icon ( ). To select just a few resources, tick the check box next to the resource.

(5) List of devices: work area in which the devices in the various networks are listed, organized by columns.

(6) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

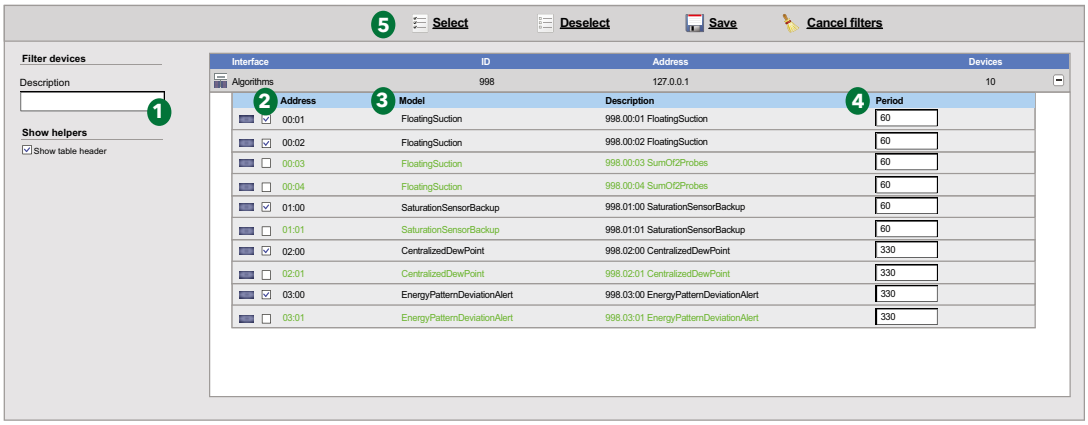
If no Modbus devices are detected, the page may not show any elements.

6.3.4. ALGORITHM SELECTION

Go through the following menu sequence:

Settings → Interfaces → Algorithms

The following page will appear:



This screen shows the list of algorithms previously loaded within the Televis**Go** (see **"12.1. SYSTEM UPDATING" on page 115**) and the corresponding settings.

The various screen components are:

(1) Description: used to filter by description.

The algorithm instances all implement the same logic, but are applied to different input/output data. The number of instances replicated is a preset parameter in the algorithm:

- The maximum number of algorithms managed simultaneously by TelevisGo is **16**
- The maximum number of instances managed simultaneously by TelevisGo is **16**
- The maximum number of instances for each algorithm is **10**

(2) Address: represents the address paired with each instance and is assigned automatically by the application.

(3) Model: the model of each algorithm is set during the programming phase.

(4) Period: represents the current cycle period for the instance. The period is expressed in seconds; it can assume a value between 60 (1 minute) and 86400 (1 day).

(5) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

The color of the rows appearing has the following meaning:

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

Select the instances you want to enable on the virtual interface by ticking the corresponding check box next to the address **(2)** and click the **Save** icon to store the algorithm instances configuration.

6.4. SYSTEM CONFIGURATION

6.4.1. SETTING THE RECORDING INTERVAL

SUMMARY:

Go through the following menu sequence:

Settings → Data archive → Summary

This screen summarizes all the settings corresponding to data archiving on the Televis**Go**.

The following settings are listed:

- Historic archive: Recording interval
  Percentage used
  Residual duration
  Oldest data.
- Temporary archive: Recording interval
  Interface
  Number of recordings
  Oldest data.
- Management: Maximum capacity
  Part of archive dedicated to circularity
  Most recent archive refresh date.

CONTROL:

Go through the following menu sequence:

Settings → Data archive → Control

This screen can be used to set a recording interval. The set time (between 1 minute and 2 hours inclusive) represents the storage interval (sampling) for the value of the selected resources.

Once you have accessed the screen, click "**Registration interval in the archive**", click the **Edit** icon, enter the numerical value (hours:minutes:seconds) and click the **Save** icon.

This interval does not apply to **Machine statuses**, **Alarms** and **Digital entities**.
In these cases, in fact, recording takes place when they vary and not based on an interval.

The date of the oldest data can also be set. If set, all data prior to the date entered will be deleted.
Once you have accessed the screen, click "**Oldest data**", click the **Edit** icon, enter the desired date and click the **Save** icon.

MANAGEMENT:

Go through the following menu sequence:

Settings → Data archive → Manage

This screen can be used to set the "Part of the archive dedicated to circularity (%CA)" (maximum 30%), which represents the maximum amount of mass memory used to save data.

Once you have accessed the screen, click "**Part of the archive dedicated to circularity (%CA)**", click the **Edit** icon, enter the numerical value (e.g. 10) and click the **Save** icon.

NOTE: Data archive management settings can only be changed by system administrators as it may affect system performance.

6.4.2. GENERAL SYSTEM SETTINGS

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

- Install the TelevisGo and SerialAdapter in an environment in which the EMC disturbance level is below the limits specified by standard EN61000-6-1 (residential, commercial and light industry environments).
- Configure the “LifeTest” function to make sure the TelevisGo is active. If regular emails are not received, something has caused the TelevisGo or email transmission service to malfunction.

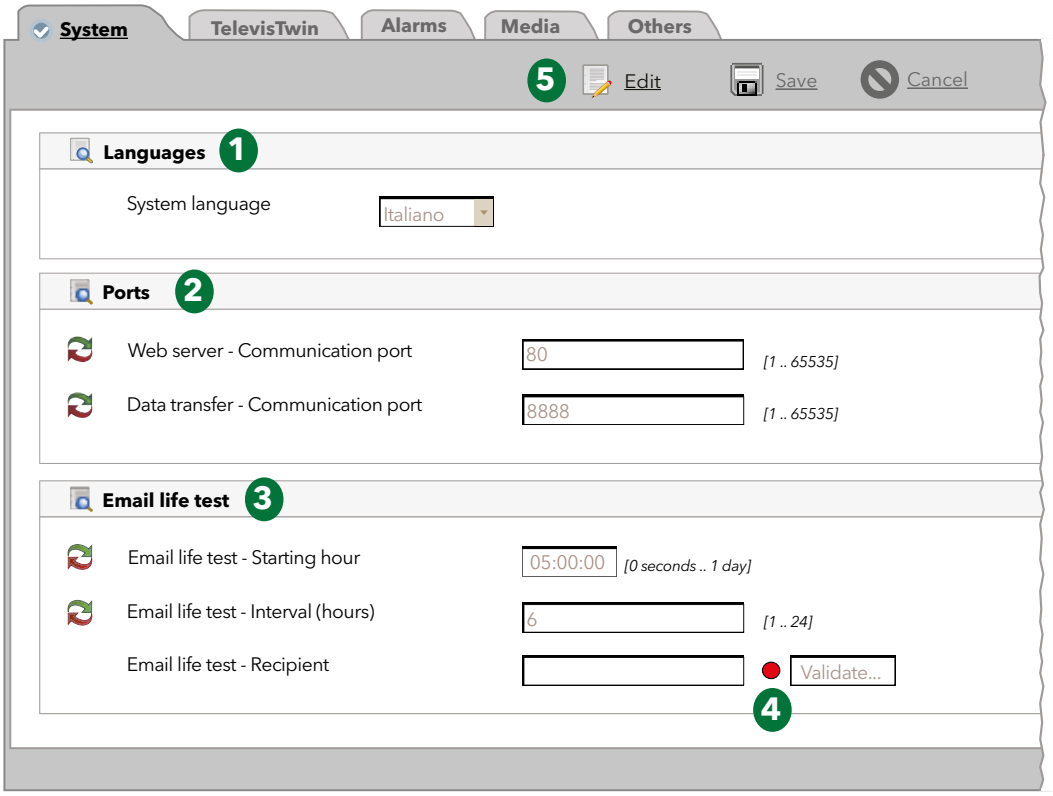
Failure to follow these instructions can result in death, serious injury, or equipment damage.

SYSTEM

This page can be used to set the system language, communication ports and the transmission times for system life test notifications. Go through the following menu sequence:

Settings → General settings → System

The screen below opens:



The various screen components are:

(1) Languages: used to set the language used to construct alarm messages and communications with systems outside the Televis**Go** (TWIN or Third-party systems).

The system language setting affects the information relating to regular exports (.csv and .pdf files).

(2) Ports: used to set the following ports:

- **Web server**: Identifies the port to be used for WEB connection (e.g. 80).
- **Data transfer**: Identifies the port to be used for Data downloading (e.g. 8888).

(3) Email life test: manages the information relating to email transmission:

- **Starting hour**: Identifies at what time the test will be executed (e.g. 05:00:00).
- **Interval (hours)**: Identifies the test execution interval, expressed in hours (e.g. 6).
- **Recipient**: Identifies the recipient(s) to whom the test will be sent.
  If there are several recipients, separate the various addresses with "**;**".

(4) Email validation: once the email addresses have been entered, the LED will turn **RED** to show that they have not been validated. Click "**Validate...**".
(**NOTE**: you will need to have configured a mail server in the section **... / General settings / Alarms**).
In the window that opens, enter the code received via email and the LED will turn **GREEN**.
If one of the transmissions fails, the LED will change color and turn **YELLOW**.

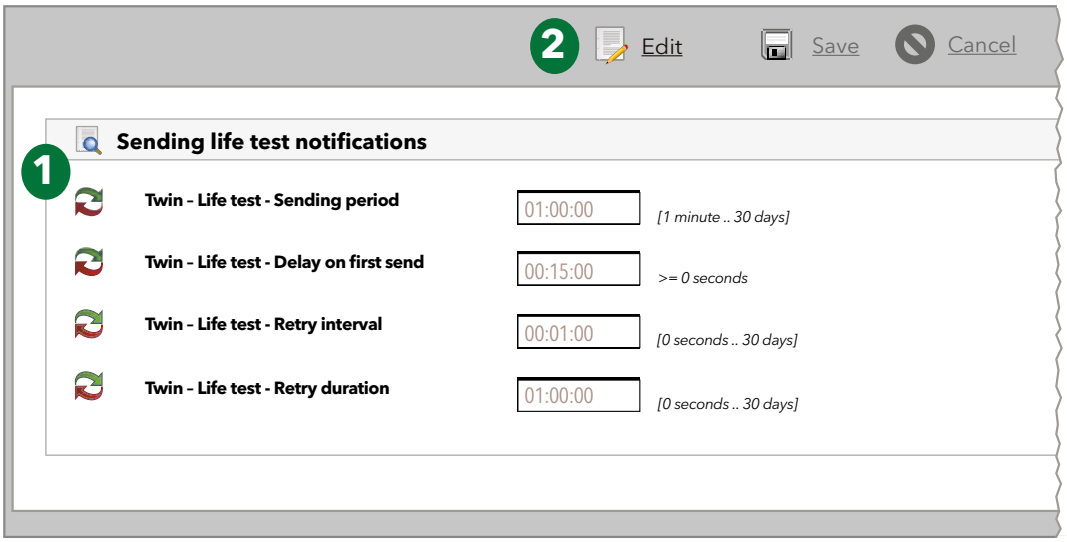
(5) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

TELEVISTWIN

Go through the following menu sequence:

Settings → General settings → TelevisTwin

The screen below opens:



The various screen components are:

(1) Sending life test notifications: manages information regarding Twin - Life test transmission:

- **Sending period**: Identify how often to perform the life test (for example, 01:00:00).
- **Delay on first send**: Identify how long to wait after powering on before sending a life report in hours (for example, 00:15:00).
- **Retry interval**: Identify the time interval between two consecutive attempts to send a life report (for example, 00:01:00).
- **Retry duration**: Identify the maximum time interval within which to attempt sending a life report (for example, 01:00:00).

(2) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

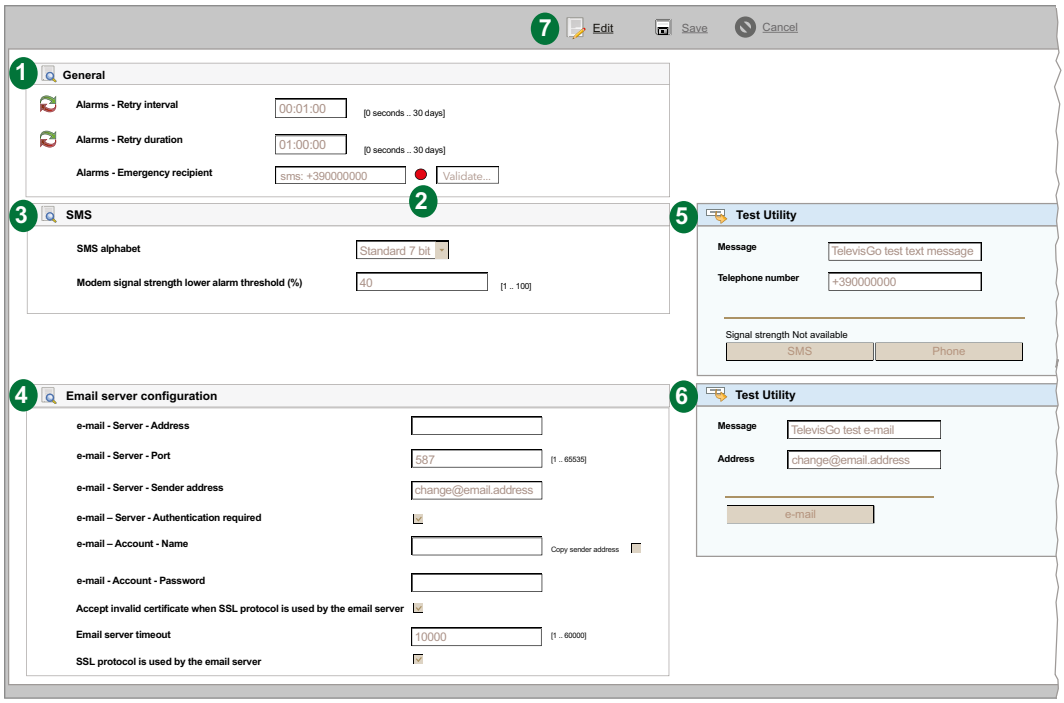
The life test will be sent to the TelevisTwin if at least one "TelevisTwin" type action is configured in the system (see **"ALARM MANAGEMENT" on page 78**).

ALARMS

Go through the following menu sequence:

Settings → General settings → Alarms

The screen below opens:



The various screen components are:

(1) General: used to set alarm transmission (see **"ALARM MANAGEMENT" on page 78**):

- **Retry interval**: Sets the interval between 2 consecutive alarm transmission attempts.
- **Retry duration**: Sets the maximum interval in which alarm transmission is attempted.
- **Emergency recipient**: Sets the telephone number and/or email to which an emergency message is sent if the Televis**Go** database is corrupted and therefore the recipients set by the user are not available. If you enter several recipients, separate them with ";".

NOTICE

INOPERABLE DEVICE

- Set the emergency recipient to receive any notifications regarding the malfunctioning of the TelevisGo database.
- Use a SIM Card with an unlimited usage plan to send SMS and/or email messages.

Failure to follow these instructions can result in equipment damage.

(2) Validation: 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 and the LED will turn **GREEN**.
If one of the transmissions fails, the LED will change color and turn **YELLOW**.

(3) SMS: used to set up the sending of information via SMS:

- **SMS alphabet**: Sets the type of alphabet to use 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 strength threshold (as a percentage) before activating the alarm indication for "Modem signal strength low".

(4) Email server configuration: used to set the mail server (**e-mail - Server**):

- **Address**: Sets the mail server address.
- **Port**: Sets the mail server connection port.
- **Sender address**: Sets the email address of the sender.
- **Authentication required**: tells the system whether authentication is required.
- **Name**: Sets the username (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**:
  Allows the use of invalid certificates when SSL protocol is active.
- **Email server timeout**: Sets the maximum interval for attempting communication with the server before entering error mode (timeout).
- **SSL protocol is used by the email server**:
  Sets whether the mail server uses SSL protocol.

(5) Test Utility: allows you to immediately check whether the settings entered are correct and working properly, by sending an SMS.

(6) Test Utility: allows you to immediately check whether the settings entered are correct and working properly, by sending an email.

(7) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

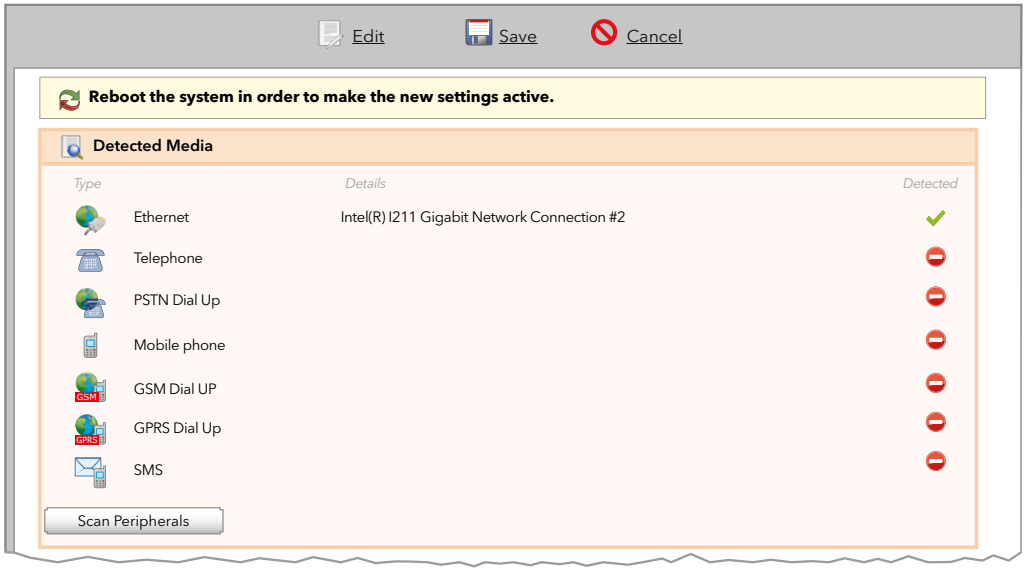
MEDIA

The Televis**Go** is capable of automatically detecting compatible connectivity devices connected to it (MEDIA such as, for example, a LAN or a GSM modem) and using them to send alarm notifications.

Go through the following menu sequence:

Settings → General settings → Media

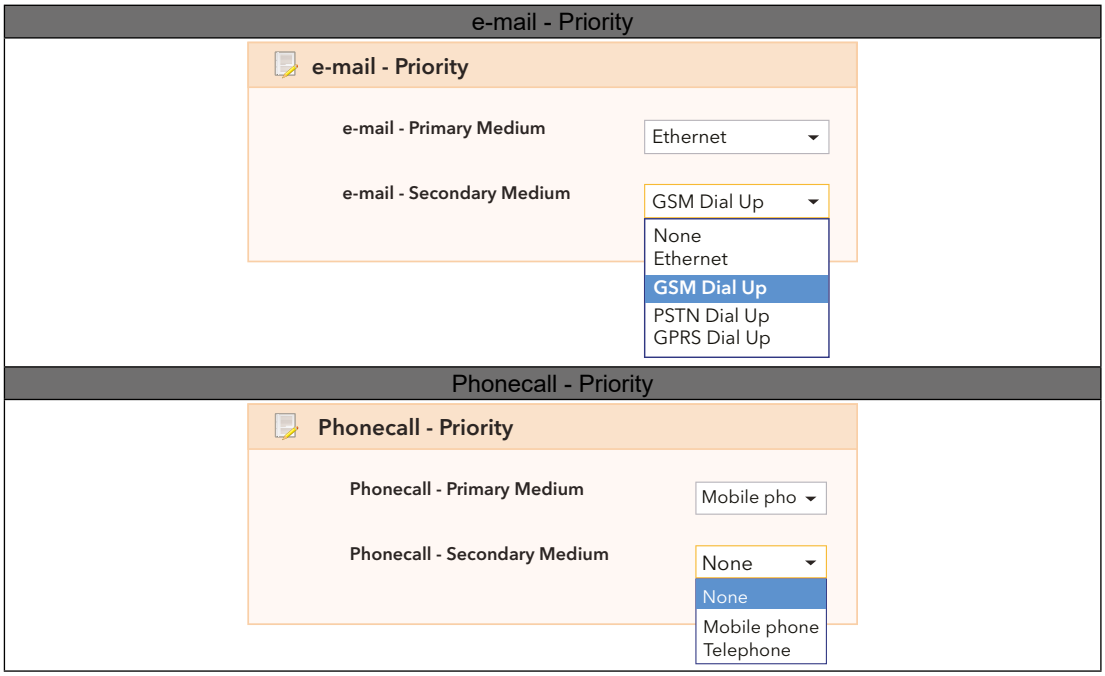
The screen below opens:



The Detected Media box lists the elements found, plus the corresponding connection **type**. The column **Detected** indicates whether the specified medium has been detected, while the column **Details** shows its description.

If you click on **Scan Peripherals**, the system starts automatically detecting the media elements connected to the Televis**Go**.

The Televis**Go** has a backup mechanism when sending alarm notifications. This page can be used to decide the order in which the system will use the various types of media to send notifications.



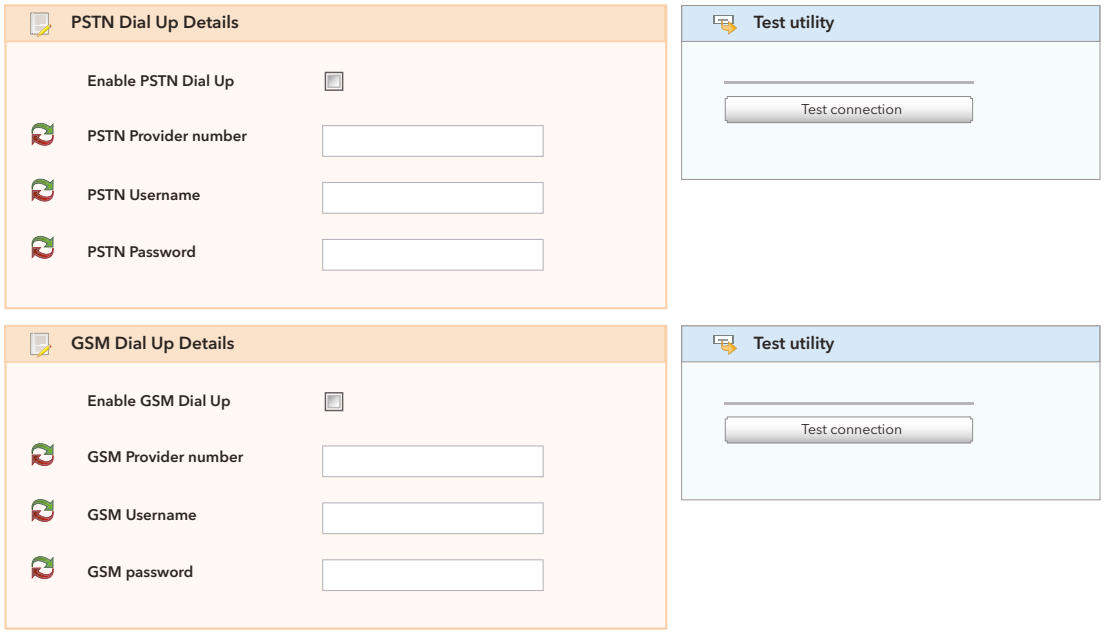
For example, in the e-mail Priority box you can select the primary medium for sending alarm notifications via email (Ethernet, in the example shown). If the Ethernet connection is not available, the Televis**Go** will attempt to send emails using the secondary medium (in this case a GSM modem).

Selecting the order of priority for alarm notification via phonecall takes place in the same way.

In both cases, the drop-down lists will allow you to select from all relevant media for that type of notification, even if the specific medium is not currently enabled.

The configuration of **PSTN**, **GSM** and **GPRS** type connections also takes place on this page.
Each of the three connection types can be activated via the corresponding drop-down list.
The PSTN and GSM type connections require the following information to be entered:

- Number of the phone line provider, including the national calling code (for example, **+39** for Italy)
- Username for the dial-up connection, and
- User password for the dial-up connection



A GPRS connection will also require the Access Point Name (APN) for the service (for example, internet.mnc012.mcc345.gprs).

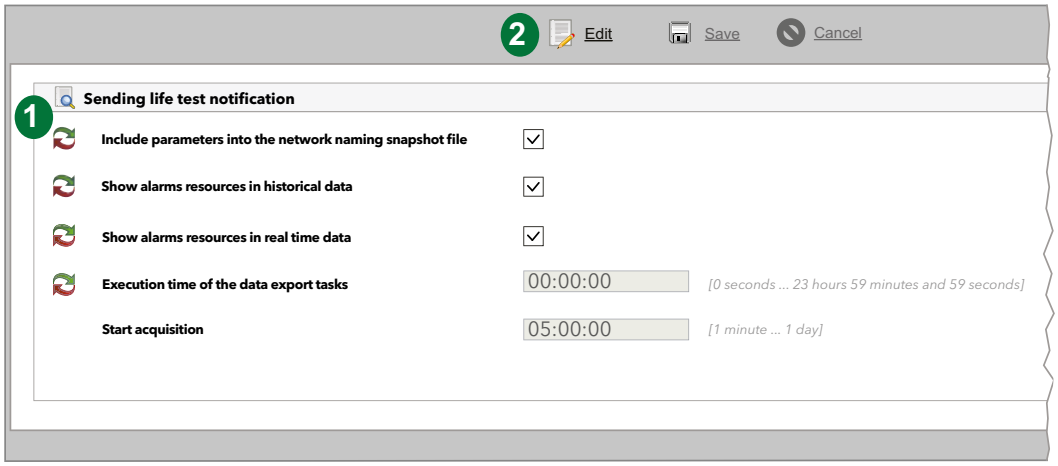


OTHER

Go through the following menu sequence:

Settings → General settings → Others

The screen below opens:



The various screen components are:

(1) Sending life test notification: Manages sending life test information:

- **Include parameters into the network naming snapshot file**:
- **Show alarms resources in historical data**:
- **Show alarms resources in real time data**:
- **Execution time of the data export tasks**:
- **Start acquisition**:
  Indicates the period of inactivity after which acquisitions will be restarted automatically.

(2) Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

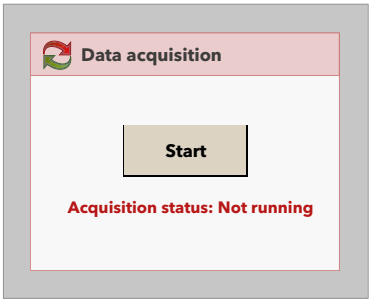
6.5. STARTING ACQUISITION

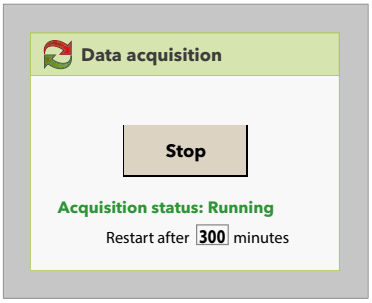
Go through the following menu sequence:

Tools → Start/Stop

Once you have accessed the menu, one of the following windows will appear:

- Acquisition not running: the window on the left will be displayed: click **Start** to run it.
- Acquisition running: the window on the right will be displayed: click **Stop** to stop it.





It is useful to set automatic acquisition restart, to prevent the user from inadvertently leaving data acquisition off following maintenance work.

The acquisition status can be checked via the status bar (see **"5.7. STATUS ICONS" on page 36**).

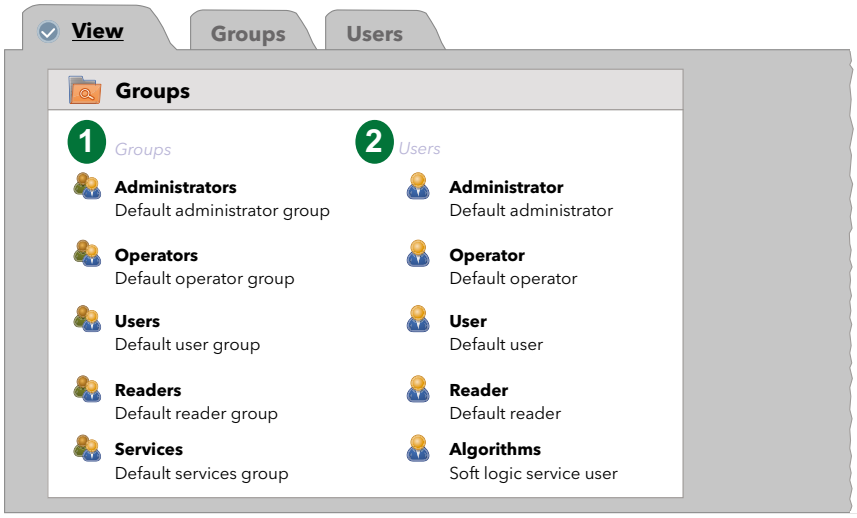
6.6. USER MANAGEMENT

6.6.1. VIEWING GROUPS OF USERS

Go through the following menu sequence:

Settings → Users → View

The screen below opens:



The various screen components are:

(1) Groups: list of all groups registered in the system.

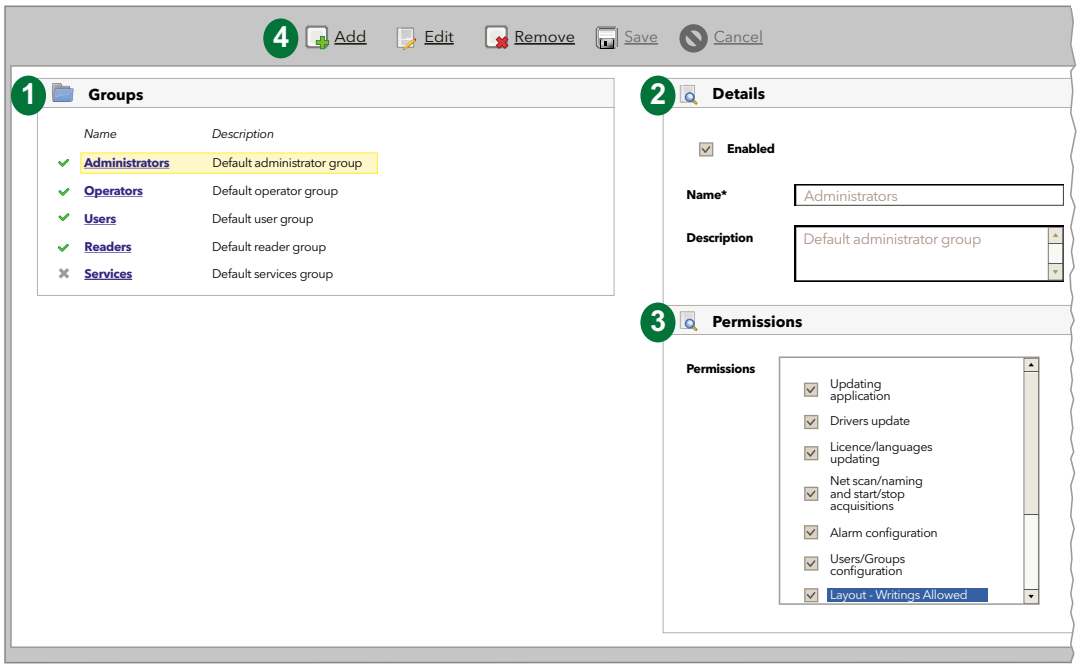
(2) Users: list of all users registered in the system, divided into groups.

6.6.2. GROUP MANAGEMENT

Go through the following menu sequence:

Settings → Users → Groups

The screen below opens:



The various screen components are:

(1) Groups: lists all groups registered in the system.

(2) Details: used to set the name and description of a group (only enabled after clicking the **Add** or **Edit** icon).

(3) Permissions: used to set the permissions associated with a specific group, enabling/disabling the option of updating/configuring one or more functions (only enabled after clicking the **Add** or **Edit** icon).

(4) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

To edit the Permissions for a Group, you must log in using the password for the Administrator or a user authorized for Users/Groups configuration.

The option "**Layout - Writings allowed**" is now amongst the Permissions that can be assigned to the groups. It works in the following way:

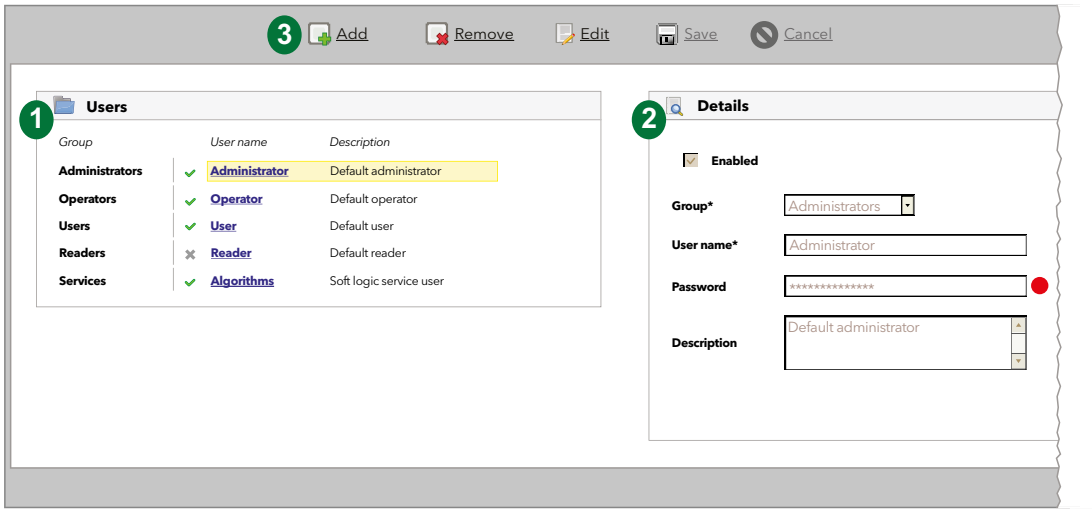
- If the check box is ticked, the users belonging to the group will have complete control over the layout pages (they will be able to change the values of the variables, execute commands, etc.).
- If the check box is not ticked, the users belonging to the group will be able to see the layout pages, but they will not be able to change the values of the variables, nor execute commands.

6.6.3. USER MANAGEMENT

Go through the following menu sequence:

Settings → Users → Users

The screen below opens:



The various screen components are:

(1) Users: lists all users registered in the system, divided into groups.

(2) Details: used to set the name, password and description for the user and the group to which he/she belongs.

The password must contain:

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

A ball is present to the left of the password box, which indicates :

- RED: indicates that the password is not satisfying the minimum requirements
- GREEN: indicates that the password is valid
- GRAY: indicates that the password has not been change

(3) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

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

6.7. SCHEDULED ACTIONS

The Televis**Go** is capable of automatically executing the actions configured by the user, according to a programmable time schedule.

There are three types of scheduled actions:

- Send a command to one or more devices
- Write parameters on one or more devices
- Export data

There are three programming options for a scheduled action:

- Periodically: the action is performed regularly, at the end of each time period as defined by the user.
- Every day: the action is performed every **n** days, on one or more occasions during the day.
- Every week: the action is performed every **n** weeks, on one or more occasions during the day.

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

The action is therefore performed in accordance with the programmed schedule. If the action is not completed successfully, the Televis**Go** will try to perform it again at intervals established by the user, for a maximum time period established by the user.
If the maximum time period is set to **0**, or if the time period is set to a value lower than the retry interval, no attempts will be made.

The scheduled actions act on a selection of devices in the current configuration and optimize activities.

If the user sets a lot of actions to be performed frequently, this may lead to delays in the transmission of indications and/or may cause malfunctions. Similarly, the generation of frequent exports may cause an excessive number of files to be produced; over time, this may slow the machine down or cause it to malfunction if they are not moved from the folder in the Televis**Go** to an external network folder.

NOTICE

INOPERABLE DEVICE

- Do not use the “Scheduled actions” tools to manage critical actions.
- Set up a network folder outside the TelevisGo if you anticipate the generation of many data exports.

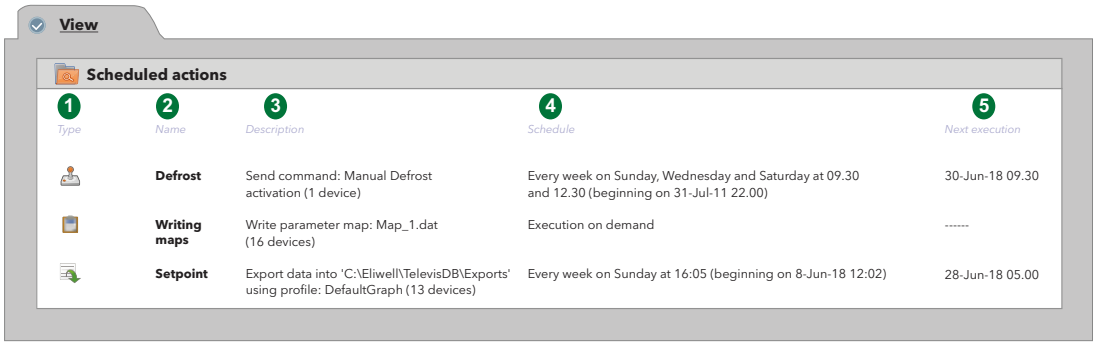
Failure to follow these instructions can result in equipment damage.

6.7.1. GENERAL VIEW

Go through the following menu sequence:

Settings → Scheduler → View

The screen below opens:



The various screen components are:

(1) Type: identifies the type of scheduled action:
- = Send a command
- = Write parameters
- = Export data

(2) Name: user-defined label.

(3) Description: defines the action to be performed; the number of devices on which the action will be carried out.

(4) Schedule: describes the regularity with which the action will be performed.

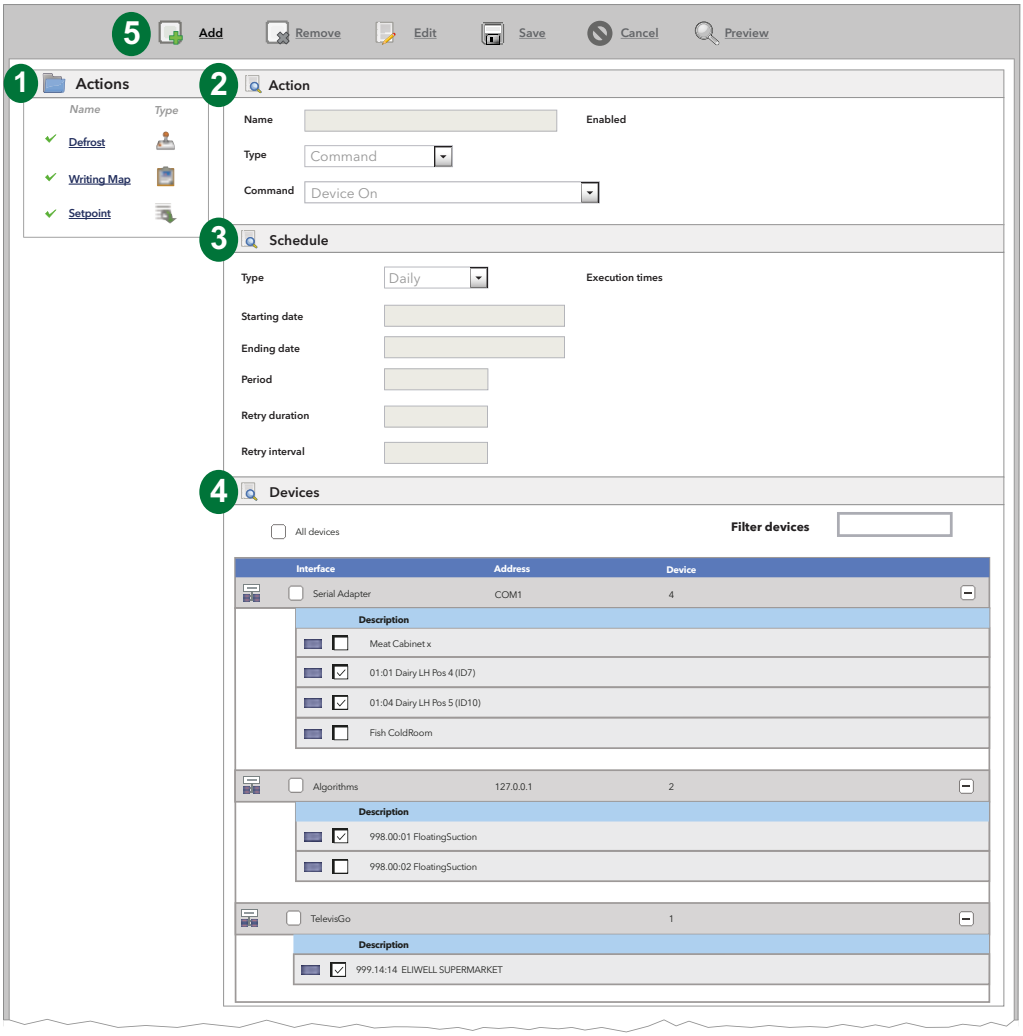
(5) Next execution: shows the next date/time at which the action will be performed.

6.7.2. SCHEDULED ACTION MANAGEMENT

To edit the scheduled actions, go through the following menu sequence:

Settings → Scheduler → Actions

The screen below opens:



The various screen components are:

(1) Actions: list of actions.

(2) Action: section for creating/editing an action.

(3) Schedule: section for setting when an action should be performed (period).

(4) Devices: section for choosing on which devices an action will be performed.

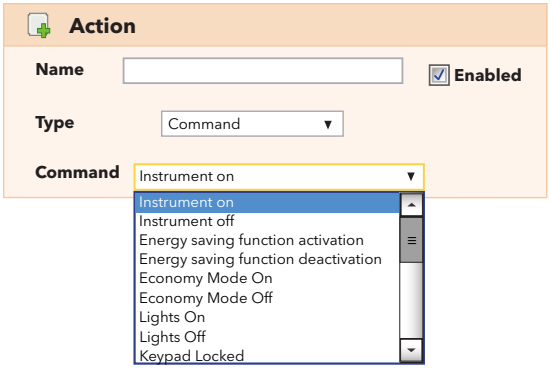
(5) Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

The right-hand part is divided into 3 sections:

ACTION

The **Action** section is used to define the **Type** of action to be performed.

Type of action: **Command**



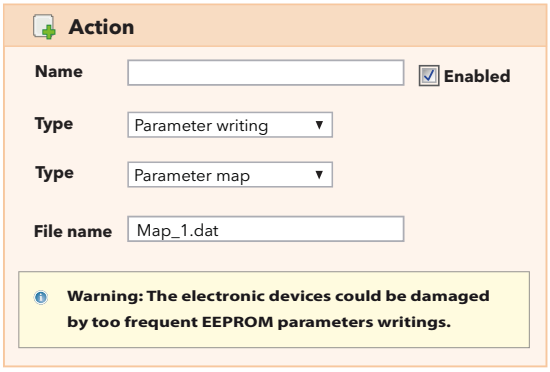
Used to set the type of **command** to perform on the devices selected using the filter.

The name of the action must be specified in the **Name** box.

The **Command** drop-down list shows all devices present in the network configuration.

To implement the action, click “**Enabled**”.

Type of action: **Parameter writing**



Used to set the name of the map file to be applied every time the **Parameter map writing** action is carried out.

The name of the action must be specified in the **Name** box.

The name of the file must be specified in the **File name** box.

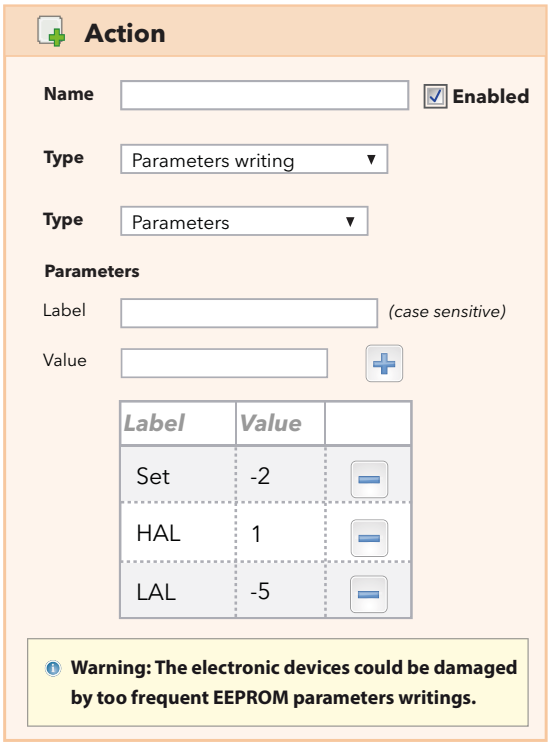
In order for the Televis**Go** to execute the procedure, the map file should be loaded from the system update page.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

Frequent writing of EEPROM parameters may damage 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 every time the **Individual parameters writing** action is executed. At least one parameter must be entered.

The name of the action must be specified in the **Name** box.

To enter a new parameter, enter the label in the **Label** box, the value in the **Value** box and then click .

The label/value pairing will be added to the list underneath.
If there is a ??? label, the Televis**Go** will remove it as soon as another pairing is entered.

If a pairing with the same label was already present, the Televis**Go** will overwrite the value entered previously.

To remove a label/value pairing from the list, click .

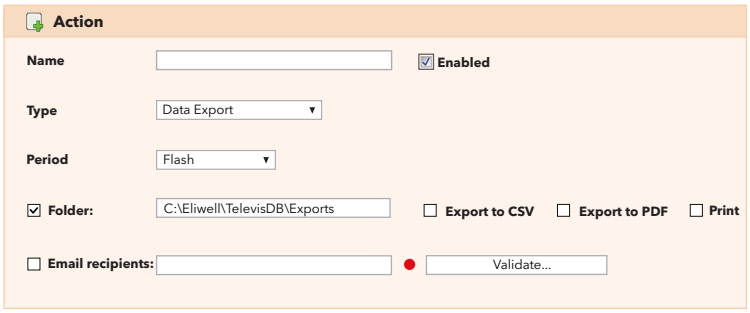
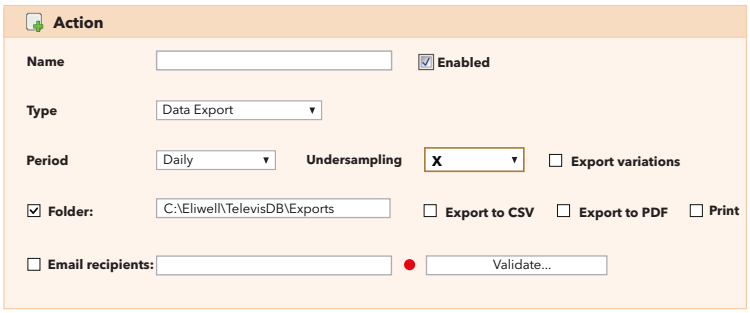
NOTE: When entering the label, Televis**Go** considers lower-case letters as different from upper-case letters.

⚠ WARNING

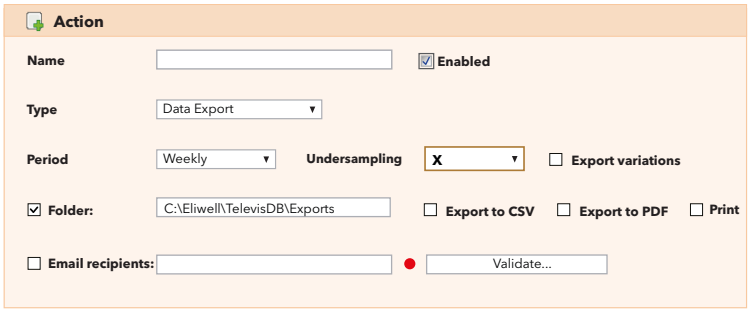
UNINTENDED EQUIPMENT OPERATION

Frequent writing of EEPROM parameters may damage system memory.

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

Type of action: **Data export**
Period: **Immediate -** Schedule: **Daily**  Used to export data for the previous day (from 00:00 to 24:00), selected via the filter, to a .csv file or a .pdf file and/or to print it. Enter the name of the action in the **Name** box. Used to set: • whether to save the file in a folder, specifying its directory and format (.csv, .pdf or both). • whether to print the data. • whether to send the file via email, by ticking the relevant box and entering the email address of the recipient[1].
Period: **Daily -** Schedule: **Daily**  Used to export data for the previous day (from 00:00 to 24:00), selected via the filter, to a .csv file or a .pdf file and/or to print it. Enter the name of the action in the **Name** box. If Undersampling is “**None**”, all the data for the previous day (from 00:00 to 24:00) will be exported. If the value **x** 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). If “Export variations” is selected, the events which have occurred at different times outside the schedule will also be exported. Used to set: • whether to save the file in a folder, specifying its directory and format (.csv, .pdf or both). • whether to print the data. • whether to send the file via email, by ticking the relevant box and entering the email address of the recipient[1].

Period: **Weekly -** Schedule: **Weekly**



The **Data export** action (Period: **Weekly**) is used to export data for the previous week (from 00:00 Monday to 24:00 the following Sunday), selected via the filter, to a .csv file or a .pdf file and/or to print it.

Enter the name of the action in the **Name** box.

If Undersampling is "**None**", all the data for the previous day (from 00:00 to 24:00) will be exported.
If the value **x** 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).

If "Export variations" is selected, the events which have occurred at different times outside the schedule will also be exported.

It allows you to decide:

- whether to save the file in a folder, specifying its directory and format (.csv, .pdf or both).
- whether to print the data.
- whether to send the file via email, by ticking the relevant box and entering the email address of the recipient[1].

(1) If you enter an email address, you will need to validate it using the relevant button.
If it is correct, the LED turns GREEN.

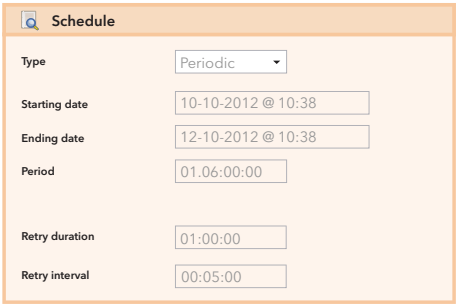
NOTE: • There may be multiple email recipients. Simply separate the addresses with ";"
• The template for the exported data can be created/edited using the "Historical Table" function.
• The default is "System_HACCP" which extracts the first probe and the first defrost status from each of the devices on the network.

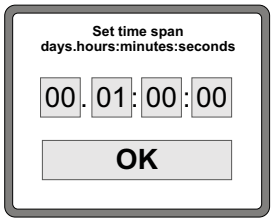
SCHEDULE

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

Schedule type: **Periodic**

Action executed every day and 6 hours (30 hours)





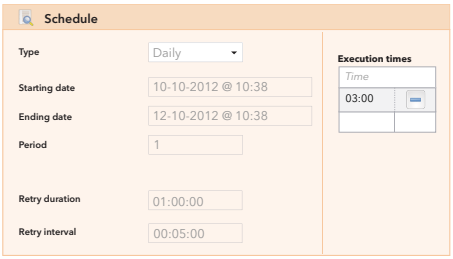
The **Periodic** schedule requires the user to define:

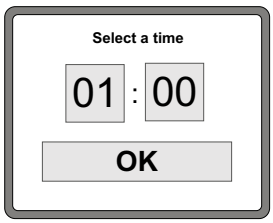
1. The **Starting date** (and time) for the schedule
2. The **Ending date** (and time) for the schedule
3. The schedule **Period** (enter days.hours:minutes:seconds).
   A window will open (see above right) in which to enter the period. Next, click OK
4. The maximum duration for attempts to execute the action again, if it had failed previously (**Retry duration**)
5. The time interval between retry attempts, if the action had failed previously (**Retry interval**)

The first execution of this type of schedule coincides with the time specified in the **Starting date** box.

Schedule type: **Daily**

Action executed every day at 3:00





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

1. The **Starting date** (and time) for the schedule
2. The **Ending date** (and time) for the schedule
3. How many days between each execution of the action
4. One or more **Execution times** for the day on which the action is to be performed.
   Click the box underneath the text “Time” to open a window (see above right) in which to enter the time. Next, click OK The time will be added to the list. Repeat the procedure to add new times
5. The **Retry duration**
6. The **Retry interval**

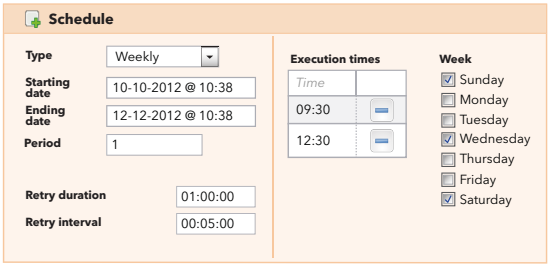
To define how many days between each execution of the action, enter the number in the **Period** box.

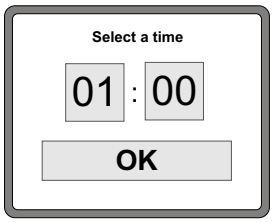
To remove a time entered on the list, click .

The first execution of this type of schedule will take place at the first available time following the date and time specified in the **Starting date** box.

Schedule type: **Weekly**

Action executed every week on Sunday, Wednesday and Saturday at 9:30 and 12:30





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

1. The **Starting date** (and time) for the schedule
2. The **Ending date** (and time) for the schedule
3. How many weeks between each execution of the action
4. On which days of the week the action is to be executed
5. One or more **Execution times** for the day on which the action is to be performed.
   Click the box underneath the text “Time” to open a window (see above right) in which to enter the time. Next, click OK The time will be added to the list. Repeat the procedure to add new times
6. The **Retry duration**
7. The **Retry interval**

To define how many weeks between each execution of the action, enter the number in the Period box.

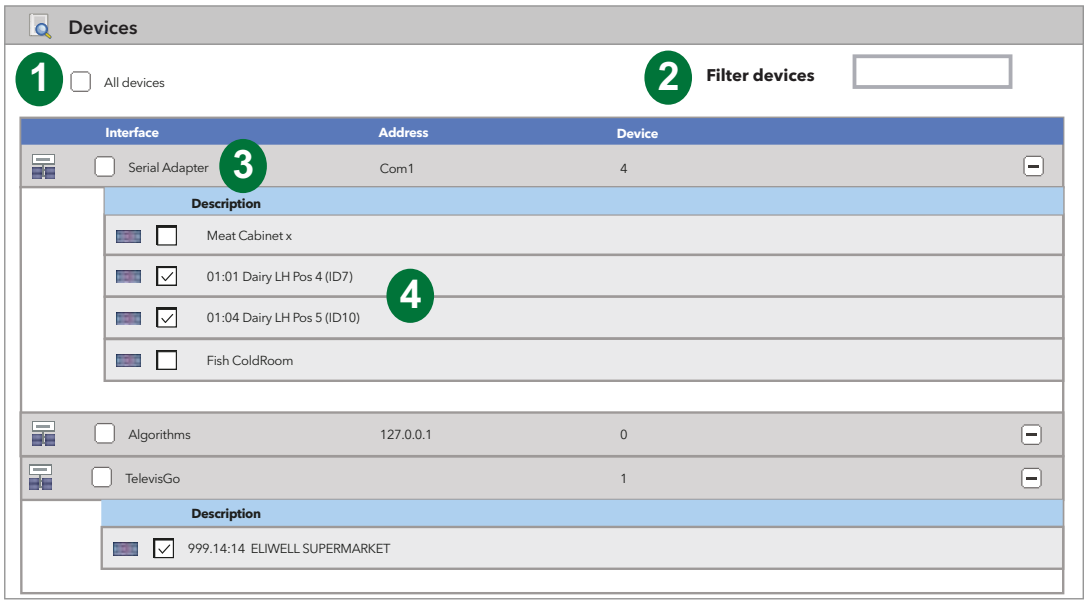
To define the days of the week on which to execute the action, select one or more days on the **Week** list. If the user does not select a day at all, when the information is saved the Televis**Go** will automatically select Sunday.

To remove a time entered on the list, click .

The first execution of this type of schedule will take place at the first available day/time following the date and time specified in the **Starting date** box.

DEVICES

The **Devices** section can be used to select the devices belonging to the network to which the action you are setting up applies.



The various screen components are:

(1) All devices: used to select all devices in the network.

(2) Filter devices: used to filter devices in the network by description.
The screen will only show the devices which satisfy the filter.

(3) Interface: used to select all the devices of the same interface by ticking the corresponding check box.

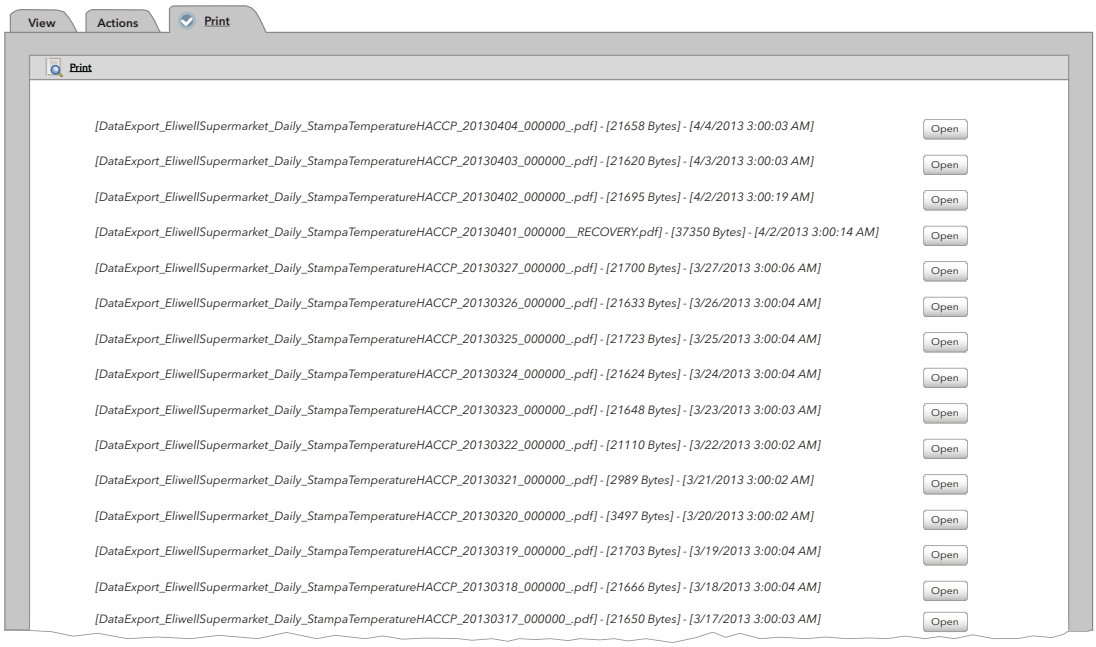
(4) Devices: used to select an individual device of an interface by ticking the corresponding check box.

6.7.3. PRINTING EXPORTED DATA

To view a list of **Data Export** procedures carried out, go through the following menu sequence:

Settings → Scheduler → Print

The screen below opens:



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

6.7.4. CUSTOMISING REPORTS

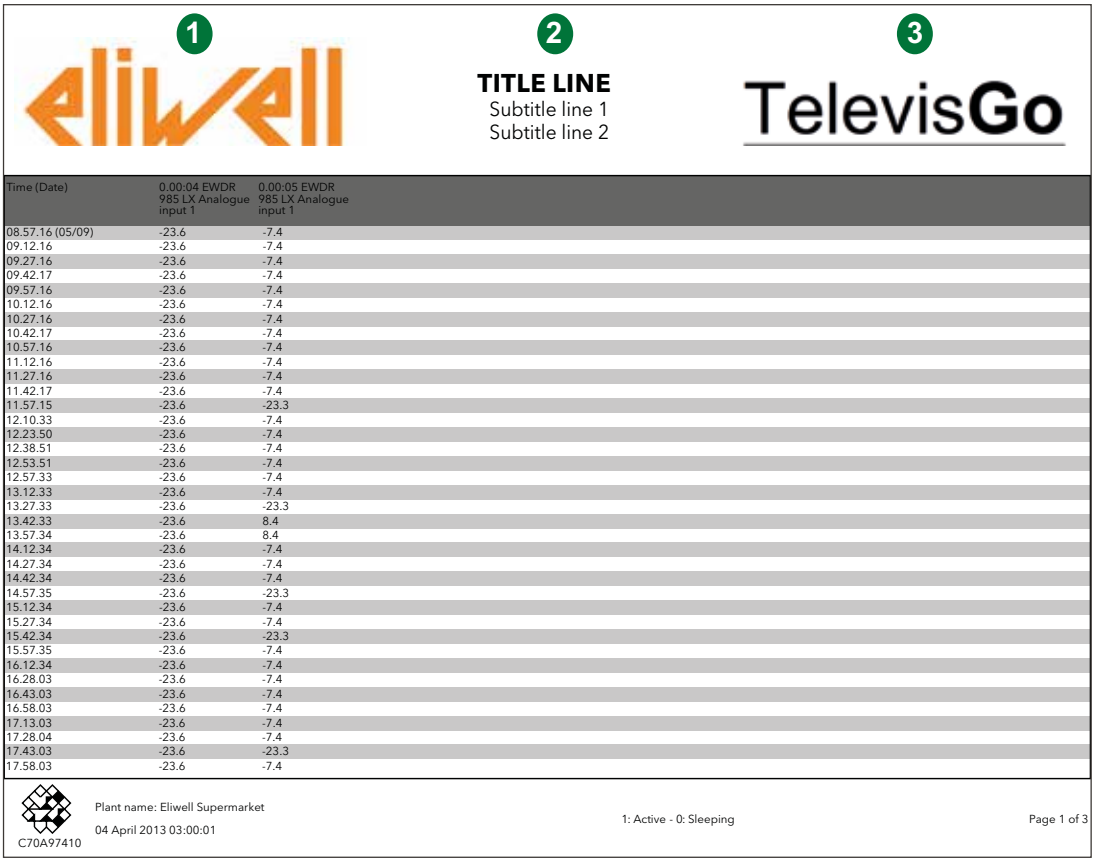
The reports do not carry a header, unless explicitly specified by the user.

The position of the report changes depending on whether the information being printed is real time data or historical data:

- **Real time data**: the report will be vertical
- **Historical data**: the report will be horizontal

The headers use the same graphics elements (logos, images, titles).

The following is an example of a historical report with a visible header:



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

To **customize** the report header, access the following folder on the Televis**Go**:

C:\Eliwell\Televis\CustomerReports

After editing/customizing one or more files on the list, you will need to **restart the service** to implement the changes.

The files inside the folder are as follows:

A) **head-first-page.html**: used to set the header for the first page of the report (**1**, **2** and **3**).
B) **head-page.html**: used to set the header for subsequent pages of the report (**1**, **2** and **3**).
C) **logo-left.png**: contains the logo which will appear on the left-hand side of the header (**1**).
D) **logo-right.png**: contains the logo which will appear on the right-hand side of the header (**3**).
E) **ReportTemplate.xml**: represents the report template and is used to set the height of the header for the first page and subsequent pages.

EDITING PNG FILES (files C & D)

First, replace the PNG files with the logos or the images you want to appear on the report header. The positioning will be as follows:

- **logo-left.png:** logo/image which will appear on the left-hand side of the header (**1**)
- **logo-right.png:** logo/image which will appear on the right-hand side of the header (**3**)

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

By default, HTML files require the images to have the following dimensions:

- on the first page they will be 200pt x 64pt
- on subsequent pages they will be 96pt x 46pt

If the images are sized differently, they will be resized to fit the preset dimensions.

Do not change the file name. Using different names requires editing of the code for the 2 HTML files containing the header characteristics.

EDITING HTML FILES (files A & B)

First, edit the 2 files by opening them with a text editor (e.g.: Notepad++).

The 2 files are as follows:

- **head-first-page.html:** sets the header for the first page of the report (**1**, **2** and **3**)
- **head-page.html:** sets the header for subsequent pages of the report (**1**, **2** and **3**)

The part of the code to customize is at the end of the file, as shown below:

```
...
<br  />
TITLE LINE
<br /></span>
<span class="sub-title">
Subtitle line 1
<br />
Subtitle line 2
</span></p></td>
<td class="img-cell"><img src="logo-right.png" alt="" /></td>
</tr></table>
</body>
</html>
```

The 3 parts in **RED** (**TITLE LINE**, **Subtitle line 1** and **Subtitle line 2**) will appear at the center of the report header (**B**) and should be tailored to your own requirements.

If you do not want one or more of the lines, replace the text with “blank space”.

Make sure the finalized file has a valid HTML format.

Do not change the name of the files as doing so may cause malfunctioning when generating reports.

EDITING XML FILES (file E)

First, edit the file by opening it with a text editor (e.g.: Notepad++). There are 2 parts of code which should be customized, one for the real time data report and one for the historical data report.

1) Historical data

You will need to edit line 4 (see below).

```
<historical gap="5" margin="20">
<customHeader firstPage="head-first-page.html" firstPageHeight="100" otherPages=
  "head-page.html" otherPagesHeight="100" />
<customValues>
```

The two values to be set are those shown in **RED** and **GREEN**, representing:

- Value in **RED**: represents the height of the header on the first page of the report.
- Value in **GREEN**: represents the height of the header on subsequent pages of the report.

By default the 2 values are set to "**0**"

We recommend not enlarging images too much, to avoid generating an excessive number of pages.

2) Real Time data

You will need to edit line 28 (see below).

```
<realTime gap="5" margin="20" orientation="portrait">
<customHeader firstPage="head-first-page.html" firstPageHeight="100" otherPages=
  "head-page.html" otherPagesHeight="100" />
<customValues>
```

The two values to be set are those shown in **RED** and **GREEN**, representing:

- Value in **RED**: represents the height of the header on the first page of the report.
- Value in **GREEN**: represents the height of the header on subsequent pages of the report.

By default the 2 values are set to "**0**"

We recommend not enlarging images too much, to avoid generating an excessive number of pages.

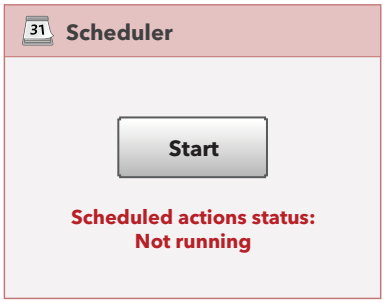
6.8. STARTING SCHEDULED ACTIONS

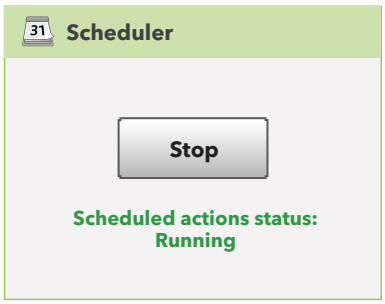
Go through the following menu sequence:

Tools → Start/Stop

Once you have accessed the menu, depending on whether the actions have been started or not, one of the following windows will appear:

- Scheduled actions not running: the left-hand window will appear.
  Click **Start** to start the scheduled actions.
- Scheduled actions running: the right-hand window will appear.
  Click **Stop** to stop the scheduled actions.





CHAPTER 7
ALARM MANAGEMENT

7.1. INTRODUCTION

The Televis**Go** can display and log alarm indications for the devices connected to the network (e.g. Temperature alarm) and send them to one or more recipients.

When an alarm is detected, the ((•)) icon appears in the status bar (if it was not already displayed due to a previous alarm). The **alarm log** shows alarms based on the time interval selected by the user.
Alarms are recorded as soon as an alarm condition is diagnosed.

NOTE: Start data acquisition to enable alarm management.

To check the devices in the network, you will need to set and enable the 2 virtual alarms the system enters between the resources for all devices and the algorithms, i.e. “No-link” and “Device Changed”.

NOTICE

INOPERABLE DEVICE

Set and enable the “No-Link” and “Device Changed” alarms for the various devices to receive notifications when there is no communication or in the event of faulty operation linked to incorrect recognition of the device resources.

Failure to follow these instructions can result in equipment damage.

7.2. ALARM MANAGEMENT RULES

In the event of an **Alarm**, the system will check whether it is managed, on which device it occurred, if it belongs to a valid Category and whether it was activated during a valid interval. If all the conditions are verified, the Actions set in the Alarm Categories level-based system will be carried out.

The Televis**Go** sends alarm notifications to all properly configured and enabled recipients.
Alarm management is controlled by the alarm categories, which pair device alarms to a series of actions within specific time intervals.

The methods used by the Televis**Go** to send alarms are guided by the concepts of “Level” and “Escalate”:

Level	Expected behavior
Level 4	The software checks the alarm categories beginning with this level, and transmits notifications for all those which satisfy the criteria.
Level 4 – Escalate (*)	If at least one of the alarm categories in the previous point is marked as “Escalate”, the software continues checking at the next level.
Level 3 (**)	The software checks all alarm categories to which this level is assigned in two situations: I) If **no** Level 4 category has managed the alarm II) If it has been managed by **at least one** Level 4 category which stipulates “Escalate”.
Level 3 – Escalate	**(*)** As for point **Level 4 – Escalate**.
Level 2	**(**)** As for **Level 3**.
Level 2 – Escalate	**(*)** As for point **Level 4 – Escalate**.
Level 1	**(**)** As for **Level 3**.

7.3. DELAY TIME

All alarms are registered when variation occurs, but some alarms may not be sent to recipients if a delay time has been set and the alarm does not persist for longer than the set time period.

The delay time can be set in the template configuration panel for the devices in the network (see **“6.2.2. TEMPLATE MANAGEMENT” on page 44**).

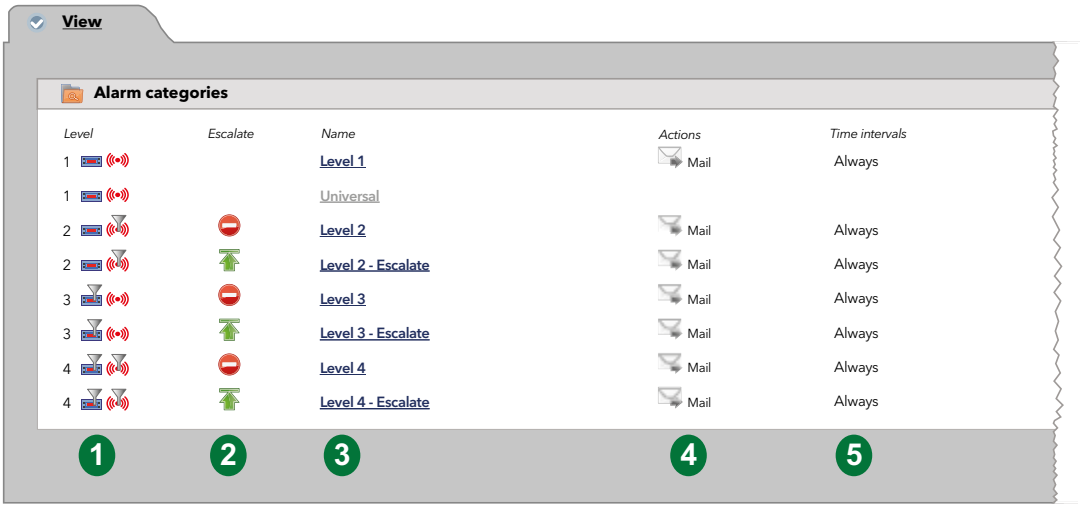
7.4. ALARM CONFIGURATION

7.4.1. GENERAL VIEW

Go through the following menu sequence:

Settings → Alarms → View

The screen below opens:



The various screen components are:

(1) Level: identifies the level assigned to the alarm category. (see **“7.2. ALARM MANAGEMENT RULES” on page 78**)

(2) Escalate: enable checking for next levels (or not):

- = Escalate to next levels enabled
- = Escalate to next levels disabled.

(3) Name: display the name assigned to the Alarm Category.

(4) Actions: lists the notifications enabled for the Alarm Category.

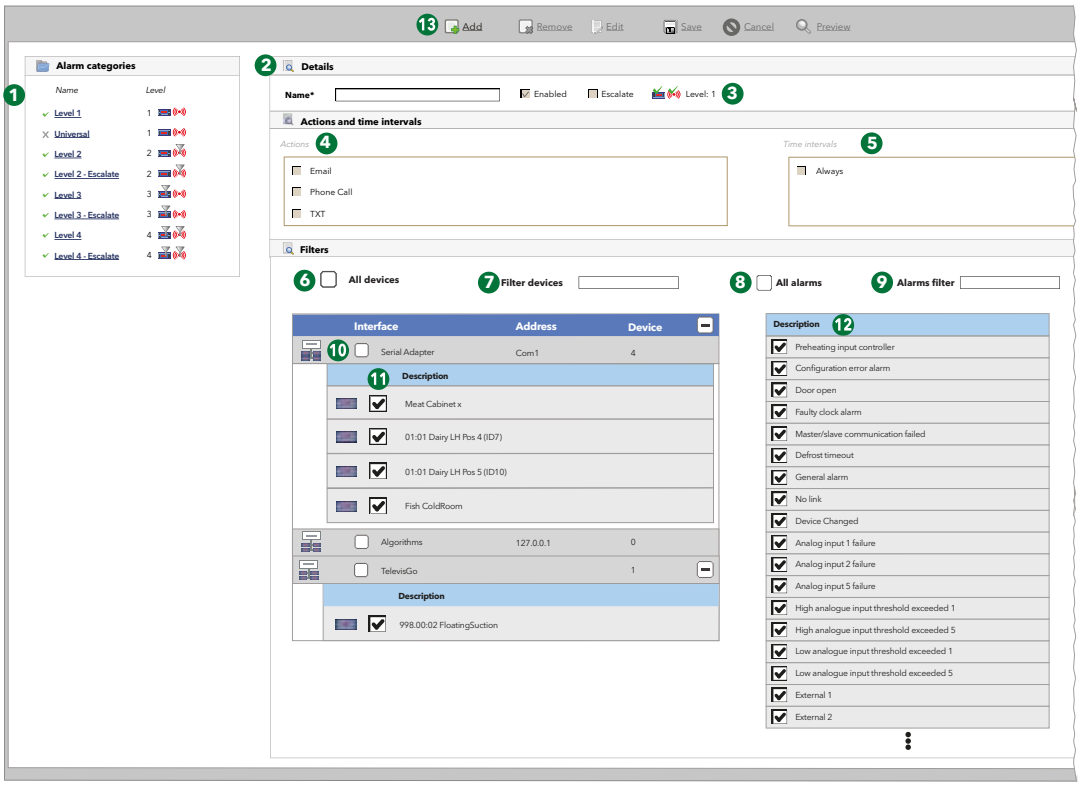
(5) Time intervals: lists the time intervals in which the alarm category is active.

7.4.2. ALARM CATEGORIES

To set the alarm categories, enter the following menu sequence:

Settings → Alarms → Alarm categories

The screen below opens:



The various screen components are:

(1) Alarm categories: shows the “Alarm categories” set.

(2) Name: sets the name to be assigned to the Alarm category.

(3) Setting: used to set the following characteristics:

- **Enabled**: Activates/deactivates the “Alarm category”.
- **Escalate**: Enables checking for next levels (or not).
- : The check box “All devices” has been ticked.
- : A list of specific devices has been selected.
- : The check box “All alarms” has been ticked.
- : A list of specific alarms has been selected.
- **Level**: Based on the settings for point **(6), (7), (8)** and **(9)**, the “Alarm category” will be assigned level from 1 to 4 in accordance with the diagram:

Level	Level 1	Level 2	Level 3	Level 4
Device selection	All	All	Select	Select
Alarm selection	All	Select	All	Select

(4) Actions: used to select which actions to carry out.

(5) Time intervals: used to select when the selected actions are carried out.

(6) All devices: if ticked, selects all devices in the network.

(7) Filters: used to filter the devices to which the actions are applied by description.

(8) All alarms: if ticked, selects all alarms in the network.

(9) Alarms filter: used to filter alarms by description.

(10) Interface: if ticked, selects all devices for an interface in the network.

(11) Select devices: select one or more specific devices from the list.

(12) Select alarms: select one or more specific alarms from the list.

(13) Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

The Televis**Go** always and exclusively takes account of valid categories and always begins with Level 4 Categories, where present. If there are several categories on the same level, the device will execute all of them.

Once the actions for Level 4 Categories (if present) have been executed, if the "**Escalate**" flag has been selected in at least one Level 4 Category, the system will verify and execute the Level 3 Categories. The same applies for the other levels.

If the "**Escalate**" flag is selected in a Level 4 Category but there are no valid Categories at Level 3 or Level 2, but just at Level 1, the system will move straight on to executing those on the highest level.

To select an alarm, you first need to have selected the device for which you want to view the alarms, or to have selected all devices to have the full list of all alarms.

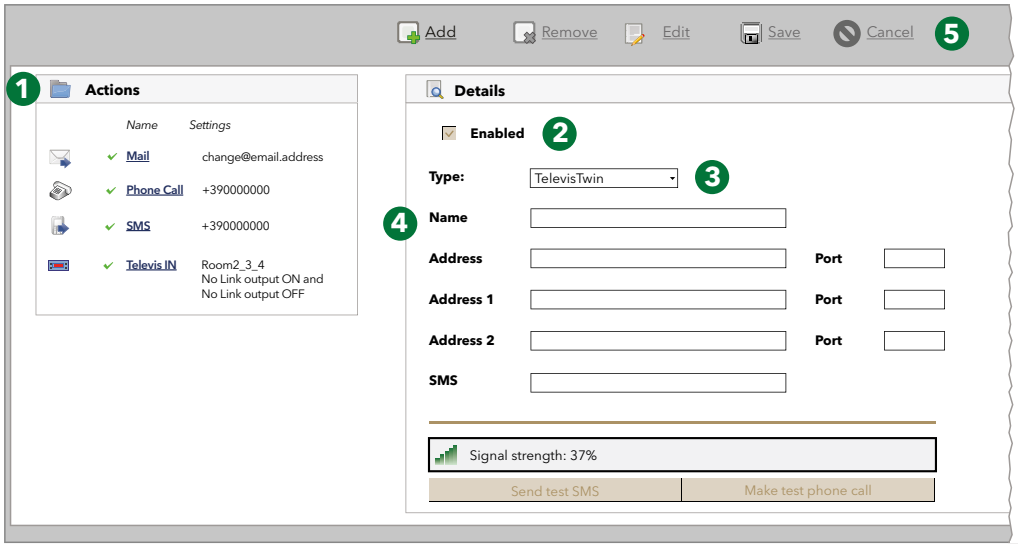
If several time intervals are paired with the same category, they will be considered as an ensemble.

7.4.3. ACTIONS

To set the actions to be undertaken in the event of an alarm, enter the following menu sequence:

Settings → Alarms → Actions

The screen below opens:



The various screen components are:

(1) Actions: shows all the set "Actions".

(2) Enabled: tick the check box to Enable/Disable execution of the selected action.

(3) Type: used to select the type of action you are setting.

(4) Name: used to set the action. The sequence of the fields varies depending on the "Type" selected in point **(3)**.

(5) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

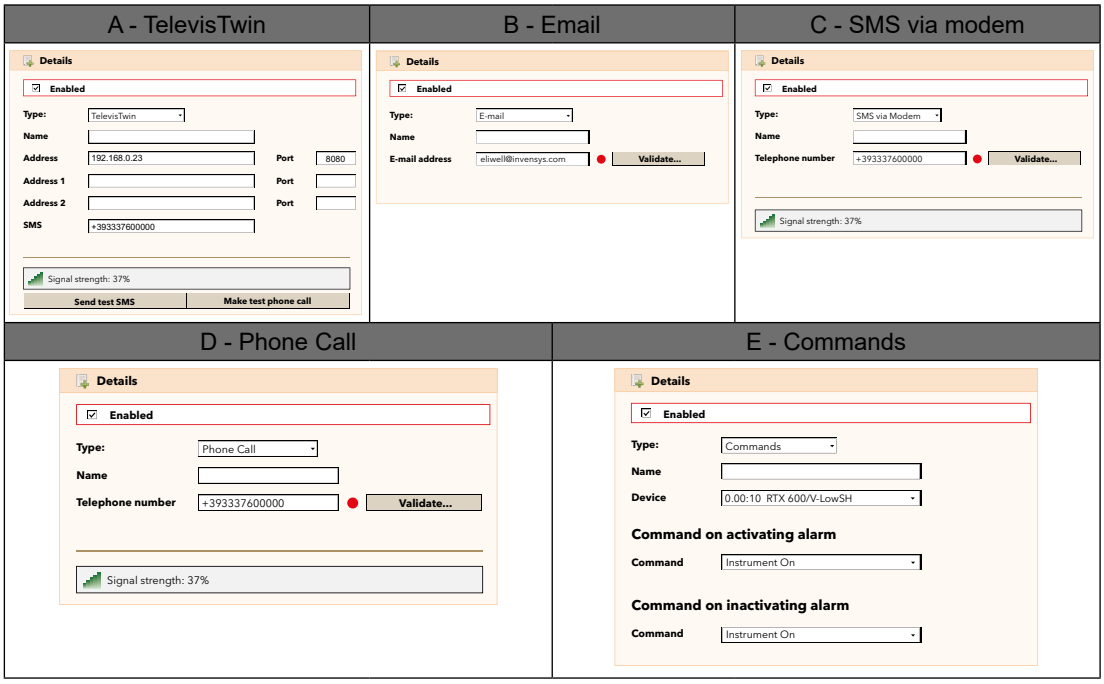
5 different types of Action may be created:

- **TelevisTwin:** sets the IP addresses of a TelevisTwin to which any alarms will be sent.
- **Email:** sets an email address to which any alarms will be sent.
- **SMS via modem:** sets a telephone number to which an SMS will be sent in the event of alarms.
- **Phone Call:** sets a telephone number which will receive a call in the event of alarms.
- **Commands:** sets the commands to be sent to one or more devices in the event of alarms.

Selection takes place via the relevant drop-down menu (**C**) and will cause the controls underneath to vary (**D**).

The actions are only enabled when entered in an alarm category.

One of the screens below opens:



Once the data has been entered 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 (e.g.: 192.168.0.23) and the corresponding port (e.g.: 8080).
- Address 1: — Enter any alternative IP address 1 and the corresponding port.
- Address 2: — Enter any alternative IP address 2 and the corresponding port.
- SMS: — Enter the telephone number to which an SMS will be sent (e.g.: +39 333 7600000).
- Signal strength: — Indicates the signal strength of the modem connected to the Televis**Go** (in %).
- Send test SMS: — Sends a test SMS to the number entered.
- Make test phone call: Attempts to call the telephone number entered.

B. Email:

- Name — Enter the name assigned to the action.
- Email: — Enter the email address to which alarm indications should be sent.
- Validate — 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 to which SMS messages will be sent (e.g.: +39 333 7600000).
- Validate — 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 the Televis**Go** (in %).

D. Phone Call:

- Name — Enter the name assigned to the action.
- Telephone number: — Enter the telephone number to call (e.g.: +39 333 7600000).
- Validate — 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 the Televis**Go** (in %).

E. Commands:

- Name: — Enter the name assigned to the action.
- Device: — Indicates the device on which to act, from those detected in the network.
- Command on activating alarm: Indicates what the device should do if an alarm is activated.
- Command on disabling alarm: Indicates what the device should do after an alarm has been disabled.

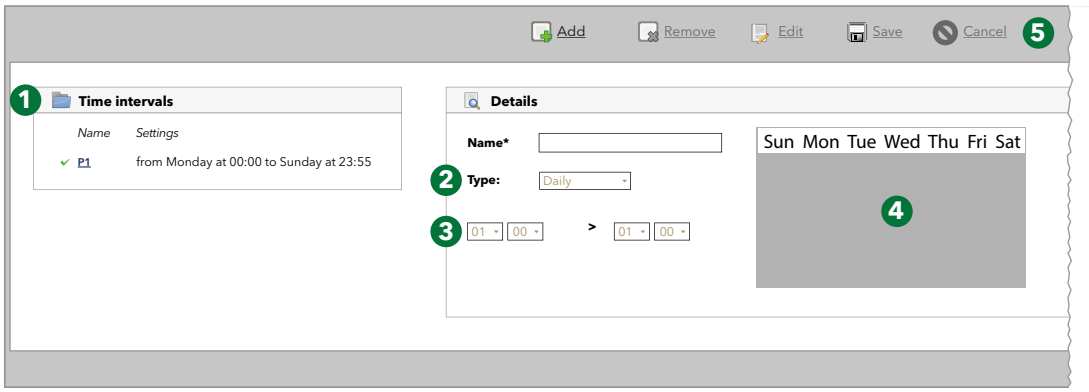
Remember to enter the international prefix for the Recipient before the actual telephone number, both when making a phone call and sending an SMS (e.g.: for ITALY enter +39).

7.4.4. TIME INTERVALS

To set the actions to be undertaken in the event of an alarm, enter the following menu sequence:

Settings → Alarms → Time intervals

The screen below opens:



The various screen components 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 to pair with the interval (the fields vary depending on the type of interval selected).

(4) Chart: graphical representation of the set time interval.

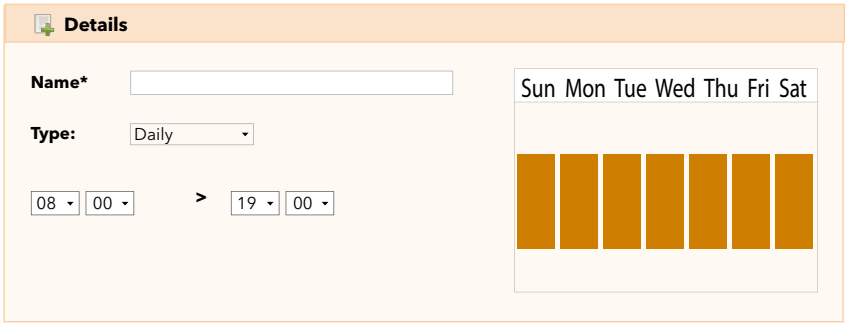
(5) Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

3 different types of time interval may be created:

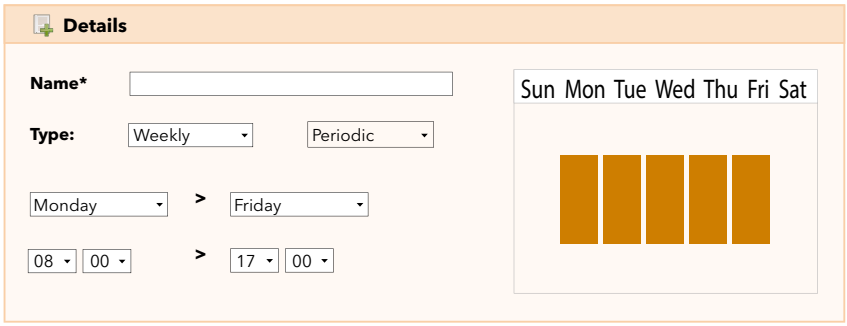
- **Daily**
- **Weekly**
- **Monthly**

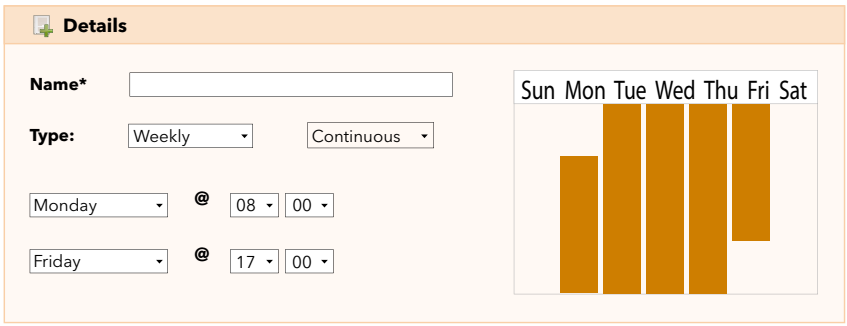
Selection takes place via the relevant drop-down menu and will cause the controls underneath to vary.
The screens that open depending on the type of interval selected are as follows:

A - Daily

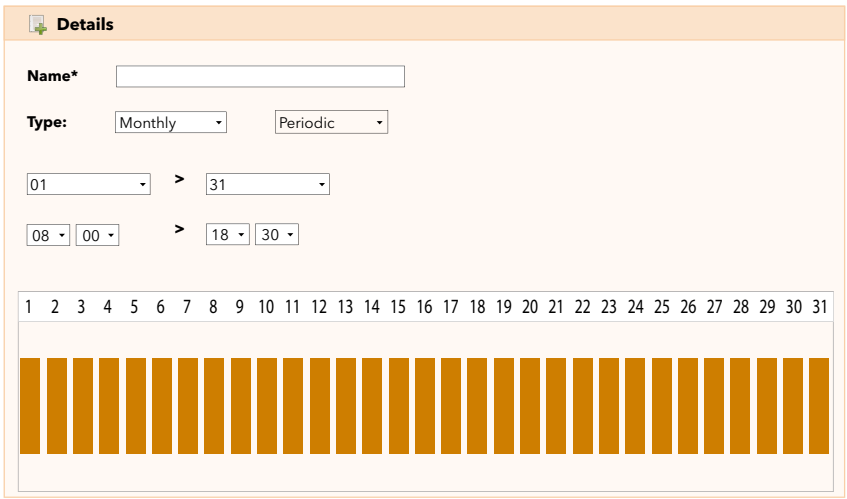


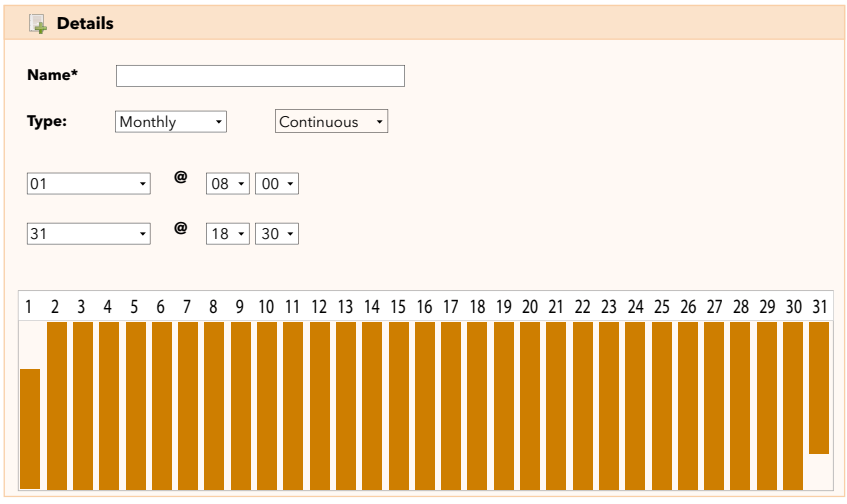
B - Weekly





C - Monthly



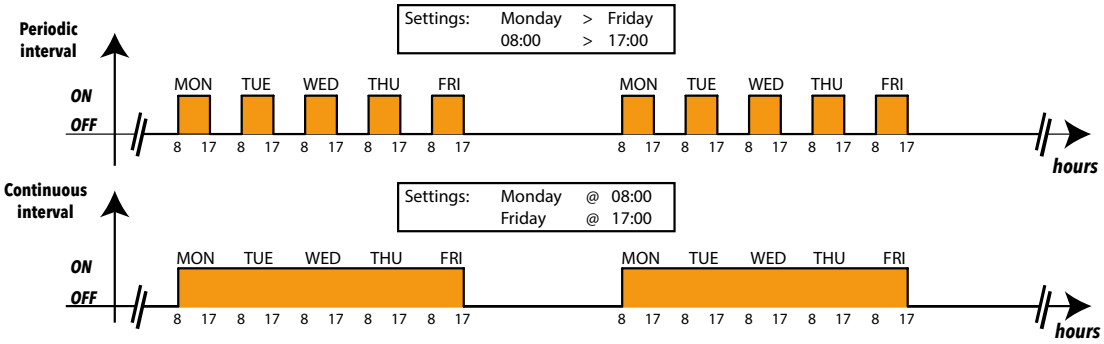


A. Daily period:

- Name: Enter the name assigned to the interval.
- Interval: The 2 check boxes are used to set the validity start and end times for all days (e.g.: 08.00 > 19.00 indicates from 08.00 in the morning to 19.00 in the evening; 19.00 > 06.00 indicates from 19.00 in the evening to 06.00 the morning after).

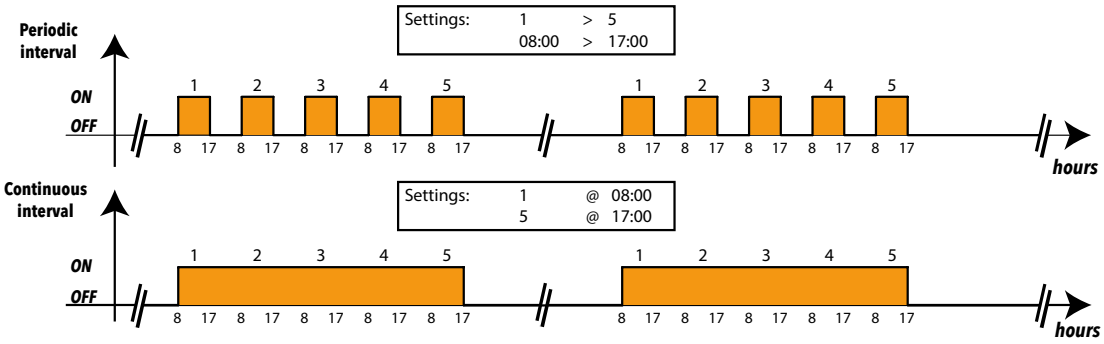
B. Weekly period:

- Name: Enter the name assigned to the interval.
- Periodic: the following must be set:
  - valid days of the week (from → to)
  - valid times (from → to) within each day
- Continuous: the following must be set:
  - the day of the week and the validity start time
  - the day of the week and the validity end time



C. Monthly period:

- Name: Enter the name assigned to the interval.
- Periodic: the following must be set:
  - valid days of the month (from → to)
  - valid times (from → to) within each day
- Continuous: the following must be set:
  - the day of the month and the validity start time
  - the day of the month and the validity end time



NOTE: The “ALWAYS” time interval is preset on the system and cannot be deleted (it selects 24 hours for all days of the week).

7.5. MEDIDA CONFIGURATION

The Televis**Go** is capable of automatically detecting compatible connectivity devices connected to it (MEDIA such as, for example, a LAN or a GSM modem) and using them to send alarm notifications (see **“6.4.2. GENERAL SYSTEM SETTINGS” on page 55**).

CHAPTER 8
OPERATION

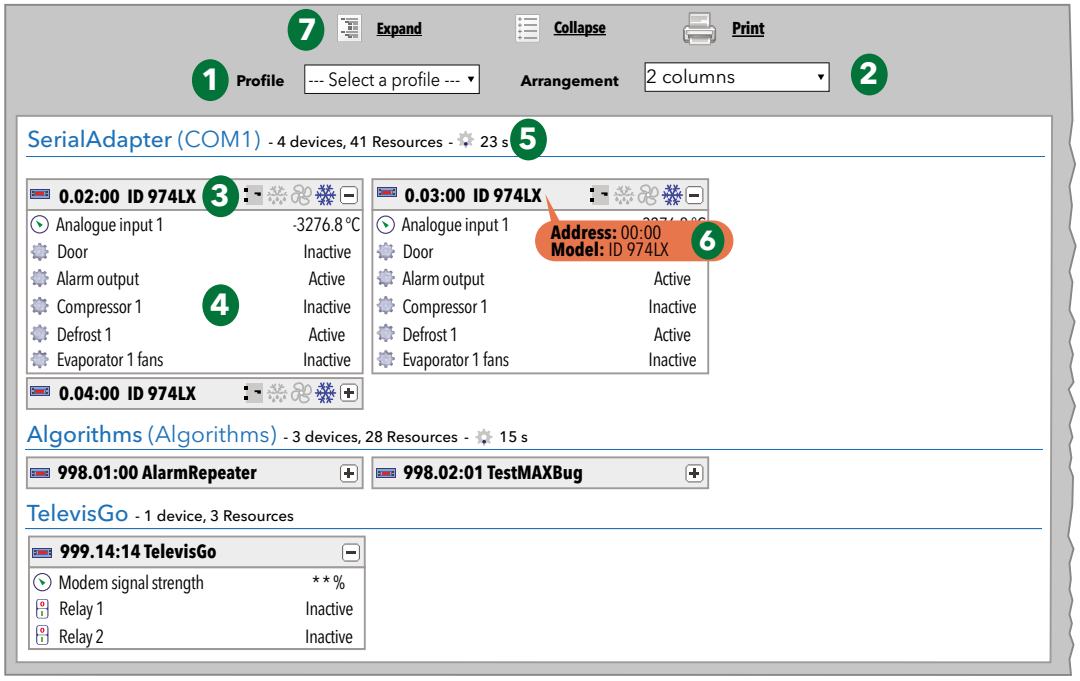
The user can view data/alarms in real time, historical data/alarms or charts and download this data to an external file.

8.1. REAL TIME DATA

To view data in real time, enter the following menu sequence:

Data → Real time data

The screen below opens:



The various screen components are:

(1) Profile: used to load a profile previously defined in the "Historical Table".

(2) Arrangement: used to view the devices grouped within the interface to which they belong, over 1,2,3,4 or 5 columns.

(3) Device: summary of the data on the device: address, model, status icons.

(4) Resources: view the list of resources for the devices.

(5) Data Acquisition: the time in seconds taken by the Televis**Go** to acquire the data originating from all devices connected to the interface is shown alongside the icon.

(6) Device info: If you move the cursor over the device name, a tooltip appears showing the address and model of the device. This makes it possible to view this information quickly, without having to access the network display page.

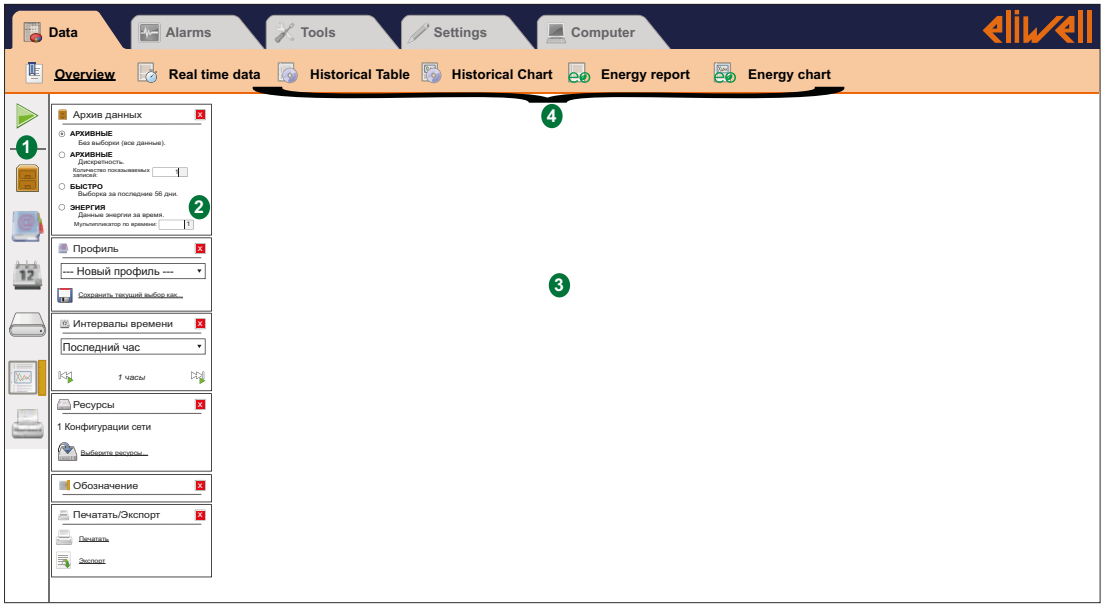
(7) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

At the end of the network scan and after the user has saved everything, the Televis**Go** automatically creates a profile for each device, the name of which is preceded by the prefix "**#**".

8.2. DATA TABLES AND CHARTS

8.2.1. PAGE STRUCTURE

The web application pages for viewing historical data and energy data have the same structure, i.e.:



The various screen components are:

(1) Selection bar: used to enable or disable viewing of the following information:

- : search data based on the settings in the selection windows described in point 2
- : show/hide the “Data archive” window
- : show/hide the “Profile” window
- : show/hide the “Time intervals” window
- : show/hide the “Resources” window
- : show/hide the “Legend” window (only applicable with charts)
- : show/hide the “Print/Export” window

(2) Selection windows: used to customize your search by setting the type of data, profile, time intervals, resources, etc.
(see **“6.4.2. GENERAL SYSTEM SETTINGS” on page 55**).

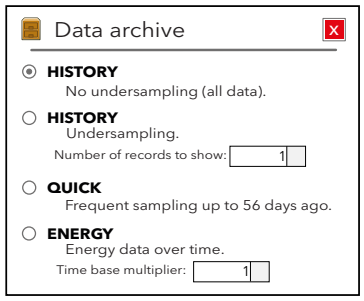
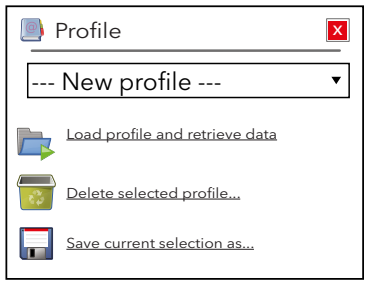
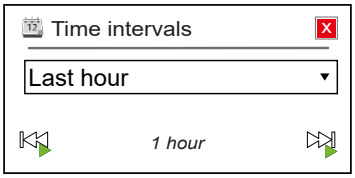
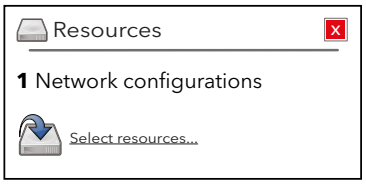
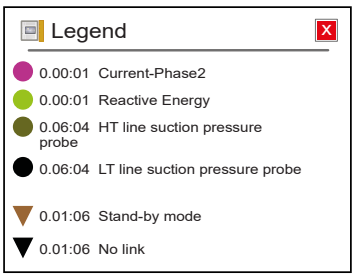
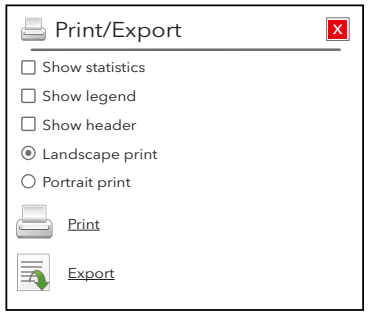
(3) Data view: view data in the form of a table or chart, depending on the settings implemented previously. Press the icon.

(4) Selection: There are 4 display options that can be accessed on this screen:

- : Historical Table
- : Historical Chart
- : Energy report
- : Energy chart

8.2.2. SELECTION WINDOWS

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

Icon	Window	Description of actions
	/	Filters settings based on the selection window.
		Used to select the data to be displayed: - **HISTORY** No undersampling: Displays all stored data - **HISTORY** Undersampling: Used to select how many recordings to display - **QUICK** Frequent sampling: Shows frequent data for the last 56 days - **ENERGY** Energy data over time: Used to select the time base multiplier
		Used to: - Select a saved profile - Create a new profile - Save a profile you have just created or edited - Delete a saved profile **NOTE**: after selecting a profile, you need to click the button to apply it and view the relevant data.
		Used to select the viewing interval from a list of preset values (1 hour, 2 hours, 3 hours, 6 hours, 12 hours, 1 day, 2 days, 1 week), and the software will start counting down the time, beginning from the moment at which the archive was searched.
		If you do not select an existing profile you can use this box to set which devices and which resources in the network you want to view.
		Pairs each line (by color and shape) with a parameter selected during the system setup. **NOTE: Only visible if a chart is shown**.
		Used to select whether the following should be shown during the print or export procedure: - statistics - legend - header It also allows you to decide whether the output should be horizontal or vertical.

8.2.3. HISTORICAL TABLE

To view historical data stored by the Televis**Go**, enter the following menu sequence:

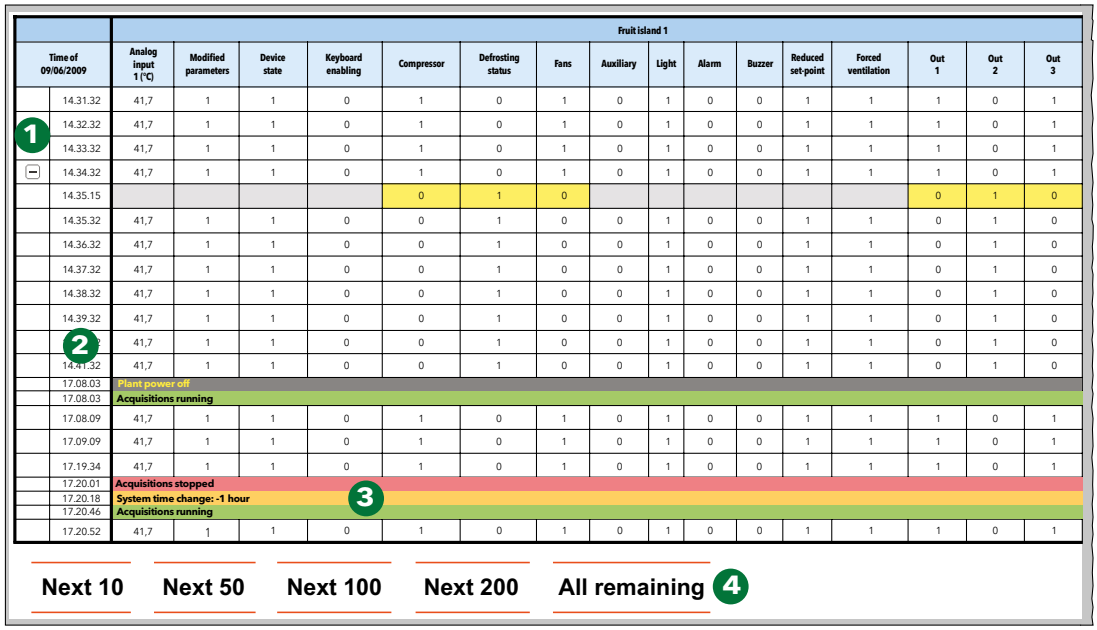
Data → Historical table

The screen that opens is described in **"8.2.1. PAGE STRUCTURE" on page 87** and the available selections are described in **"8.2.2. SELECTION WINDOWS" on page 88**.

The various available screen components are:

- **Data archive**: to select the data to be displayed.
- **Profile**: used to select, save or delete a Profile. If a profile is loaded, the time interval and resources are assigned automatically.
- **Time intervals**: used to set a time interval.
- **Resources**: used to select resources without them being assigned to a specific profile.
- **Print export**: used to print or export the data.

If you click the button to load a selected profile or the icon, the following screen will appear:



Time of 09/06/2009	Analog input 1 (°C)	Modified parameters	Device state	Keyboard enabling	Compressor	Defrosting status	Fans	Auxiliary	Light	Alarm	Buzzer	Reduced set-point	Forced ventilation	Out 1	Out 2	Out 3
					Fruit island 1											
14.31.32	41,7	1	1	0	1	0	1	0	1	0	0	1	1	1	0	1
14.32.32	41,7	1	1	0	1	0	1	0	1	0	0	1	1	1	0	1
14.33.32	41,7	1	1	0	1	0	1	0	1	0	0	1	1	1	0	1
14.34.32	41,7	1	1	0	1	0	1	0	1	0	0	1	1	1	0	1
14.35.15					0	1	0							0	1	0
14.35.32	41,7	1	1	0	0	1	0	0	1	0	0	1	1	0	1	0
14.36.32	41,7	1	1	0	0	1	0	0	1	0	0	1	1	0	1	0
14.37.32	41,7	1	1	0	0	1	0	0	1	0	0	1	1	0	1	0
14.38.32	41,7	1	1	0	0	1	0	0	1	0	0	1	1	0	1	0
14.39.32	41,7	1	1	0	0	1	0	0	1	0	0	1	1	0	1	0
14.41.32	41,7	1	1	0	0	1	0	0	1	0	0	1	1	0	1	0
17.08.03	Plant power off															
17.08.03	Acquisitions running															
17.08.09	41,7	1	1	0	1	0	1	0	1	0	0	1	1	1	0	1
17.09.09	41,7	1	1	0	1	0	1	0	1	0	0	1	1	1	0	1
17.19.34	41,7	1	1	0	1	0	1	0	1	0	0	1	1	1	0	1
17.20.01	Acquisitions stopped															
17.20.18	System time change: -1 hour															
17.20.46	Acquisitions running															
17.20.52	41,7	1	1	0	1	0	1	0	1	0	0	1	1	1	0	1

The various screen components are:

(1) ⊞ / ⊟: used to expand/collapse the variations in the asynchronous resources (digital inputs and outputs, statuses, alarms).

(2) Date/Time: identifies the time and date when the data was saved. You will then see a series of columns listing the resources selected previously and the values read for each device at the moment indicated.

(3) Events: a colored line identifies the presence of a special color-coded event:

- **RED** background: identifies the moment at which acquisitions were stopped
- **GREEN** background: identifies the moment at which acquisitions were started
- **YELLOW** background: identifies when the system time was changed
- **GRAY** background: identifies the time the system was switched off or when an electrical blackout occurred

(4) New records: the initial screen will only show the first 50 results. To view more values, select one of the following options:

- **Next 10**: displays the next 10 values.
- **Next 50**: displays the next 50 values.
- **Next 100**: displays the next 100 values.
- **Next 200**: displays the next 200 values.
- **All remaining**: displays all values

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

8.2.4. HISTORICAL CHART

Go through the following menu sequence:

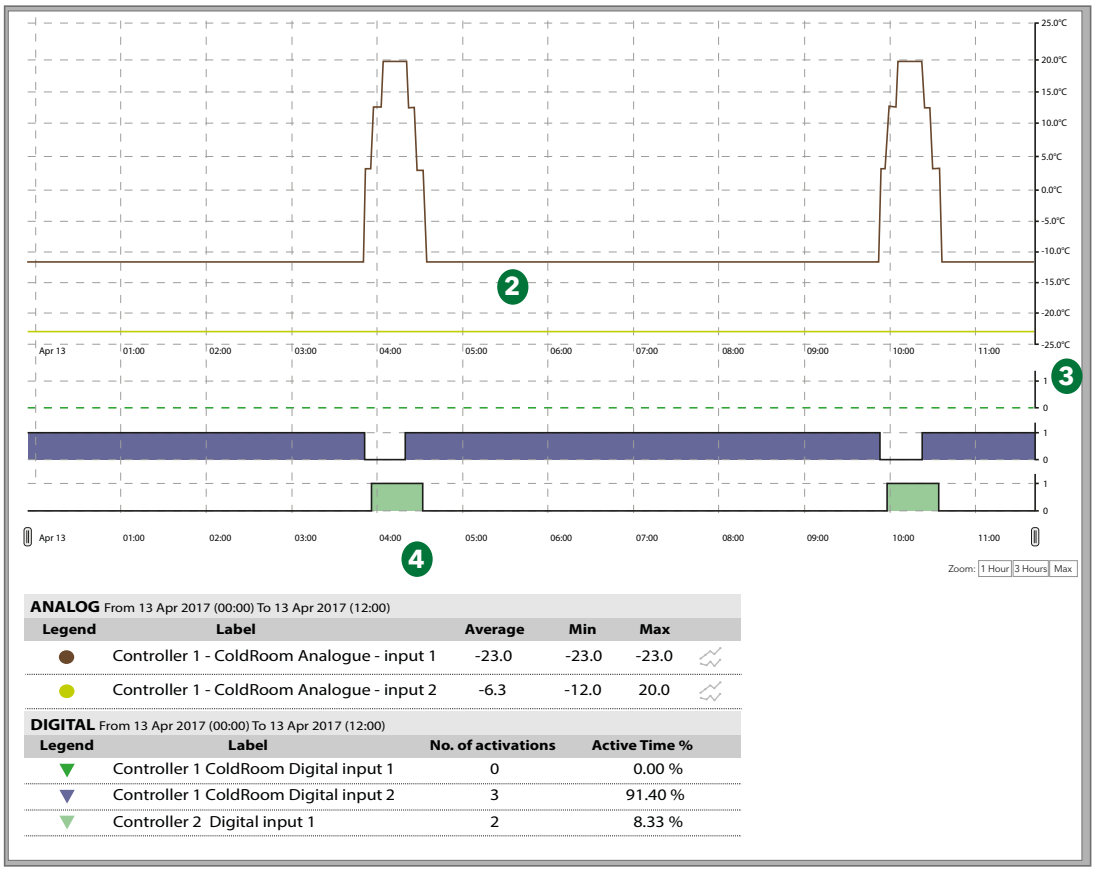
Data → Historical chart

The screen that opens is described in **"8.2.1. PAGE STRUCTURE" on page 87** and the available selections are described in **"8.2.2. SELECTION WINDOWS" on page 88**.

The various available screen components are:

- **Data archive**: to select the data to be displayed.
- **Profile**: used to select, save or delete a Profile. If a profile is loaded, the time interval and resources are assigned automatically.
- **Time intervals**: used to set a time interval.
- **Resources**: used to select resources without them being assigned to a specific profile.
- **Legend**: used to pair a resource with a specific line shown.
- **Print export**: used to print or export the data.

If you click the button to load a selected profile or the icon, the following screen will appear:



ANALOG From 13 Apr 2017 (00:00) To 13 Apr 2017 (12:00)

Legend	Label	Average	Min	Max
●	Controller 1 - ColdRoom Analogue - input 1	-23.0	-23.0	-23.0
●	Controller 1 - ColdRoom Analogue - input 2	-6.3	-12.0	20.0

DIGITAL From 13 Apr 2017 (00:00) To 13 Apr 2017 (12:00)

Legend	Label	No. of activations	Active Time %
▼	Controller 1 ColdRoom Digital input 1	0	0.00 %
▼	Controller 1 ColdRoom Digital input 2	3	91.40 %
▼	Controller 2 Digital input 1	2	8.33 %

The various screen components are:

(1) Legend: shows the color selected for each resource when the device profile was being created (see **"6.2.2. TEMPLATE MANAGEMENT" on page 44**) and a symbol identifying the type of resource (● = analog resource and ▼ = digital resource).

(2) Resource chart: Ithe curve for the values read (y ordinate axis) with the passing of time (x abscissa axis) appears on screen. Each resource selected will have its own line in the assigned color, showing the progress of the values over time (e.g.: ● Controller 1 - ColdRoom Analogue - input 1).

(3) Value axes: shows the ordinate axis for the various curves displayed. If the ordinate axes for several resources are compatible, a single axis will be displayed; otherwise several ordinate axes will appear on the right-hand side.

(4) Statistics: shows the statistics relating to the analog and digital resources displayed.

Click on the symbol for a single entity to hide/show it.

If an analog entity is hidden, the corresponding line on the chart will also be hidden and the axes for the values read (one for each unit of measure, up to a maximum of 3) will be resized based on the remaining values.
If a digital entity (digital inputs/outputs, machine statuses and alarms) is hidden, its chart will disappear and the next entity will appear in its place.

If you click on the first line of the name for a value, a window opens allowing you to:

- **Change color**: to change the color used in the chart.
- **Mark**: (digital entities only) to display a vertical band corresponding to value 1 of the digital entity.

ANALOG RESOURCE	DIGITAL RESOURCE
Controller 1 ColdRoom Analogue input 1 **Change color**	**Controller 1 ColdRoom Digital input 1** **Change color** **Mark**

AXES FOR VALUES READ (y ordinates)

If you click on the axis for the values, a new window opens with the following options:

- **Set as preset**: this is only shown if there are 2 or 3 axes and can be used to view the values on the chart in the unit of measure for the selected axis.
- **Change color**: used to customize the color of the axis and the corresponding grid.
- **Change minimum/maximum**: used to customize the max/min values shown on the axis for the values.
- **Set bands**: based on set values A and B (set to the closest grid value).

If more than 15 resources have been selected, the following message will appear at the top: “More than 15 entities have been selected and therefore the chart will take longer to appear.”

The chart shown is interactive: if you move the mouse over the lines for the various resources the mouse pointer will assume the shape ● (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 will be displayed in their unit of measure

Zoom: there are controls in the bottom left-hand corner for focusing on the time band you want to view:

- **1 hour**: the charts relating to the last hour of the selected interval (see previous page) are displayed.
- **3 hours**: the charts relating to the last 3 hours of the selected interval (see previous page) are displayed.
- **Max**: the charts relating to the entire interval selected (see previous page) are displayed.

The interval can be edited by dragging the cursors || downwards.

NOTE: Make sure your printer is set to the same orientation as the selected print option.

8.2.5. HACCP PROFILES

During profile setup, you will have the option of creating one or more profiles categorized as **HACCP** type profiles which influence the way in which data is displayed and formatted during the print phase.

In order to create a **HACCP** profile, one of the following conditions must be met:

A. For each device you want to enter in the profile, select just one analog entity (typically the regulation probe) and just one machine status associated with the selected analog probe (typically the defrost status).

B. For each device you want to enter in the profile, select only one analog entity.

To the right of the temperature value, there is a * (asterisk) if the machine status (typically defrost) is active.

In the case of Flash printing (regular printing of real time data) or real time display, behavior is as follows:

- If an analog entity is in error or if the device cannot be reached, the system searches the data log for the first valid temperature value preceding it.
- The search time window is defined at configuration level (default = 30 minutes).

Only profiles satisfying the conditions described in points 1. and 2. can be marked as HACCP profiles.
It is the user that decides to mark a profile as HACCP by ticking the corresponding check box, but the software only offers this option if the conditions have been observed.

The Televis**Go** makes a factory profile available, System-HACCP, which along with any HACCP profiles created by the user, can be viewed on the real time data page and the historical data page.

8.2.6. ENERGY REPORT

To view the energy resources log, enter the following menu sequence:

Data → Energy report

The screen that opens is described in **"8.2.1. PAGE STRUCTURE" on page 87** and the available selections are described in **"8.2.2. SELECTION WINDOWS" on page 88**.

The various available screen components are:

- **Data archive**: to select the data to be displayed.
- **Profile**: used to select, save or delete a Profile. If a profile is loaded, the time interval and resources are assigned automatically.
- **Time intervals**: used to set a time interval.
- **Resources**: used to select resources without them being assigned to a specific profile.
- **Print export**: used to print or export the data.

If you click to load a selected profile or the icon, the same screens as described for the historical table will open (see **"8.2.3. HISTORICAL TABLE" on page 89**).

The data represented in a row is the variation of the entity monitored in the time interval between this row and the previous row. The data is compiled according to the recording interval for the energy resources.

You can enter a number greater than or equal to 1 in the text box to represent a multiplication factor for the recording time for the energy resources.

The page will automatically calculate the value of the resulting period (after around a second of typing). To confirm the selected compiling period, click **Set value**.

8.2.7. ENERGY RESOURCES CHART

Go through the following menu sequence:

Data → Energy chart

The screen that opens is described in **“8.2.1. PAGE STRUCTURE” on page 87** and the available selections are described in **“8.2.2. SELECTION WINDOWS” on page 88**.

The various available screen components are:

- **Data archive**: to select the data to be displayed.
- **Profile**: used to select, save or delete a Profile. If a profile is loaded, the time interval and resources are assigned automatically.
- **Time intervals**: used to set a time interval.
- **Resources**: used to select resources without them being assigned to a specific profile.
- **Legend**: used to pair a resource with a specific line shown.
- **Print export**: used to print or export the data.

If you click to load a selected profile or the icon, the same screens as described for the historical chart will open (see **“8.2.4. HISTORICAL CHART” on page 90**).

8.3. ALARMS

To check the devices in the network, you will need to set and enable the 2 virtual alarms the system enters between the resources for all devices and the algorithms, i.e. “No-link” and “Device Changed”.

NOTICE

INOPERABLE DEVICE

Set and enable the “No-Link” and “Device Changed” alarms for the various devices to receive notifications when there is no communication or in the event of faulty operation linked to incorrect recognition of the device resources.

Failure to follow these instructions can result in equipment damage.

8.3.1. REAL TIME ALARMS

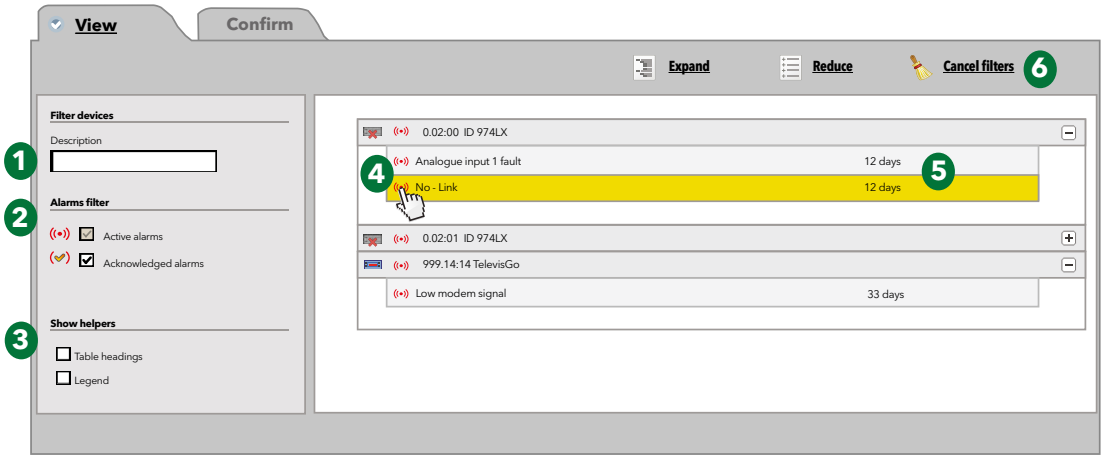
Go through the following menu sequence:

Alarms → Alarm state

The window that appears anticipates the following 2 cases:

GENERAL VIEW

The screen below opens:



The various screen components are:

(1) Filter devices: used to filter alarms by device name.

(2) Alarms filter: used to select alarms by type (active ((•)), acknowledged ((✓)) alarms) (active alarms cannot be unselected).

(3) Show helpers: tick the relevant check box to show/hide the table headings and/or legend.

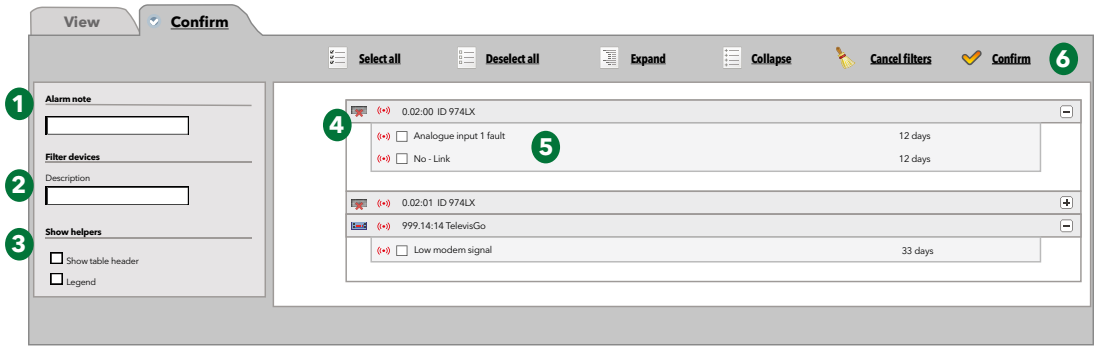
(4) Alarms: list of existing alarms in the device, already filtered with (**B**). Click the alarm icon (**D**) to access the page with its details.

(5) Alarm details: shows for how long an alarm resource has been active.

(6) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

CONFERMATIONS

The screen below opens:



The various screen components are:

(1) Alarm note: this is the text displayed within all alarms selected.

(2) Filter devices: used to filter alarms by device name.

(3) Show helpers: tick the relevant check box to show/hide the table headings and/or legend.

(4) List of alarms: displays the list of active alarms grouped by the device to which it belongs. The devices whose alarms are displayed depends on the device filter **(3)**.

(5) Alarms: the alarms can be selected by ticking the check box to the left of each alarm.

(6) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

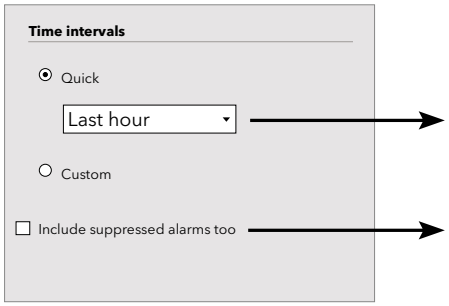
Confirming an alarm has no operative consequence for the alarm status; the aim is to show that the alarm has been seen by at least one user (consider a situation in which there are several operators: a confirmed alarm means that "someone is aware of it").

8.3.2. ALARM LOG

Go through the following menu sequence:

Alarms → Alarm history

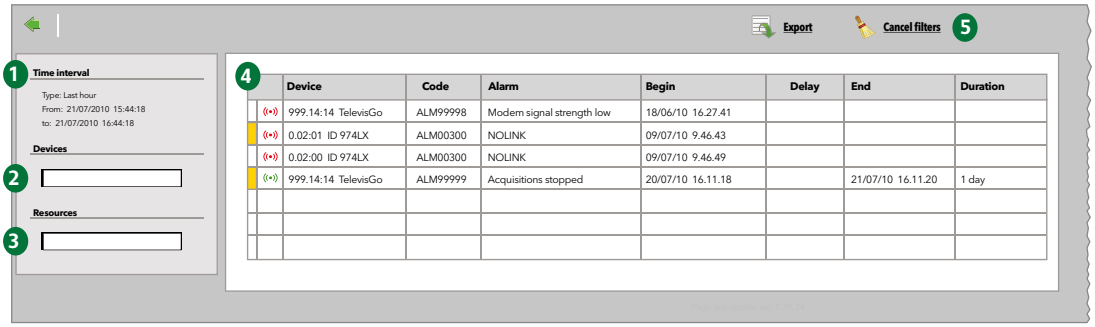
The screen below opens:



Select whether to use a relative (**Quick**) or absolute (**Customized**) time interval. In the first case there will be a series of preset intervals which start counting down the moment they are selected (1, 2, 3, 6 or 12 hours, 1 or 2 days). In the second case you will need to specify the start and end date/time.

Suppressed alarms may be included by enabling the relevant check box.

Click to access the next page. The screen below opens:



The various screen components are:

(1) Time interval: indicates the time interval set via the previous screen.

(2) Devices: used to filter alarms by device name.

(3) Alarms: used to filter alarms by name.

(4) Details: shows the details relating to the alarms:

- **Alarm note**: if the box to the left of the alarm icon is colored yellow ( ), this means an “Alarm note” has been entered.
- **Alarm icon**:
  - RED ( ) if an active alarm is identified.
  - GREEN ( ) if a terminated alarm is identified.
- **Device**: name of the device.
- **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**: alarm end date/time.
- **Duration**: indicates the overall duration of the alarm.

(5) Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

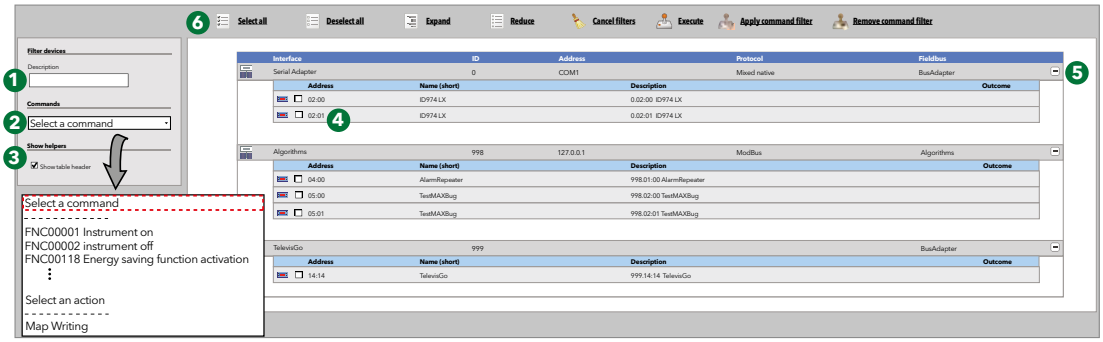
The “Alarm note” can also be entered/edited within the alarm itself (by clicking the alarm icon).

8.4. COMMANDS

Go through the following menu sequence:

Tools → Commands

The screen below opens:



The various screen components are:

(1) Filter devices: used to filter devices by description.

(2) Commands: used to select the command/action to send to one or more devices.
The list is a group of all the commands available for all devices in the network, plus any “Manually executed” parameter writing actions defined within “Scheduled actions”.

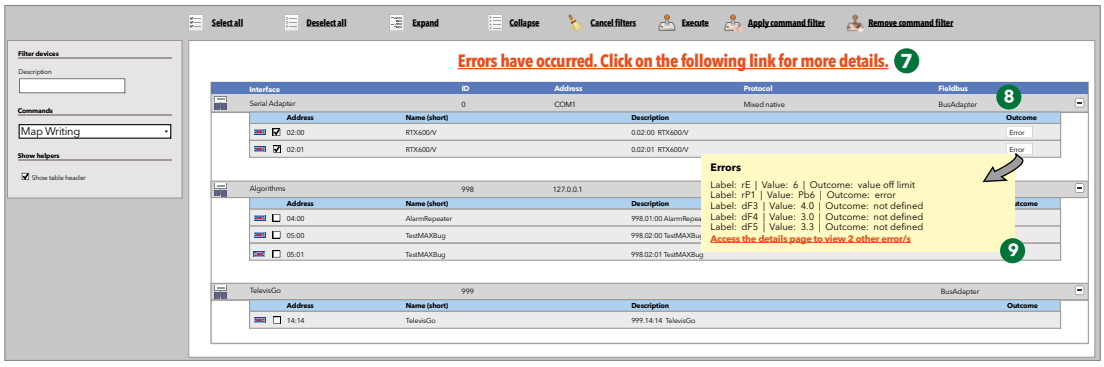
(3) Show helpers: used to show/hide the table headers.

(4) List of devices: used to select individual devices by means of the corresponding check box to the left of the address.

(5) Expand/Collapse: expands/collapses the list of devices for an interface.

(6) Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

Once execution is complete, the following screen will appear:



It will show the following information:

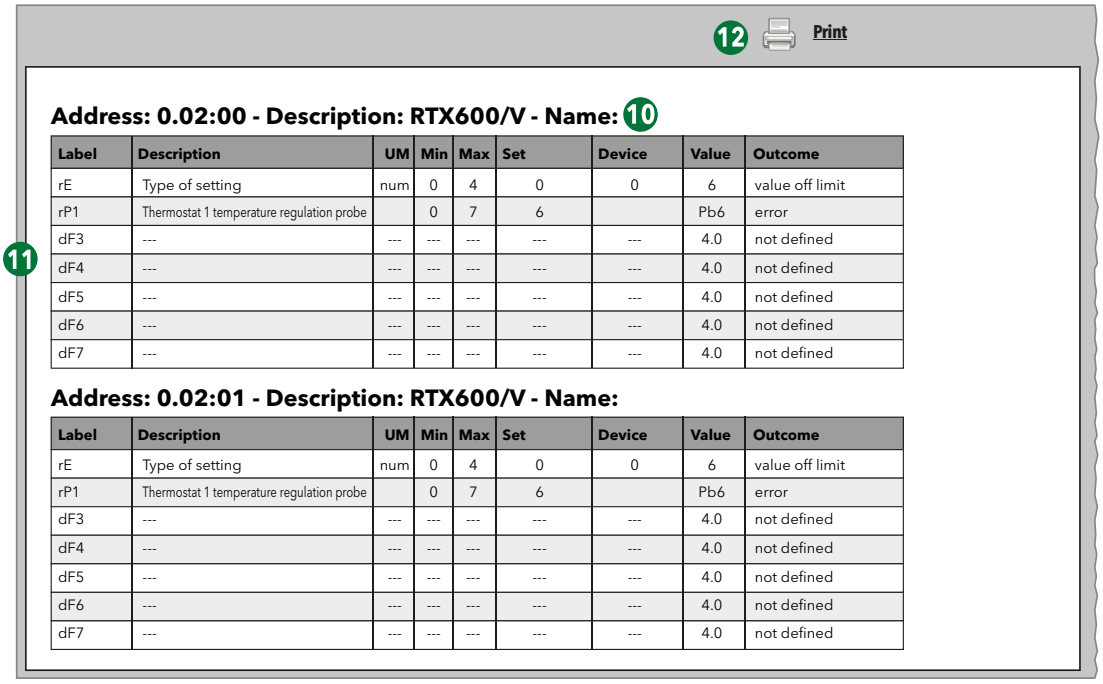
(7) A sentence notifying the user of any errors present.
Click the highlighted text to open a pop-up with the full list of detected errors.

(8) The **Outcome** column which may contain, for all selected devices:

- **Completed**: the action has been completed successfully.
- **Error**: if an error has occurred.

(9) If there are errors: click the “**Error**” for a specific device to open a pop-up with the list of detected errors.

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



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

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 will show:

(10) The data for the device on which the errors were 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
- preset value
- value set on the device
- value the action attempted to write
- type of error detected

(12) The **Print** is used to print the full error report.

NOTE: Incorrect selection of one or more commands (e.g. “Device OFF”) may compromise equipment operation. In the example, sending the command “Device OFF” physically switches off the device and prevents it from acquiring data or carrying out regulation procedures. Always provide control systems that are external to the Televis**Go** for critical functions.

⚠ WARNING

LOSS OF CONTROL

The system 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 restart.

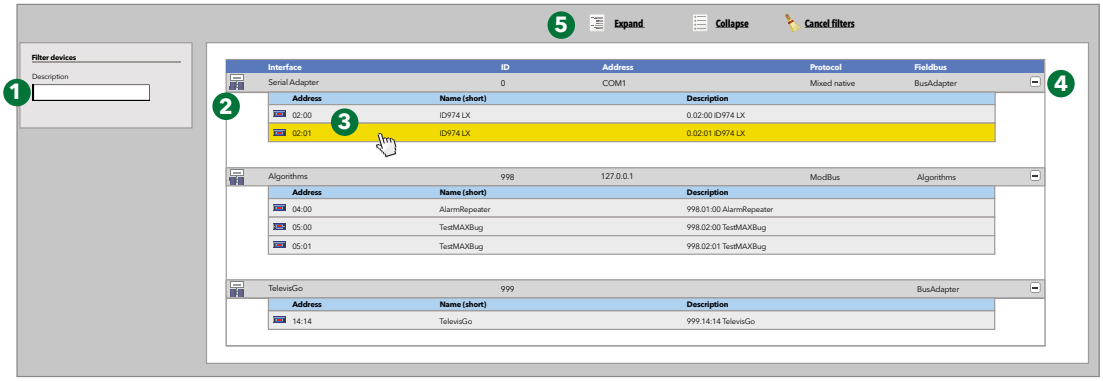
Failure to follow these instructions can result in death, serious injury, or equipment damage.

8.5. PARAMETERS

Go through the following menu sequence:

Tools → Parameters

The screen below opens:



The various screen components are:

(1) Filter devices: used to filter by device description.

(2) List of devices: shows the list of devices in the network, grouped by interface.
The commands present are those specific to each individual device.

(3) Parameters: click the device row to access the parameters for the selected device.

(4) Expand/Collapse: expands/collapses the list of devices for an interface.

(5) Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

Only one device can be selected at a time.

Setting the value of some parameters incorrectly can compromise equipment operation, even if the value is within the range of values that can be set (e.g. Setpoint, temperature, etc.).

NOTICE

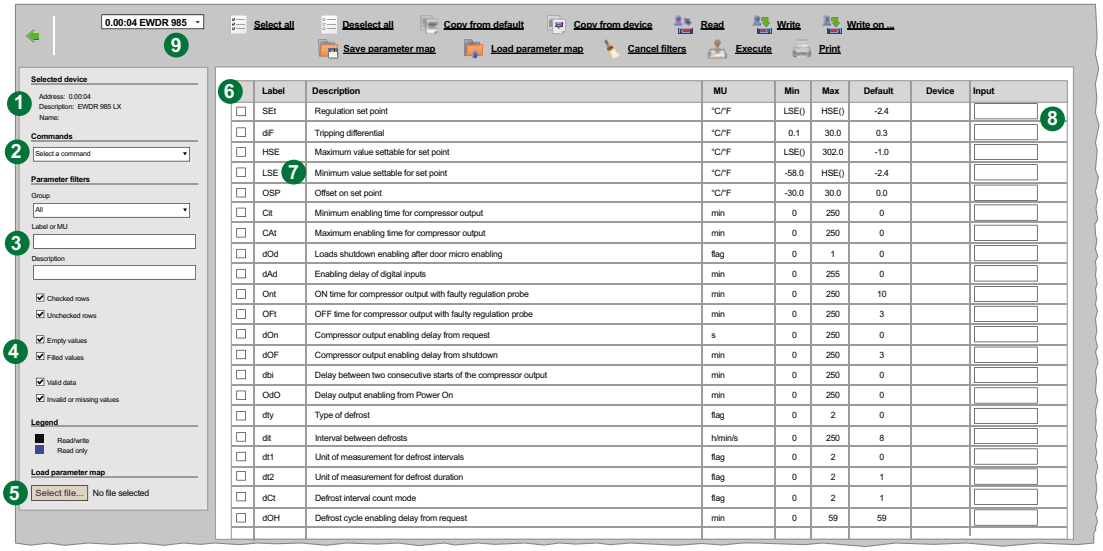
INOPERABLE DEVICE

Enable the TelevisGo alarm thresholds for the resources that are critical to the application.

Failure to follow these instructions can result in equipment damage.

8.5.1. LIST OF DEVICE PARAMETERS

The screen below opens:



The various screen components are:

(1) Selected device: shows the information relating to the selected device:
Address, Description and Name of the selected device.

(2) Commands: used to select the command to be sent to the device (the list is a group of all the commands available for all devices in the network).

(3) Parameter filters 1: used to filter the parameters by Group, Label or Description.

(4) Parameter filters 2: there are three pairs of check boxes which act independently:

- **Checked rows / Unchecked rows(*)**:
  filters checked or unchecked rows.
- **Empty values / Filled values(*)**:
  filters the rows with or without user values entered.
- **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 will be displayed.
If none of the check boxes are ticked, the table will appear empty.

(5) Load parameter map: used to load a map from a file.
Click Select file to open a window allowing you to select the file.

(6) List of parameters: shows the list of device parameters (filtered or unfiltered).

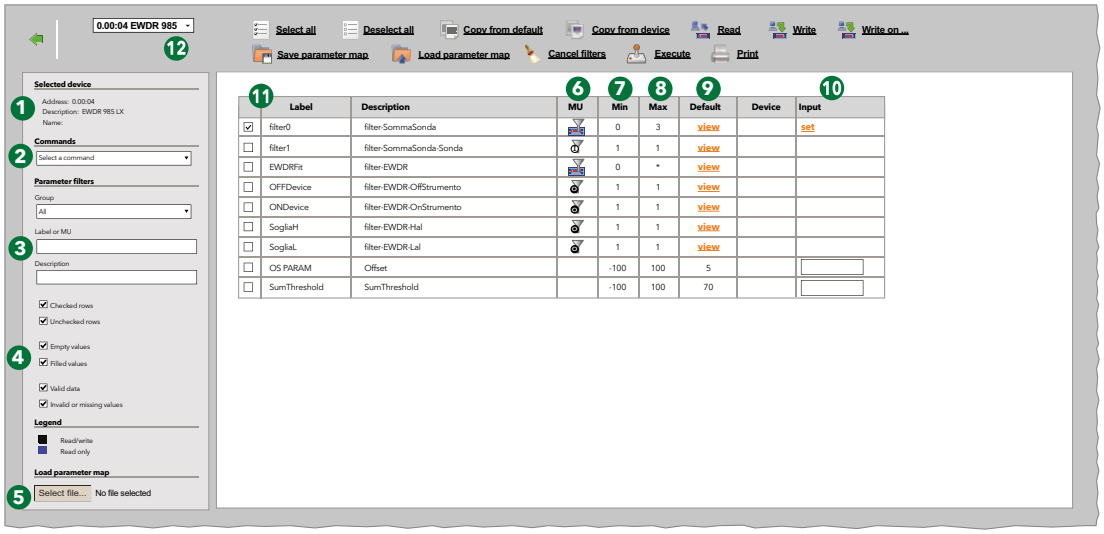
(7) Parameter selection: used to select one or more parameters by ticking the corresponding check box.

(8) Parameter value: used to enter the value to assign to that specific parameter. To enable writing the value of a parameter, tick the box to the left of the parameter name.

(9) Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

8.5.2. LIST OF ALGORITHM PARAMETERS

The screen below opens:



The various screen components are:

(1) Selected device: shows the information relating to the selected device:
Address, Description and Name of the selected device.

(2) Commands: used to select the command to be sent to the device (the list is a group of all the commands available for all devices in the network).

(3) Parameter filters 1: filters the parameters by Group, Label or Description.

(4) Parameter filters 2: there are three pairs of check boxes which act independently.
(see **"8.5.1. LIST OF DEVICE PARAMETERS" on page 99**).

(5) Load parameter map: used to load a map from a file.
Click Select file to open a window allowing you to select the file.

(6) UM: shows an icon identifying the type of filter on which the algorithm operates.
(see **"5.7. STATUS ICONS" on page 36**).

(7) MIN: shows the following:
- Master filters: minimum number of devices;
- Subsidiary filters: minimum number of resources for an output to be restored.

(8) MAX: shows the following:
- Master filters: maximum number of devices that can be selected with the filter;
- Subsidiary filters: maximum number of resources that can be selected with the filter (MAX=10).

(9) Default: shows the filter loaded by the designer by clicking the hyperlink **view**

(10) Input: for the parameters selected **(11)**, enables the check box used to input the new value to be applied to the parameter. For the filters selected **(11)**, displays the hyperlink **set** for filter management. If a filter is edited, the hyperlink **edit** will appear.
The change becomes effective when you click **Execute**.

(11) Label: used to select parameters and/or filters by ticking the corresponding check box to the left of the label.

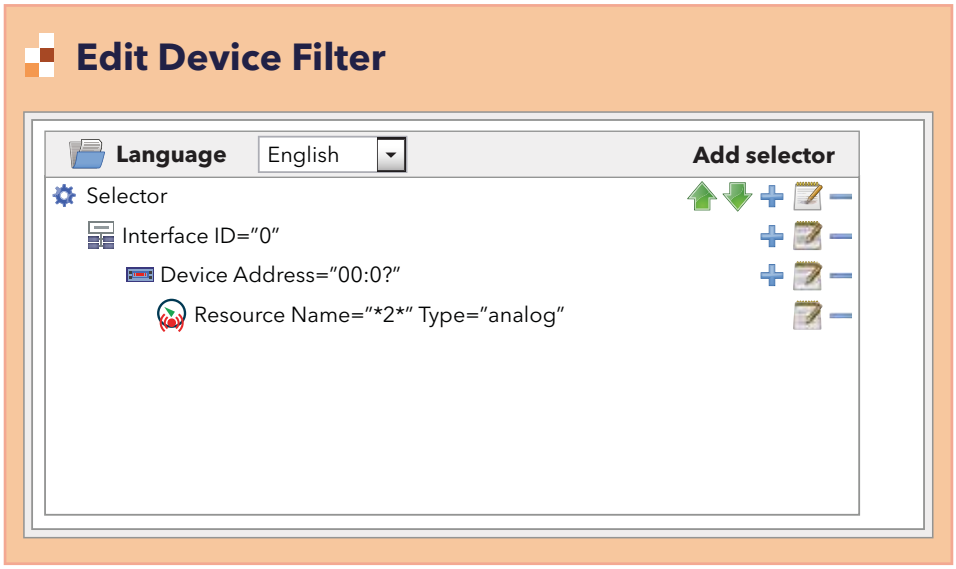
(12) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

The master filter and subsidiary filter act independently of one another.

The type of output resources are a sub-group of input resource types; only parameters and network commands can be set as output resources.

For subsidiary filters, the symbol ***** in the **MAX** field indicates no maximum limit.
If the set minimum number is greater than the maximum number, the group of elements is empty.

If you click the hyperlink **set (10)** for a master filter, the following screen opens:



The hierarchy of selectors and resources appears on the left. The buttons have the following meaning:

Button	Meaning
	Move the selector up a position
	Move the selector down a position
	Add a sub-rule (selector > interface; interface > device; device > resource)
	Edit the selector or the rule
	Remove the selector or the rule and all rules below

A filter consists of at least one selector. Each selector identifies a separate sub-group of resources and can be additional or subtractive.

An additional selector adds the resources it has filtered to the end group, a subtractive selector removes the resources it has filtered from the full group.

NOTE: Selector order is important.

A subtractive selector is only useful for filtering the result of an additional selector that precedes it.

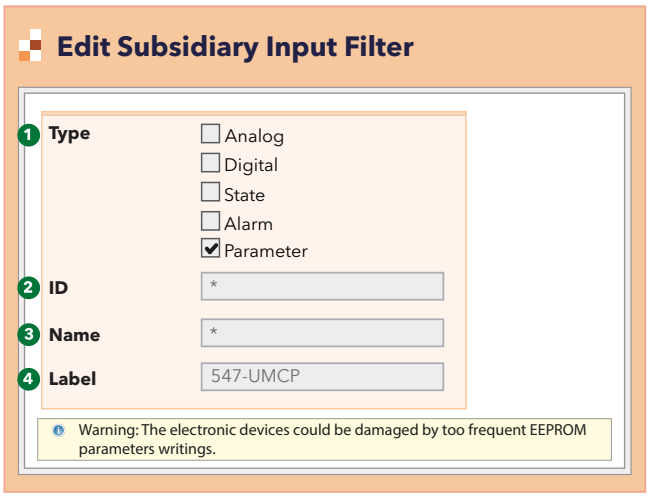
To edit a selector, click the icon for that selector.

For further information regarding the boxes that appear on the right-hand side of the screen, see **"6.3. SCANNING" on page 47**.

Once you have finished editing the selector properties, click **Save**.

If you click the hyperlink **set (10)** for a subsidiary input or output filter, the following screen opens:

Subsidiary Input filter



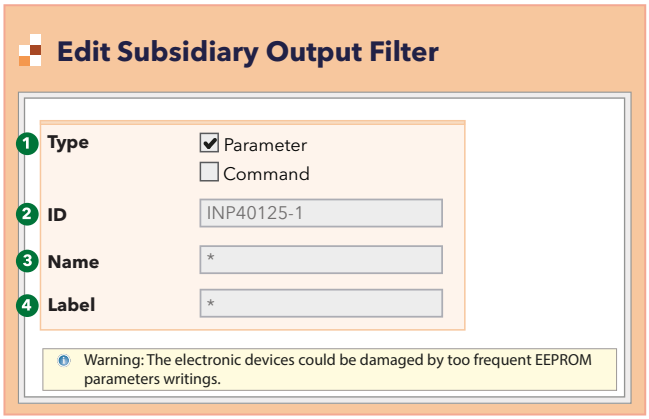
⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

Frequent writing of EEPROM parameters may damage 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 may damage system memory.

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

The various screen components are:

(1) Type: In the case of a subsidiary input filter, select the type of element to which the filter will be applied:

- Analog resource
- Digital resource
- State resource
- Alarm
- Parameter

In the case of a subsidiary output filter, select the type of element to which the filter will be applied:

- Parameter
- Command

(2) ID: used to filter the resource based on their identification. Only accepts specific combinations of characters, digits and wildcard characters (**?** and*****). It consists of 3 upper-case alphabetic characters and 5 numbers, possibly followed by a dash and more text. For example: INP40001-1, ALM00300.

(3) Name: used to filter the resources based on their name, translated into the language selected in the previous step. Permits the use of wildcard characters (**?** and *****).

(4) Label: Only visible if “Parameter” type selected - **(1)**. Used to select the input or output resource by entering its code (case-sensitive).

Once you have finished editing the selector properties, click **Save**.

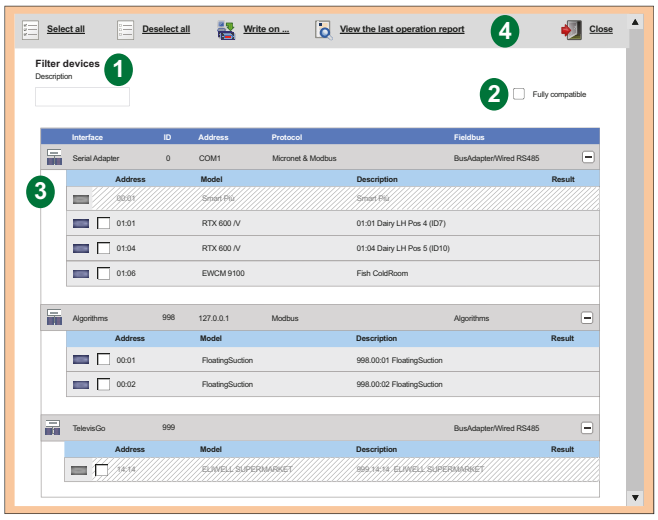
8.5.3. WRITING ON SEVERAL DEVICES

Referring to the screens shown in paragraphs:

- **“8.5.1. LIST OF DEVICE PARAMETERS” on page 99 or**
- **“8.5.2. LIST OF ALGORITHM PARAMETERS” on page 100**,

click **Write on ...** to access the selection page for the devices on which to write the parameter values entered on the previous page.

A screen like this will appear:



The various screen components are:

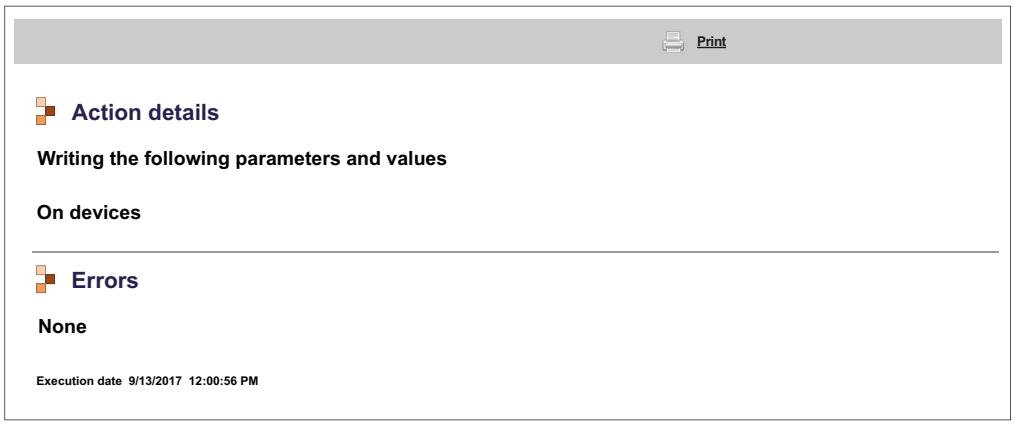
(1) Filter devices: used to filter devices by Description.

(2) Fully compatible: used to show only the devices that are perfectly compatible with the one you are starting from, in which the new parameter values have been entered.

(3) List of devices: shows the list of devices that can be selected, to which the parameter writing will be applied. The Televis**Go** and the reference device cannot be selected.

(4) Control bar: see **“5.8. BUTTONS and SELECTORS” on page 38**.

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



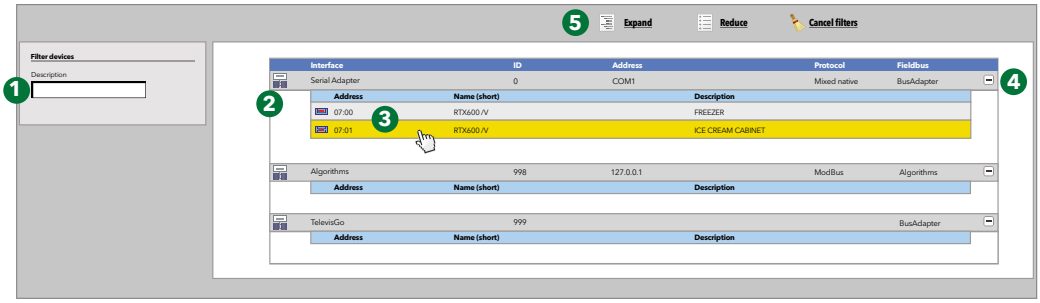
showing the last writing procedure carried out, on which devices and on which parameters.
Click **Print** to print the full report.

8.6. RVD

Go through the following menu sequence:

Tools → **RVD** (Remote Virtual Device)

The screen below opens:



The various screen components are:

(1) Filter devices: used to filter by device description.

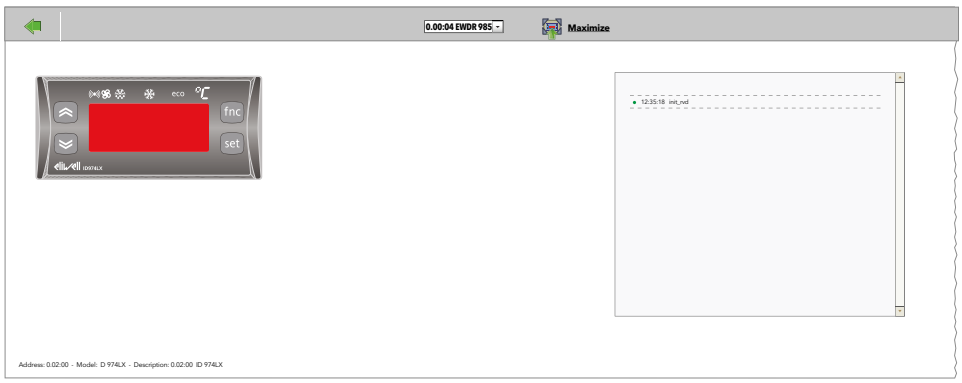
(2) List of devices: shows the list of devices in the network, grouped by interface. Only the devices in which the function exists and is enabled are shown.

(3) RVD access: click on the device row to access the corresponding RVD.

(4) Expand/Collapse: expands/collapses the list of devices for an interface.

(5) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

The screen will show a picture of the selected device:



The **Control bar** is at the top (see **"5.8. BUTTONS and SELECTORS" on page 38**).

The graphical representation is similar to how the actual device looks.
The various procedures carried out for the device on screen (pressing buttons, viewing active LEDs, etc.) will be the same as working on the device itself.

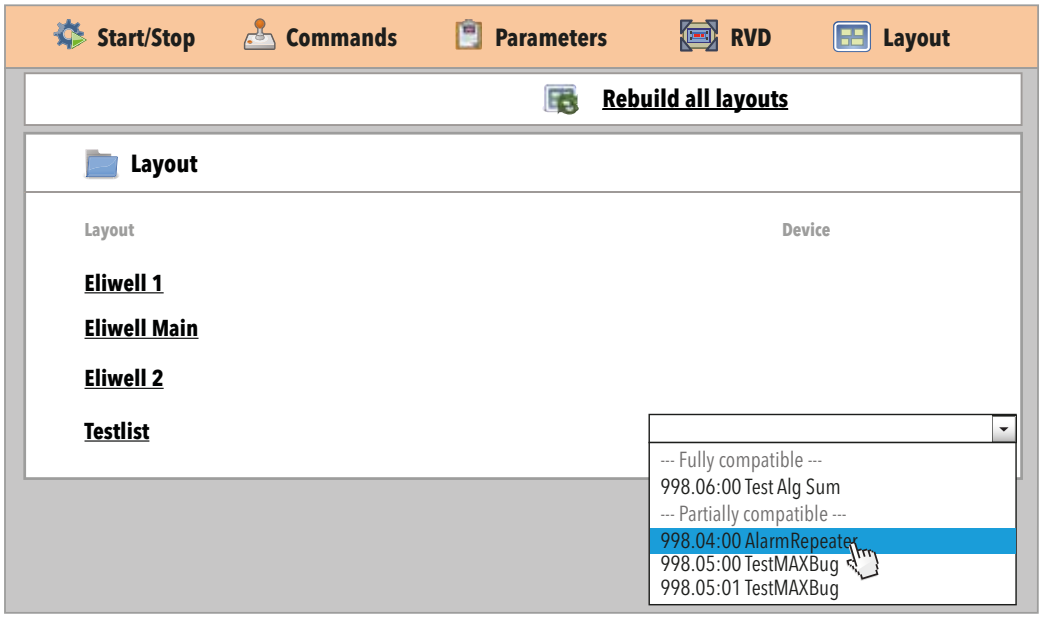
NOTE: The RVD function is only available on certain devices.

8.7. LAYOUT

Go through the following menu sequence:

Tools → Layout

The screen below opens:



Click **Rebuild all layouts** for:

- **Layout Designer on external computer**: only the list of layouts loaded on the system update page is updated:

  Computer → Upgrade → Plant → Layout pages

  Reload any new or edited layouts from the system update page.
- **Layout Designer preloaded on the** Televis**Go**: all layouts present will be updated (the Televis**Go** imports any changes made to a layout) and any new layouts will be loaded. In this case they do not have to be loaded using the system update page.

Click any of the names on the list to view the layout associated with it.

If the layout is parametric (only valid for devices which are the same, selected individually), there will be a drop-down list to the right from which the user will be able to select a device to view.

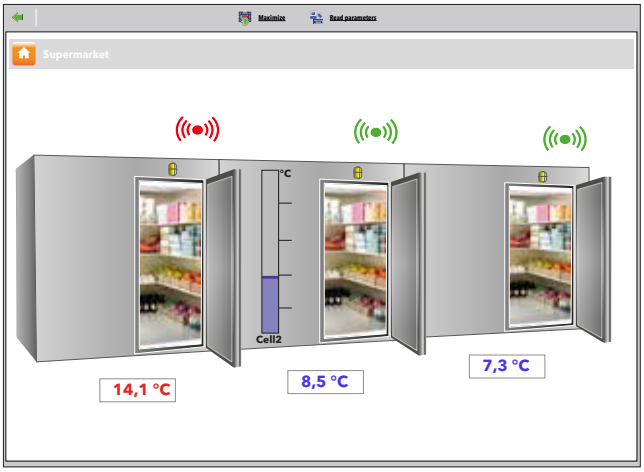
In the drop-down list, the devices will be grouped as indicated below:

- **Fully compatible:** devices shown at the beginning of the list, which have all the resources present in the layout.
- **Partially compatible:** devices shown at the end of the list, which have some of the resources present in the layout.
- **Incompatible:** devices which are not shown do not have any of the resources present in the layout.

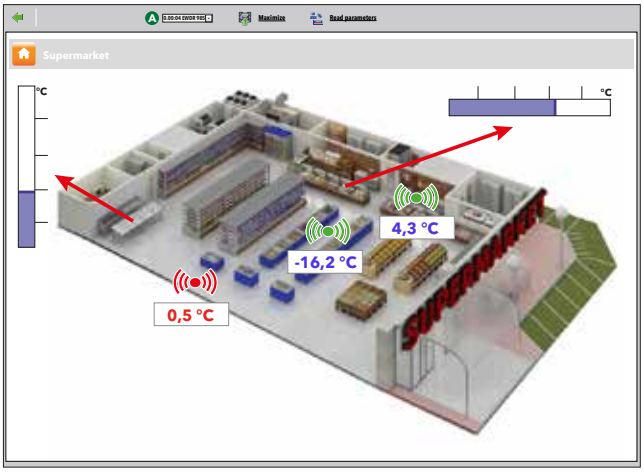
The same drop-down list will also be present within the layout screen and will allow switching from one device to another, simply by selecting it.

Click to return to the previous page and view the list of available layouts.

Example 1



Example 2 (parametric layout)



On the screens corresponding to general and parametric layouts, the **Control bar** is at the top (see **“5.8. BUTTONS and SELECTORS” on page 38**).

Automatic updating of the parameters only takes place when a Layout screen is opened. To update the displayed values manually, click **Read parameters**.

If you hover the mouse pointer over an object, a window containing its characteristics will appear.

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

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

NOTE: For further details regarding Layout creation/maintenance, refer to the manual:

9MA00237 MAN Layout Designer IT

CHAPTER 9
OFFLINE MODE

9.1. ENTERING OFFLINE MODE

Go through the following menu sequence:

Settings → Go to Offline Mode

A screen will appear, allowing you to set the following information offline:

- Interfaces
- Alarms
- Scheduled actions

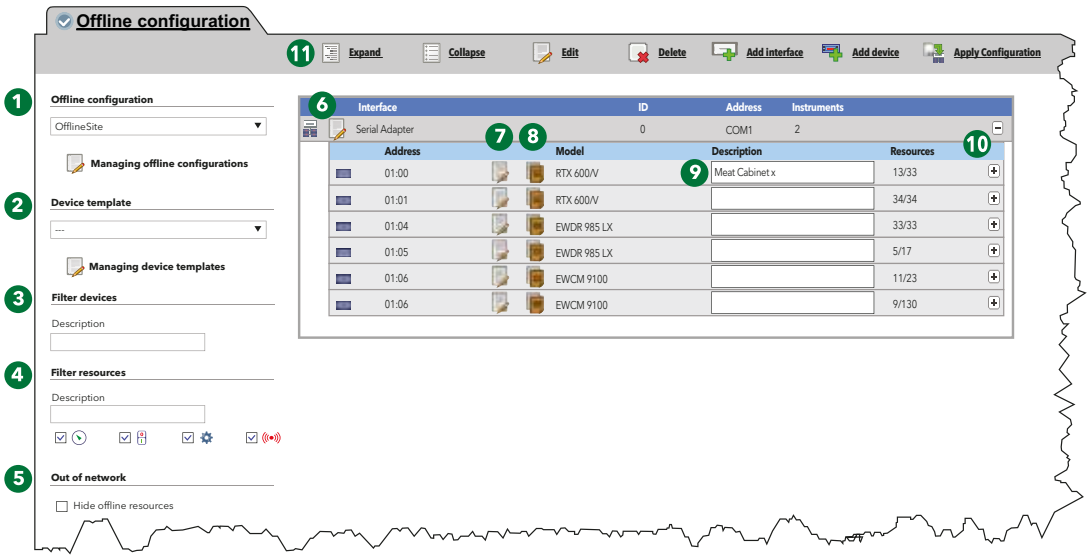
Once you have finished, click the **Exit Offline Mode** icon to return to the normal work environment.

9.2. OFFLINE CONFIGURATION

Go through the following menu sequence:

Settings → Interfaces → Offline configuration

A screen like this will appear:



The various screen components are:

(1) Offline configuration: used to load a configuration saved previously.

(2) Device template: drop-down menu which can be used to associate a previously created template to one or more devices in the network.
The button **Managing device templates** opens a new window which can be used to manage the templates (see **"6.2.1. MANAGING DEVICE TEMPLATES" on page 43**).

(3) Filter devices: filters the list of devices based on the text entered in the input box.

(4) Filter resources: filters the list of resources based on the text entered in the input box and on the type of resource enabled by ticking the check box for that specific resource.

(5) Out of network: can be used to display/hide the resources which have not been selected.

(6) : **Edit interface**: opens a new window which is used to edit the interface information (see **"9.5. OFFLINE ALARMS" on page 110**).

(7) : Edit: opens a new window used to edit the device information and, if necessary, create/edit templates
(see **"6.2.2. TEMPLATE MANAGEMENT" on page 44**).

(8) : Copy to: can be used to copy the settings of one device to one or more other similar devices.
(see **"6.2.5. COPY TO..." on page 46**).

(9) Description: name assigned to the device by the user.

(10) Resources: used to expand/collapse the list of resources for a device.

(11) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

The interface view shows the following information:

- **Address**: device address.
- **Model**: type of device used.
- **Description**: name of the device.
- **Resources**: number of resources present in the device.

Once the list of resources has been expanded, the following information will be displayed:

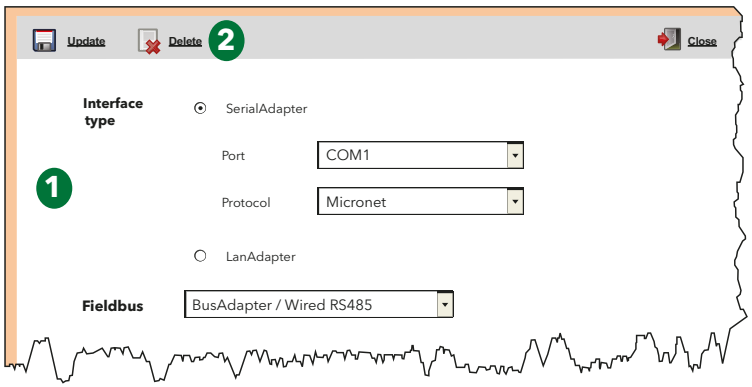
- **Description**: name of the resource; can be changed by the user.
- **Code**: code for the device resource (e.g.: ALM00300).
- **Chart**: color the resource will be when represented in chart form.
- **Delay (minutes)**: alarm activation delay in minutes.

All resources paired with each device are disabled by default.

9.3. EDIT INTERFACE

Referring to **"9.2. OFFLINE CONFIGURATION" on page 107**, click **Edit Interface**, to the left of the name of that interface, to manage the information for the selected interface.

A screen like this will appear:



The various screen components are:

(1) Interface information: list of information relating to the selected interface.
Used to edit and then save.

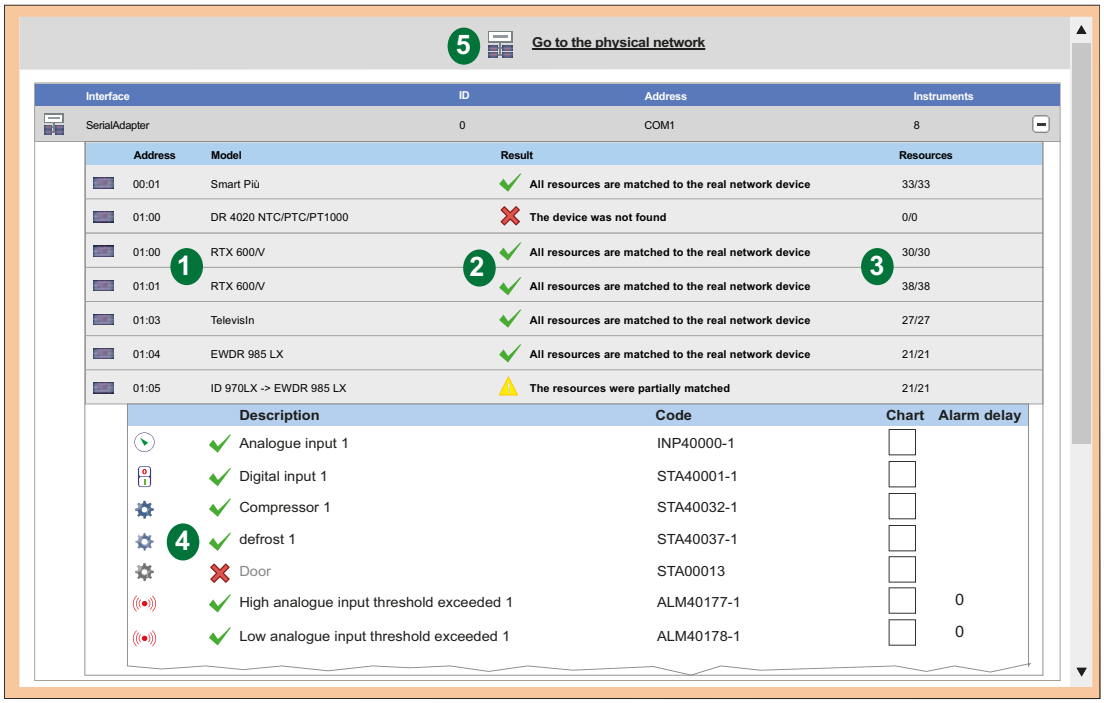
(2) Control bar: see **"5.8. BUTTONS and SELECTORS" on page 38**.

9.4. APPLY CONFIGURATION

Once the new device network has been configured offline, to apply it to the physical network, click **Apply configuration**.

The Televis**Go** will automatically begin scanning the network for devices configured with the set addresses. It ill work in the same way as described for the Network scan.
(see **"6.3.2. SCANNING THE DEVICE NETWORK" on page 49**).

Once the scan is complete, a screen similar to the one shown below will appear:



The various screen components are:

(1) Address and **Model**: pairs each device with the corresponding address.

(2) Result: shows the result of the scan. The result may be:

- ✔: All resources are matched to the real network device.
- ✖: The device was not found. Make sure the address and model are correct.
- ⚠: The resources were partially matched.

(3) Resources: Indicates the number of resources selected in relation to the total number of resources.

(4) Description: List of resources selected with an indication of whether they are matched or not:

- ✔: The resource was matched.
- ✖: The resource was not matched.

(5) Go to the physical network: returns the screen to the physical network display.
If some devices or resources are not found, they will also disappear from the physical network.

9.5. OFFLINE ALARMS

To configure the offline alarms, go through the following menu sequence:

Settings → Alarms

At this point it will be possible to configure alarm categories, actions and time intervals to apply to the alarms. Operation is the same as described previously for the Televis**Go**.

The following screens will then be available:

- **Summary**: list of categories for set alarms.
  (see **"7.4.1. GENERAL VIEW" on page 79**).
- **Alarm categories**: used to set alarm categories.
  (see **"7.4.2. ALARM CATEGORIES" on page 80**).
- **Actions**: used to set actions.
  (see **"7.4.3. ACTIONS" on page 81**).
- **Time intervals**: used to set time intervals.
  (see **"7.4.4. TIME INTERVALS" on page 83**).

9.6. OFFLINE SCHEDULED ACTIONS

To configure the offline alarms, go through the following menu sequence:

Settings → Scheduled actions

Operation is the same as described previously for the Televis**Go**.

The following screens will then be available:

- **Summary**: list of set scheduled actions.
  (see **"6.7.1. GENERAL VIEW" on page 65**).
- **Actions**: used to set the actions to be carried out.
  (see **"6.7.2. SCHEDULED ACTION MANAGEMENT" on page 66**).

CHAPTER 10
CONFIGURATION OF HTTPS PROTOCOL

10.1. CERTIFICATES

The image below shows an example of the structure of the "**Eliwell CA**" certificate installed on the Televis**Go**. It is a self-certification and by default is installed in the "**Trusted Root Certification Authorities**" folder of the Televis**Go**.



The Televis**Go** only works in **https** mode 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 you want to connect to the Televis**Go**. **NOTE**: the certificate is self-signed by Eliwell, it is not recognized by browsers and does not constitute a guarantee of security for the user.
   (see **"10.2. INSTALLING THE CERTIFICATE ON OTHER PCS" on page 112**).
2. By purchasing and installing a certificate recognized by browsers and issued by an Authorized Certificate Authority (Digicert, Verisign, etc.) on the Televis**Go**.
   (see **"10.3. INSTALLING A NEW CERTIFICATE" on page 113**).

10.2. INSTALLING THE CERTIFICATE ON OTHER PCS



At startup, the file **CertificateGo.cer** corresponding to the certificate will be generated in the Televis**Go** folder. (see **“10.1. CERTIFICATES” on page 111**).

In order to establish a secure remote connection with the Televis**Go**, as it is the “**Eliwell CA**” certificate self-signed by Eliwell and therefore not recognized by browsers, you will need to install that certificate on each machine you want to connect to the Televis**Go**.

To install it correctly, proceed as follows:

- Copy the file onto the machine on which you want to install the certificate.
- Double-click the certificate.
- In the window that opens, click “**Install Certificate…**” to launch the installation Wizard.
- Click “**Next >**”.
- Select “Place all certificates in the following store”.
- Click “**Browse...**” and search for the file “Trusted Root Certification Authorities”.
- Click “**Next >**”.
- Click “**Finish**”.

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

10.3. INSTALLING A NEW CERTIFICATE

If the customer decides to protect themselves further by having a Certificate signed by a recognized authority issued, to install it correctly on the Televis**Go** proceed as follows:

- Install the certificate issued by the authority on the Televis**Go**, in the “**Personal**” folder.
- Go to “**Start**” and then “**Run**”.
- In the text box, enter “**inetmgr**” and press enter.
- At this point the **IIS** interface will open.
- In the menu on the left, select (in sequence): **TelevisGo -> Sites -> ReverseProxy**.
- In the menu on the right, click “**Bindings…**”.
- At this point select “**https**” binding and click “**Edit**”.
- Finally, in the SSL certificate field, open the drop-down menu and select the newly-installed certificate, then click “**OK**”.

The certificate at this point is correctly installed and assigned to the Televis**Go**.

CHAPTER 11
LAYOUT DESIGNER

Layout Designer is a computer software application which allows offline configuration of the layout for networks of devices, for a graphical representation.

The user can create graphical representations (layouts) for his/her own network connected to the Televis**Go** in offline mode, i.e. from any computer, without having to connect to the network or the Televis**Go** itself.

Layout Designer actually uses an interface similar to that of the Televis**Go** and can be used to create graphical layouts of your system with the positioning of various devices, and to view the values of specific resources for specific devices in real time. The tool is preloaded on the Televis**Go** and therefore does not require installation.

It is also available form the Eliwell website, after you have registered and verified your email address. Register at **www.eliwell.com** to access the reserved area.

CHAPTER 12
SYSTEM UPDATING AND BACKUP

12.1. SYSTEM UPDATING

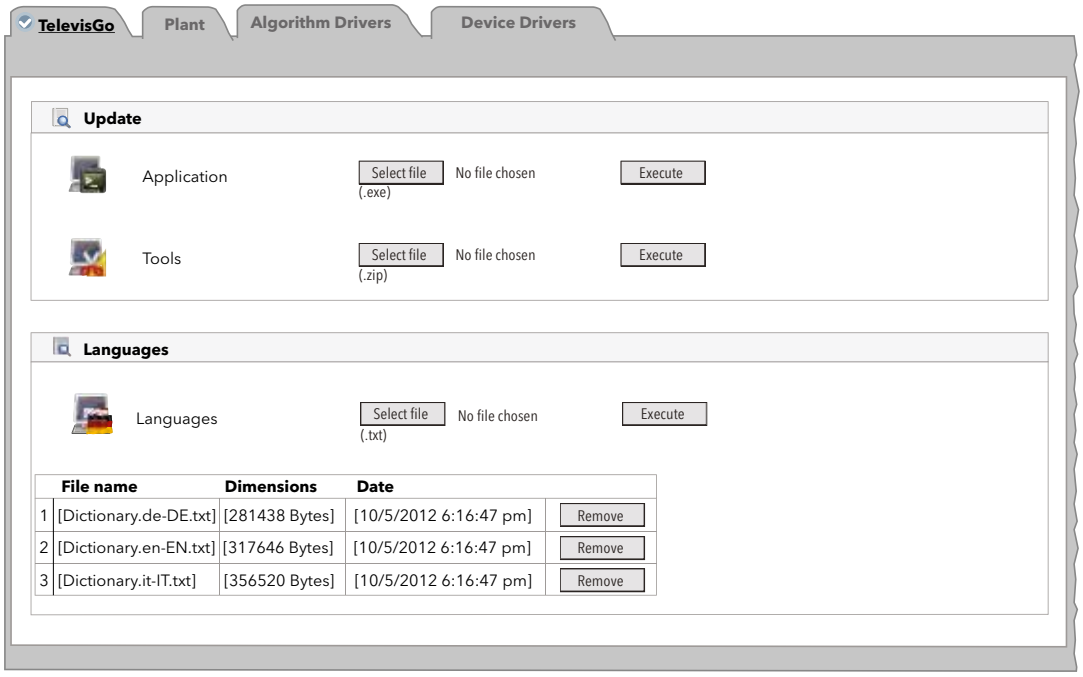
The system can be updated by loading the relevant update files.
Download the Televis**Go** update packages from the Eliwell website: **www.eliwell.com**.

12.1.1. TELEVISGO

To update the system, enter the following menu sequence:

Computer → Upgrade → TelevisGo

The screen below opens:



The following updates can be carried out within it:

- **Application**: updates the Televis**Go** Application.
- **Tools**: updates/loads the “Offline Configurator” and “Layout Designer” software applications.
- **Languages**: updates/loads the Televis**Go** system glossaries.

The application update package can be downloaded at **www.eliwell.com**:

1. It contains updates for the device drivers.
2. It does not contain dictionaries and customization files for notification messages (to prevent local changes from being overwritten).

Following an application (and therefore driver) update, the system may display the ⚠ icon to indicate that a network scan should be performed.

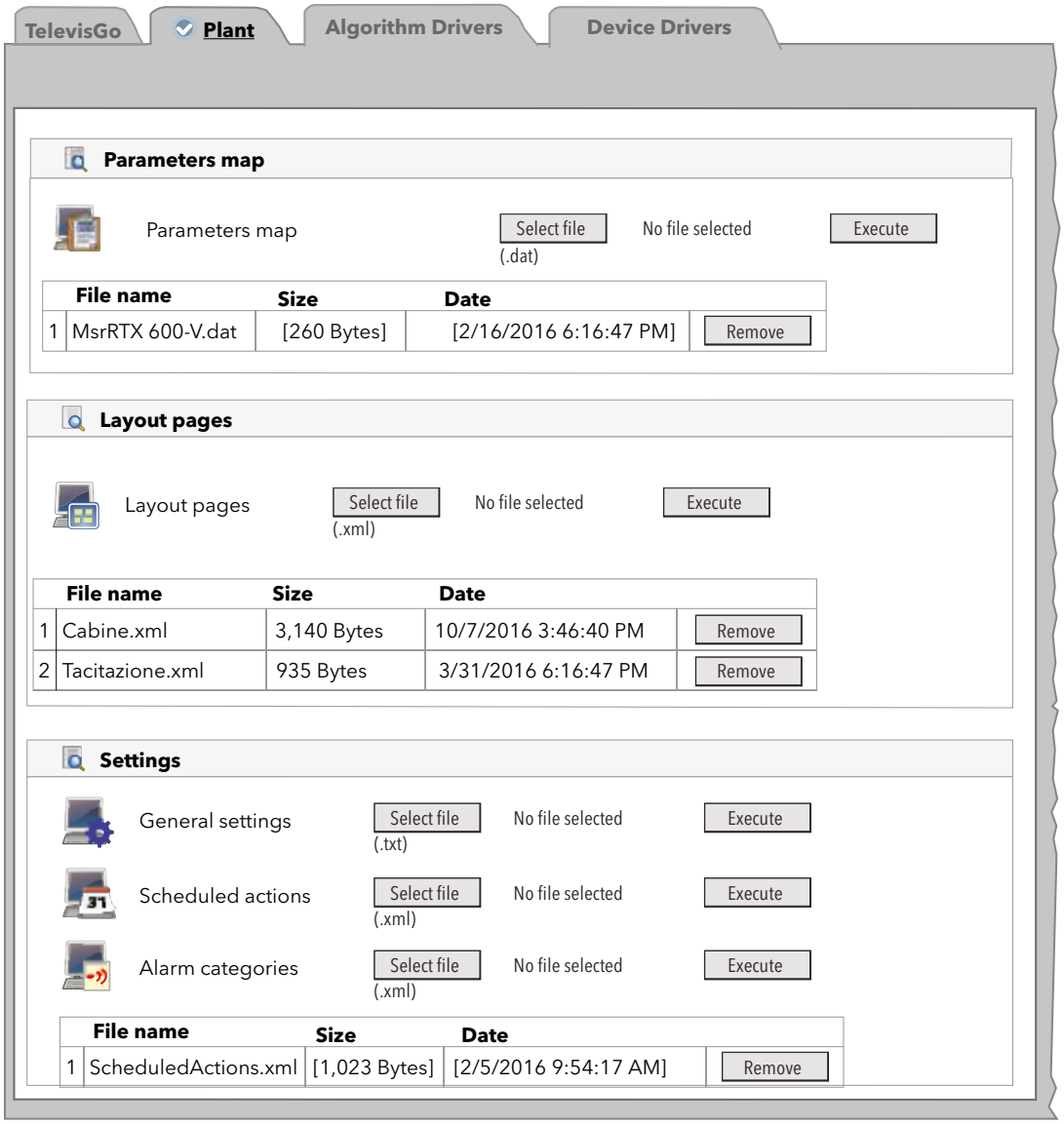
NOTE: If the driver for your device is not found, contact Eliwell Technical Support (Technical helpline: **+39 0437 986 300** - Email: **Techsupp@se.com**).

12.1.2. PLANT

To update the system, enter the following menu sequence:

Computer → Upgrade → Plant

The screen below opens:



The following updates can be carried out within it:

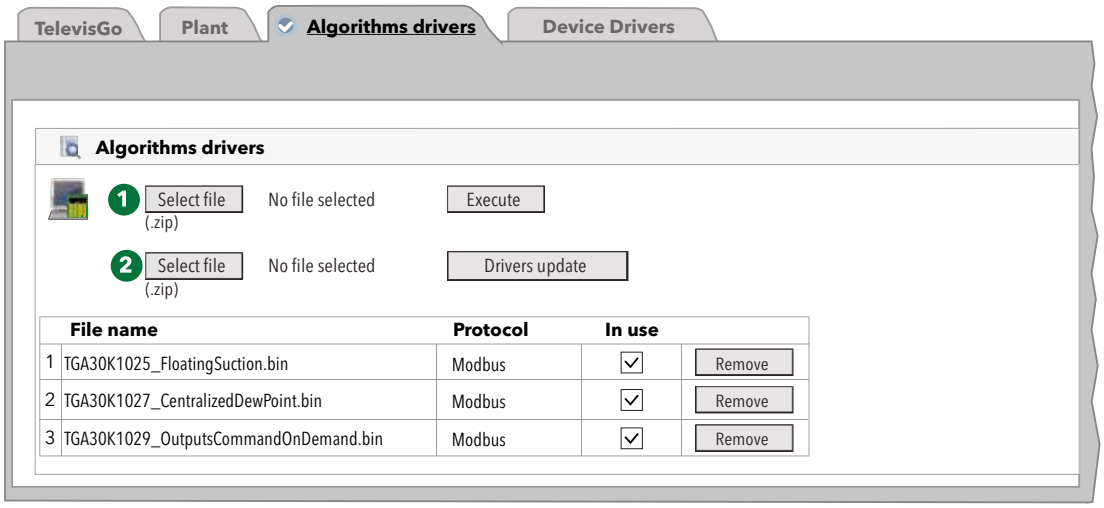
- **Parameters map**: loads a map to be used for scheduled actions.
- **Layout pages**: used to load one or more layout pages (see **“8.7. LAYOUT” on page 105**).
- **General settings**: the procedure uses the file “Forced_setting.txt”.

12.1.3. ALGORITHM DRIVERS

To update the algorithms, enter the following menu sequence:

Computer → Upgrade → Algorithm drivers

The screen below opens:



The following updates can be carried out within it:

Algorithms Drivers: Updates/loads the algorithms created with the FREE Studio programming environment.

To load a new algorithm, in **(1)** click **Select file** to select the file for the algorithm (format TGA30Kxxxx_NomeAlgoritmo.bin), then **Execute** to load it.

To update a previously loaded algorithm, in **(2)** press **Select file** to select the file for the algorithm, then **Drivers update** to update it.

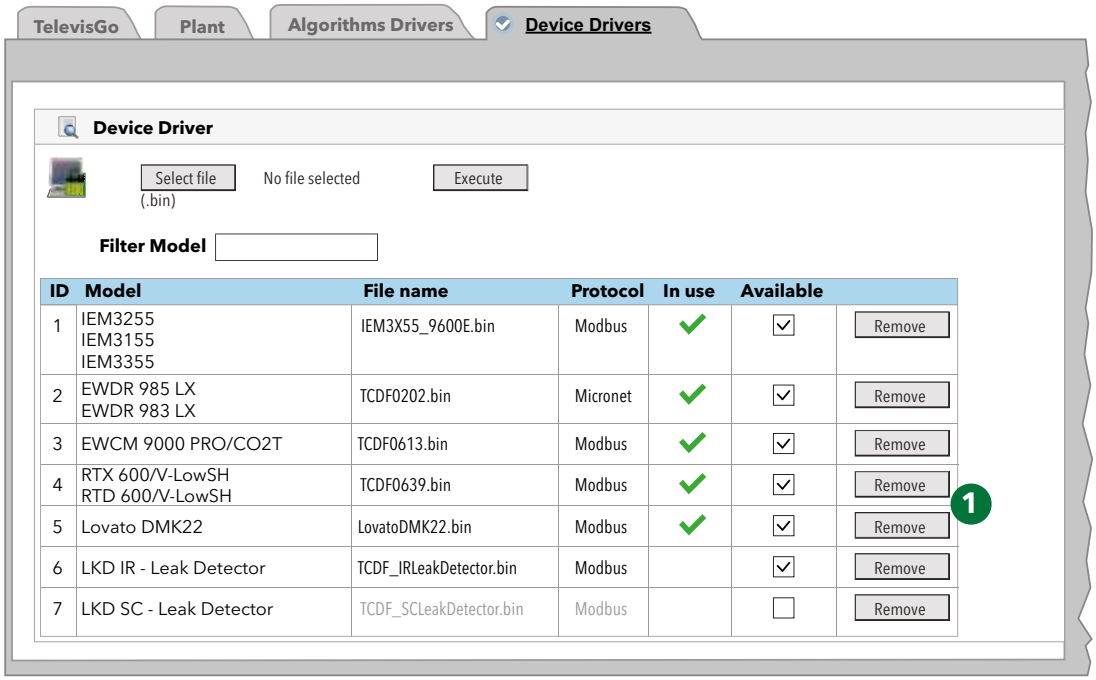
NOTE: If the driver for your device is not found, contact Eliwell Technical Support.

12.1.4. DEVICE DRIVERS

To update the device drivers, enter the following menu sequence:

Computer → Upgrade → Device drivers

The screen below opens:



The following updates can be carried out within it:

Device Drivers: used to load/update the driver for a device.

A driver update overwrites any existing driver.
Make a backup copy of the driver before carrying out the update
(see **"12.4. SYSTEM BACKUP/RESTORE" on page 119**).

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

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

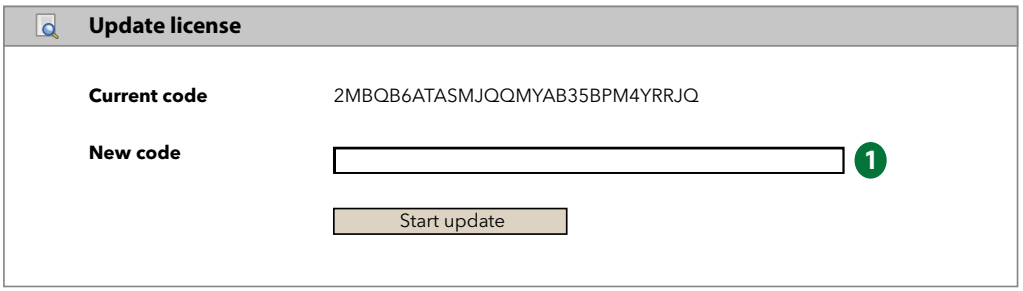
NOTE: If the driver for your device is not found, contact Eliwell Technical Support.

12.2. UPDATE LICENSE

The license can be updated if necessary (for example, to increase the number of devices that can be connected, or to activate additional functions). Go through the following menus:

Computer → Update license

On the screen, enter the "Current code" and the "New code" **(1)** provided by Eliwell and click "**Start update**". If the code entered is incorrect, an error message will appear.



12.3. REBOOT

After updating one or more of the Upgrader, Application, Tools, Languages, Algorithms, Drivers or License categories, the TelevisGo software must be restarted for the changes to become effective.

To do so, enter the following menus:

Computer → Reboot

and click **Reboot**.

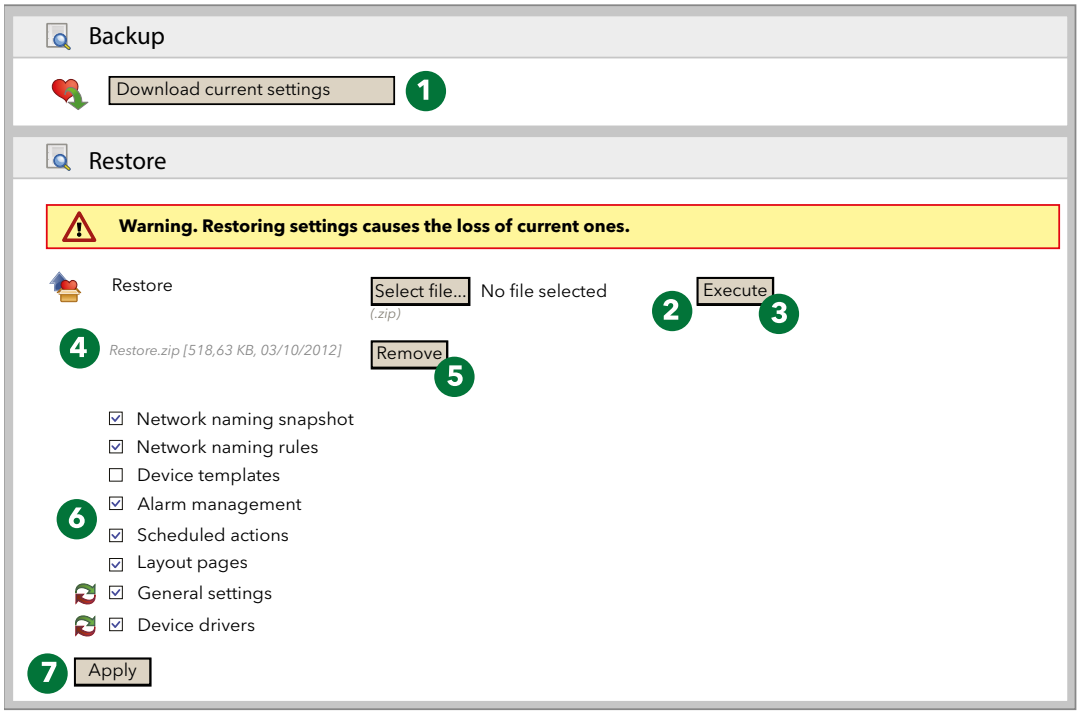
This procedure will disconnect the PC from the Televis**Go**. If the login page does not appear automatically within a few minutes, close the browser and then reopen it.

12.4. SYSTEM BACKUP/RESTORE

You can backup the system configuration.
Find the following menu:

Computer → Backup/Restore

The screen below opens:



BACKUP

If you click **Download current settings (1)**, a .zip file containing “Device templates” and “Scheduled actions” is created.

The user must archive the file created.

We recommend making a backup as soon as you have finished scanning and customizing the device network, configuring alarms and setting scheduled actions.

RESTORE

Restoring allows you to load a group of previously archived settings onto the Televis**Go**.

(2) Select file: will open a window used to select the backup file to restore.

(3) Execute: will activate loading of the selected file onto the Televis**Go**.

(4) Once loading is complete, the name, size and date of the backup file will be visible (but the restore process will not yet be complete).

(5) Remove: used to delete the file loaded previously.

(6) There are some check boxes above the **Apply** button **(7)**; the user can tick these to select which settings to restore.

(7) Apply: the Televis**Go** will be restored in accordance with the contents of the loaded file **(4)**.

In fact, the restore tool can be used to reapply backup functions on the same system or replicate information on different systems.

The restore process overwrites current system settings and cannot be reversed (the user is responsible for making a safety backup before continuing with the restore process).

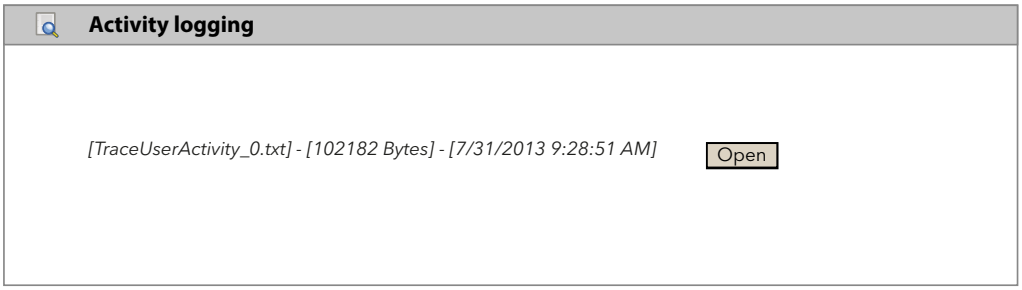
If the restore process concerns the network classification, make sure a network scan has been carried out.

12.5. ACTIVITY LOGGING

The Televis**Go** records the main procedures carried out by its users:

Computer → Activity logging

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



The activity logging text files belong to a group of files managed in a circular fashion (maximum 10 files), therefore the information is not infinite, but will be retained for a period of time that depends on the volume of user activity.
The language used to record data within these files is the system language.

Plus, to allow easier consultation as necessary, user activity tracing is also noted in the application tracing file in English.

The list of activities logged in the file is as follows:

- Login - AutoLogin - Logout
- Start / Stop data acquisition
- Start / Stop scheduled actions
- Execution of Commands
- Execution of Commands from Parameters page
- Parameter writing
- RVD access
- Network scan
- Saving new network configuration
- Editing and saving device names
- Editing and saving out of network devices
- Editing / creating / removing Alarm actions
- Editing / creating / removing Intervals
- Editing / creating / removing Scheduled actions
- Editing and saving System name
- Updating: updating files in pages
    - Updating the Computer
    - Backup / Restore
    - Classification
    - Device templates
    - Drivers
- Restart
- Updating: removing files
    - Application
    - Classification rules
    - Updating
    - Dictionaries
    - Drivers
    - Scheduled actions
    - Layouts
    - Parameter map file
- Updating license
- Settings backup
- Settings restore
- Editing and saving:
    - General settings → System
    - General settings → TelevisTwin
    - General settings → Alarms
    - General settings → Media
- Editing and saving
    - Data archive → Control
- Editing and saving
    - Data archive → Management
- Editing and saving
    - Computer → Information → Network settings.

CHAPTER 13
ADMINISTRATION TOOLS

13.1. RESTORE DISK IMAGE

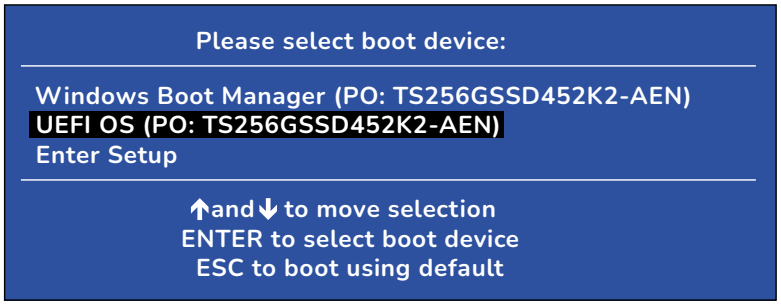
This function is used to restore the installed software and operating system in the event of:

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

The procedure will remove all information stored on the hard disk: software, data and settings for the Televis**Go**.

To proceed, you need to:

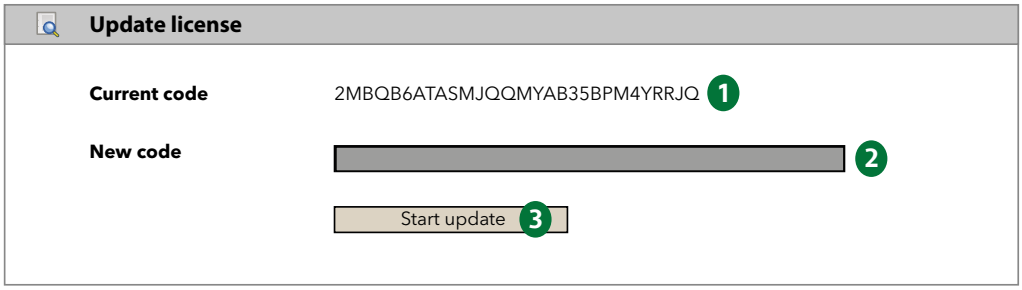
1. Add an empty file to the "**C:**\" system and name it **enablerestore**
2. Restart the Televis**Go**
3. During restart, press F7. A screen like this will appear:



4. Use the Up/Down arrows to select "UEFI OS (PO: TS256GSSD452K2-AEN)" and press ENTER
5. In the following window, enter "eliwell" as "username" and press ENTER
6. Subsequently enter "eliwell" as "password" and press ENTER
   The window does not show the entering of the password
   Note: **The procedure will take 10/15 minutes.**

When the system restore is complete, enter the menu:

Computer → Update license



a. Send an email to Eliwell Technical Support (techsuppeliwell@se.com) with "TELEVISGO LICENSE" as the message Subject. Indicate the product code and the ID code **(1)** for calculation of the new license code and the type of license to be activated (LE or standard), plus the size.
b. Eliwell Technical Support will email you the new license code to enter in the gray text box **(2)**.
c. Click "Start update" **(3)**.

NOTE: The factory settings may contain old versions of the software and/or the operating system, verify if it is necessary to proceed with their update.

13.2. DOWNLOAD FILE

You can download a .zip file containing information regarding the system status and its configuration, in order to diagnose any problems.

To do so, simply open a browser and type:

https://<TelevisGo address>/debug.rix

The address of the Televis**Go** is the one used during normal usage of the user interface (e.g.: 192.168.1.50).

The user can load the files onto the Televis**Go** using FTP or Remote Access communication.

CHAPTER 14
REMOTE DATA ACCESS PROTOCOL

14.1. DATA PROTOCOL

The Televis**Go** allows third-party customers to extract data stored in their own archives and to carry out remote procedures on the system using a TCP/IP communication protocol.
For more information, contact Eliwell Technical Support.

NOTE: The information are available in English only.

CHAPTER 15
FREQUENTLY ASKED QUESTIONS

15.1. FAQ

- **Function busy message**: to avoid locking Televis**Go** functions, always use the logout button to exit the application. If you do not, the functions that were in use will remain locked until the work session expires (20 minutes) and prevent use by any other operators.

- **Device descriptions**: the pages used to select devices/resources for accessing the various system functions (parameters, RVD, etc.) offer the option of applying filters, which act upon the “Description” of the device/resource.
  To make selection using filters easier, we recommend assigning descriptions that are easy to recognize.
  A device naming system such as the following:

  - Frozen food cabinet **1**
  - Frozen food cabinet **2**
  - ⋮
  - Frozen food cabinet **n**
  - Vegetable display **1**
  - Vegetable display **2**
  - ⋮
  - Vegetable display **m**
  - Positive temperature control unit
  - Negative temperature control unit

  allows easy identification of all devices within a group (e.g.: frozen food cabinets) simply by typing the string “**frozen food**” into the filter (or control units can be searched using the string “**Control unit**”).
  The same concept extends to the naming of individual device resources/alarms.

- **Alarm detail: why do I see an action when the alarm is triggered but not the action associated with the alarm reset?**
  This happens when an category or action connected to that alarm management category is removed. The system can no longer carry out the action associated with the resetting of that alarm.

- **Why does the system carry out an action associated with the alarm category even if it is outside the validity period?**
  This happens if an alarm instance begins within a validity period.
  Management continues even when the alarm is reset, even if this is outside the validity period.

- **Why are some strings missing sometimes, after updating the drivers?**
  This happens because the dictionaries are not updated when the drivers are updated.
  To update the dictionaries, visit the updates page and update the dictionaries (see “Updates” section).

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