

ELENOS ETHERNET CONVERTER E.BOX



Rev. 01- 16/02/2011
Cod. MAN1005UUK

ELENOS®
broadcast @xperience

USER MANUAL



Operative Office : via G. Amendola 9, 44028 Poggio Renatico (Fe) ITALY
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E-mail for general information info@elenos.com

E-mail for support support@elenos.com

Or via Website :

www.elenos.com (in On line Support page)

Please, always you give us information about the device serial number (shown on the identifying label).

Elenos s.r.l. declares that the equipment in this documentation complies with 1999/05/CE Directive.



For details see "CE Conformity" Section.

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Revision

N°	Date	Description
00	25/01/2011	First release
01	16/02/2011	Delete paragraph of function not still implemented. More details in Web server paragraph.

Family variants

Elenos Ethernet Converter module is configured to be associated with transmitters, excitors, amplifiers, systems, exchange unit and telemetry unit.

There is a compatibility with main variables (eg, forward power, reflected power, ON/OFF, fault, etc.), that allows at the modem to be interchanged between the various types of equipment.

It's available a "base" version, with minimum functionality guaranteed.

Then it's possible to add a variety of packages that provide more advanced functions and/or more robust and sophisticated functions.

Update packages are available for customer.

1 Information note	7
1.1 Operating Staff	7
1.2 Responsibility	8
1.3 Warranty	8
1.4 Jurisdiction	8
2 CE conformity	9
3 Security	11
3.1 Precautions	11
3.2 First aid	13
3.2.1 Treatment of electrical burns	13
3.2.1.1 Major burns and cuts	13
3.2.1.2 Less severe burns (1st and 2nd degree)	13
3.2.2 Treatment of electric shocks	13
3.2.2.1 If the casualty has lost consciousness	13
3.2.2.2 If the casualty is conscious	14
4 General information	15
4.1 Intended use	15
4.2 Shipment	18
4.3 Storage	18
4.4 Off line and disposal	18
4.5 Purchased product verification	18
5 Product description	19
5.1 Device presentation	19
5.1.1 Connections	19
5.1.2 Buttons	21
5.1.3 Leds	21
5.2 Marks and labels	21
5.3 Configuration and access mode	22
5.3.1 Access via SNMP browser	23
5.3.2 Access via Web browser	25
5.3.2.1 Login screen	26
5.3.2.2 Monitor screen	27
5.3.2.3 Settings screen	29
5.3.2.4 Users screen	30
5.3.2.5 Password screen	31
5.3.2.6 System screen	32
5.3.2.7 Firmware screen	34
5.4 Technical brochure	37

1 Information note

Dear Customer,

thank you for choosing an Elenos product.

Elenos s.r.l. realizes solid state Transmitters for broadcasting radio in the VHF FM ranging from a minimum power of 10W to a maximum of 30kW, Exchange Unit, Remote Control Units, etc..

The product is designed to ensure good performance over time, provided periodic checks and the required simple maintenance are carried out.

The use is very easy and intuitive. Nevertheless it is recommended to carefully read this manual and its attachments, before performing any operation.

ELENOS s.r.l Management

1.1 Operating Staff

This manual is a part of the product and **must be easily found by staff with the task of installation, operation and maintenance.**

Device installation, operation and maintenance must be **allowed exclusively to trained and qualified person**, who be aware all risks related to the fact of working with an equipment connected to dangerous power lines, employing high voltages, which generates high-power radio frequency.

This manual is not a security rules complete collection, but at **the user is required to know the contents of this document and its annexes.**

This product must be used only by holders of Government Grant and is subject to National Regulations.

AVISO IMPORTANTE

Il presente apparato è utilizzabile solo da
titolari di Concessioni Governative
e/o Autorizzazioni Ministeriali

Elenos Srl

WARNING

The use of this device
is subject
to National Regulations.

Elenos Srl

1.2 Responsibility

Elenos is not responsible for damage or injury to objects or to people if caused by improper procedures or actions conducted by users not sufficiently trained or without experience.

Descriptions and illustrations contained in this publication are not binding: without prejudice to the product essential characteristics described, Elenos reserves the right to make changes to parts, accessories and details that it deems necessary for the improvement of equipment, or for manufacturing or for commercial requirements, at any time, without warning and without promptly update this publication.

1.3 Warranty

Elenos products are covered by warranty. With the order confirmation or the purchase you agree to the terms and conditions thereof.

The warranty excludes faults caused by lightning, power supply voltages wrong, negligence, incompetence or abuse by the user, from tampering or repair by unauthorized people, and uses other than those for which they sold the equipment . The warranty is excluded for damage by fire, acts of war and unrest.

The warranty does not cover in any case the risk arising from transport.

1.4 Jurisdiction

We inform you that, in case of litigation, the jurisdiction court is the Ferrara Court.

2 CE conformity

Elenos follows, to the marketing of all its products, **the Directive 1999/5/CE**.

This means:

- Technical file, made available, exclusively at the Control Authority, for 10 years after the last sale on the market of that product type. This file contains the product description, drawings, wiring diagrams, circuits, etc., standard and technical solutions list that ensure compliance, test reports, manufacturing process warranty.
- Declaration of Conformity, supplied with the product.
- CE marking is affixed to the product and to documentation.
- Technical opinion, in writing issued, by an European Notified Body, included in the Technical Dossier.
- Notification to the member countries where to distribute the product.

Elenos products meet the essential requirements of standard:

- a) user or any other person health and safety protection, including the objectives with respect to safety requirements prescribed by law October 18 1977 n. 791, amended by Legislative Decree 25 November 1996 n. 626, but without application of voltage limits;
- b) the requirements for protection as regards the electromagnetic compatibility, provided by Legislative Decree 12 November 1996 n. 615;
- c) radio equipment in compliance with national frequency allocation, are built to effectively utilize the radio spectrum allocated to land and spatial and orbital resources, so as to avoid harmful interference;
- d) are also essential requirements those set by the European Commission providing, for the devices within certain categories or particular types, the requirement of the construction so as to:
 - interact via networks with other devices and can be connected to appropriate interfaces;
 - not harm the network or its operation and do not use wrong network resources, thereby causing an unacceptable degradation of service;
 - contain security features to ensure privacy and personal data protection of user and subscriber;
 - supports certain features ensuring avoidance of fraud;
 - supports certain features ensuring access to emergency services;
 - supports certain features that facilitate their use by disabled users.

EC Declaration of Conformity
According to Directive 1999/5/EC (R&TTE)



We : ELENOS s.r.l. - via G.Amendola, 9 – 44028 Poggio Renatico (FE) - Italy

Declare under our sole responsibility that the product:
Elenos Ethernet Converter

With intended purpose: network interface for broadcast VHF transmitters
And manufactured by: ELENOS s.r.l.

To which this declaration relates is in conformity with the essential requirements and other relevant requirements of the
R&TTE Directive (1999/5/CE).

The product is in conformity with the following standards and/or other normative documents:

Health and safety requirements

Standards applied: EN60950-1:2006+A11:09; EN62311:2008

Protection requirements concerning electromagnetic compatibility

Standards applied: EN55022:2006+A1:07; EN55024:1998+A1:01+A2:03

Supplementary information :

Notified body involved: Nemko AS

Technical file held by : Elenos s.r.l and Nemko AS

Place and Date: Ferrara January 10, 2011

Responsible person : Leonardo Busi (Amministratore unico)

Tel. +39 0532 829965

e-mail: leonardobusi@elenos.com

Signature:

A handwritten signature in black ink, appearing to be 'Leonardo Busi', is written over a circular official stamp. The stamp contains text that is partially obscured but appears to include 'ELENOS S.R.L.' and 'Poggio Renatico (FE)'. The signature is written in a cursive style.

3 Security

Elenos products meet the safety standards required for this type of equipment.

3.1 Precautions

However, the user must also observe the precautions listed below:



- Original equipment configuration must not be altered. Upon receipt it you must check that it correspond to the order and in case of non-compliance you must immediately inform Elenos.
- Before starting a maintenance work, the equipment must be isolated from the network.
- The equipment should operate only at expected voltage. Incorrect voltage can cause irreparable damage to the equipment and operator. That statement is on the label of the product, usually located in the wrapping. This should not be removed for any reason, even if the equipment was resold.
- The equipment must be powered by an electrical system that is in compliance with all standards.
- Do not place the unit near heat sources, near flammable materials.
- You must observe the rules relating to fire and security of the station.
- To avoid contamination by liquids. For cleaning to disconnect the power supply. Do not use liquid or spray cleaners.
- Some components contain TOXIC SUBSTANCES, including BERYLLIUM OXIDE. Be careful because some countries may have rules governing the storage and disposal of dangerous materials.
- If after an inspection some component is damaged or broken, you must proceed with caution to any physical contact with hands or otherwise.
- You must ensure that any person who uses a device with dangerous voltage knows artificial respiration and cardiac massage, and you must train users on first aid in case of need. In station with electrical equipment you should hang in a visible position instructions of the phases of assistance to persons involved in an accident and equip the station of a first-aid kit. It is advisable to have a plan of action for any operations connected to the emergency, public or private, institutions, that are readily available to all persons in the room.

3.2 First aid

This paragraph is NOT a complete guide to first aid procedures, but only a summary that can be used as a reference.

It is the responsibility of all personnel who use this equipment to be ready to administer adequate first aid and thus prevent avoidable loss of life.



3.2.1 Treatment of electrical burns

3.2.1.1 Major burns and cuts

- Cover the area with a clean cloth.
- Do not burst blisters, remove clothing and any particles of clothing that may be stuck to the skin. Apply a suitable cream.
- Treat the casualty according to the type of shock.
- Get the casualty to hospital as quickly as possible.
- If arms or legs have been affected, hold them in an elevated position.

WARNING:

If medical assistance is not available within one hour, and the casualty is conscious and is not trying to vomit, to give them a solution of salt and soda: 1 full teaspoon of salt and half teaspoon of bicarbonate of soda (sodium bicarbonate) for every 250 ml of water (neither hot nor cold). To allow the casualty to sip slowly 4 times (1/2 glass) over a period of 15 minutes.

Stop if the casualty was vomiting. Do not give alcohol.

3.2.1.2 Less severe burns (1st and 2nd degree)

- Apply a cold (not freezing) gauze, using a cloth which is as clean as possible.
- Do not burst blisters, remove clothing and any particles of clothing that are stuck to the skin. Apply a suitable cream.
- If necessary, give the casualty clean and dry clothing.
- Treat the casualty according to the type of shock.
- Get the casualty to hospital as quickly as possible.
- If arms or legs have been affected, hold them in an elevated position.

3.2.2 Treatment of electric shocks

3.2.2.1 If the casualty has lost consciousness

Lay the casualty on his back on a rigid surface.

A) Air ways (fig. a) :

- if unconscious, open the airways
- push back the forehead
- if necessary open the mouth
- check the breathing

fig.a



B) Breathing (fig. b) :

- if not breathing, start artificial respiration
- incline the head
- close the nostrils
- apply mouth to the casualty's mouth
- perform 4 quick respirations
- remember to start breathing again immediately

fig.b



fig.c1



fig.c2



fig.c3



C) Circulation (fig. c1) :

- check the heart beat (fig. c1)
- in the absence of a heart beat, start cardiac massage (fig. c2)
- press the sternum every 1.5 - 2 seconds
- if there is one first aider, perform 15 compressions in about 80 seconds and 2 quick respirations.
- if there are two first aiders, perform 5 compressions in about 60 seconds and one respiration (fig. c3)

WARNING :

Do not interrupt the rythm of cardiac compression when the second person is performing artificial respiration.

3.2.2.2 If the casualty is conscious

- cover the casualty with a blanket
- ensure the casualty is calm
- loosen clothing and lay the casualty flat

WARNING:

IN ANY CASE CALL A DOCTOR IMMEDIATELY

4 General information

4.1 Intended use

The object of this documentation is an Ethernet modem that is the aim to be a bridge between the Elenos bus EIA485 and the Ethernet networks.

For equipment we intend transmitters, exciters, amplifiers, systems, exchange unit and telemetry unit.

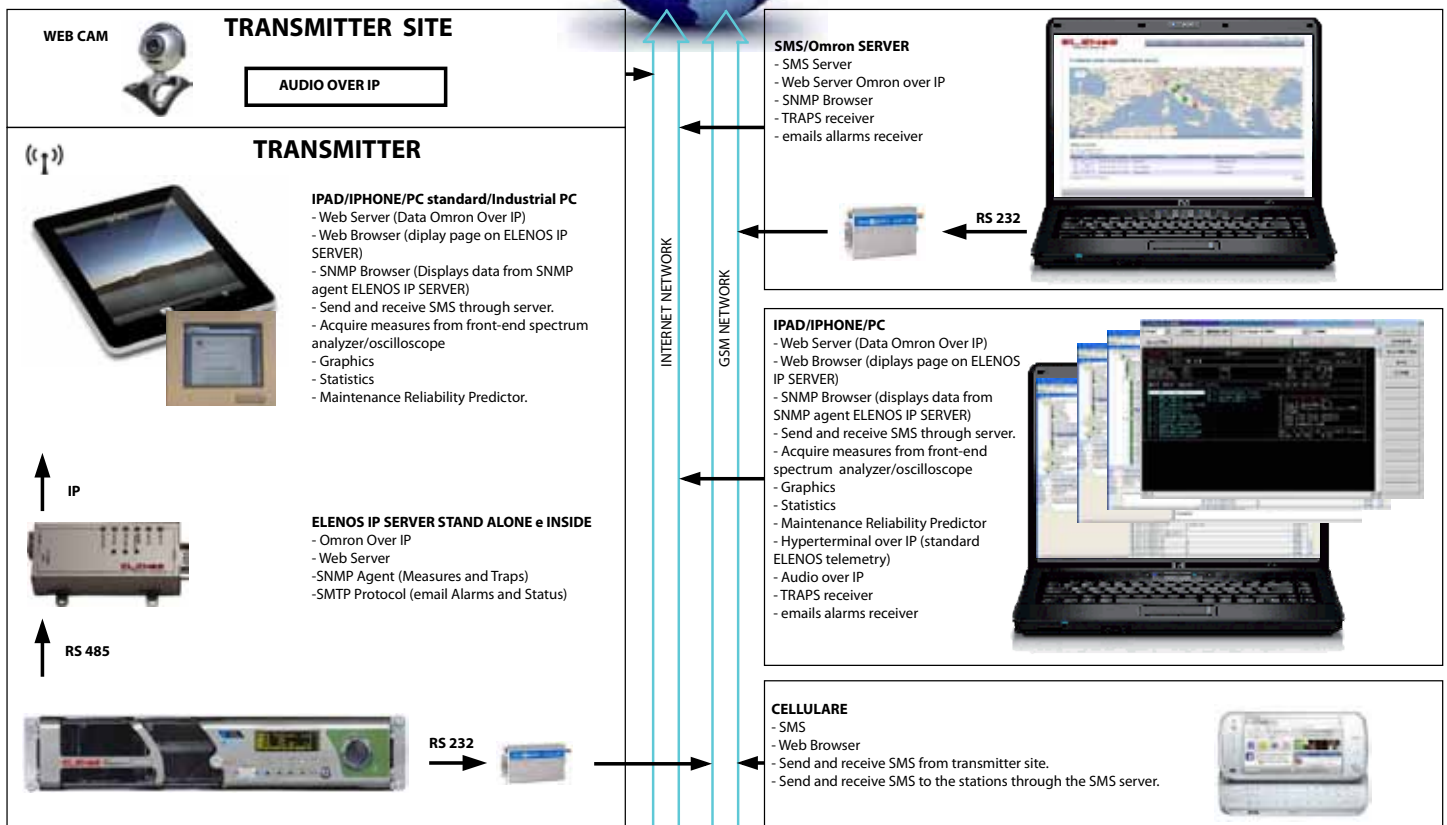
This device would be incorporated in the future into a larger network with the aim to provide a system for monitoring and managing globally and totally the equipment, to be carried out easily using tools such as phone, IPAD, iPhone, PC.

In a small container, size of 105.5x47x22.5 mm, an electronic board is housed with functionality of Hostlink Protocol, Web Server, SNMP Agent (measurements and alarms), SMTP protocol (e-mail for alarm and machine status) .

The unit is powered by an external source with voltage between 9V and 28V, and it consumes less than 2.5 W.

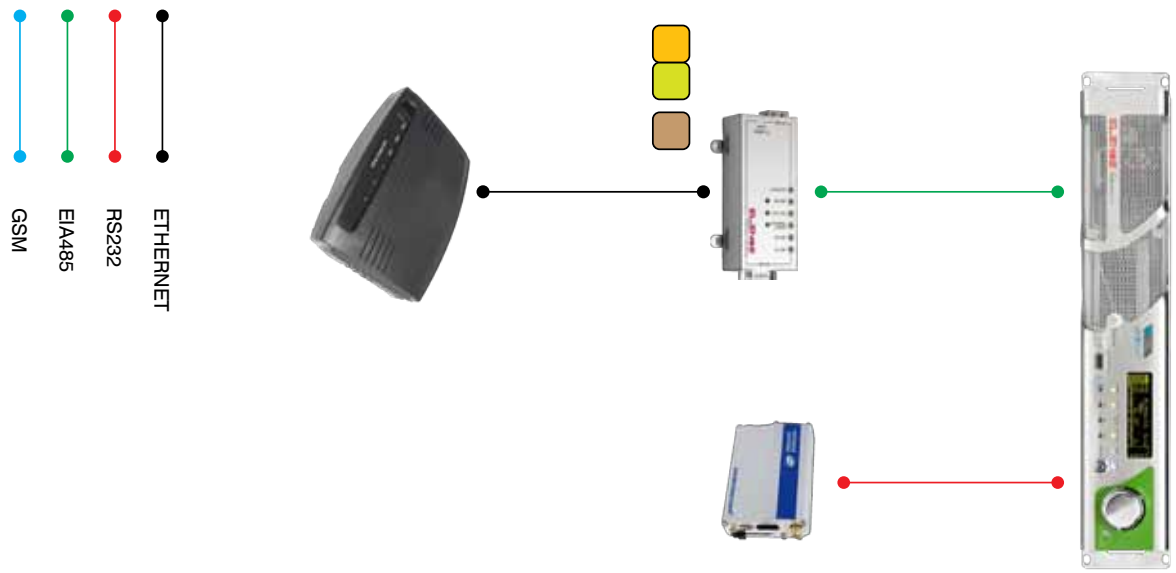


WORLD WIDE NETWORK MANAGEMENT

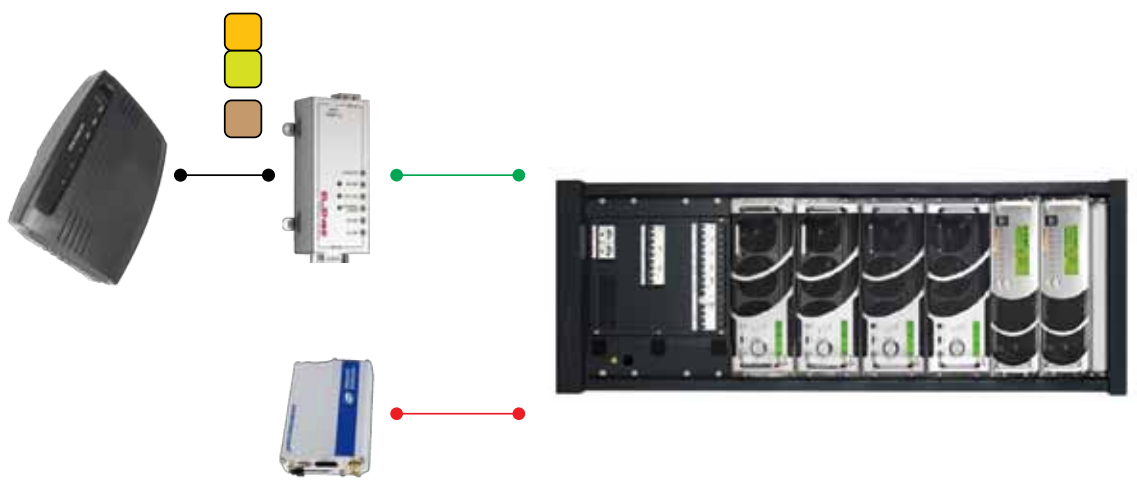


Below there are examples diagrams of possible configurations in which the unit can be inserted.

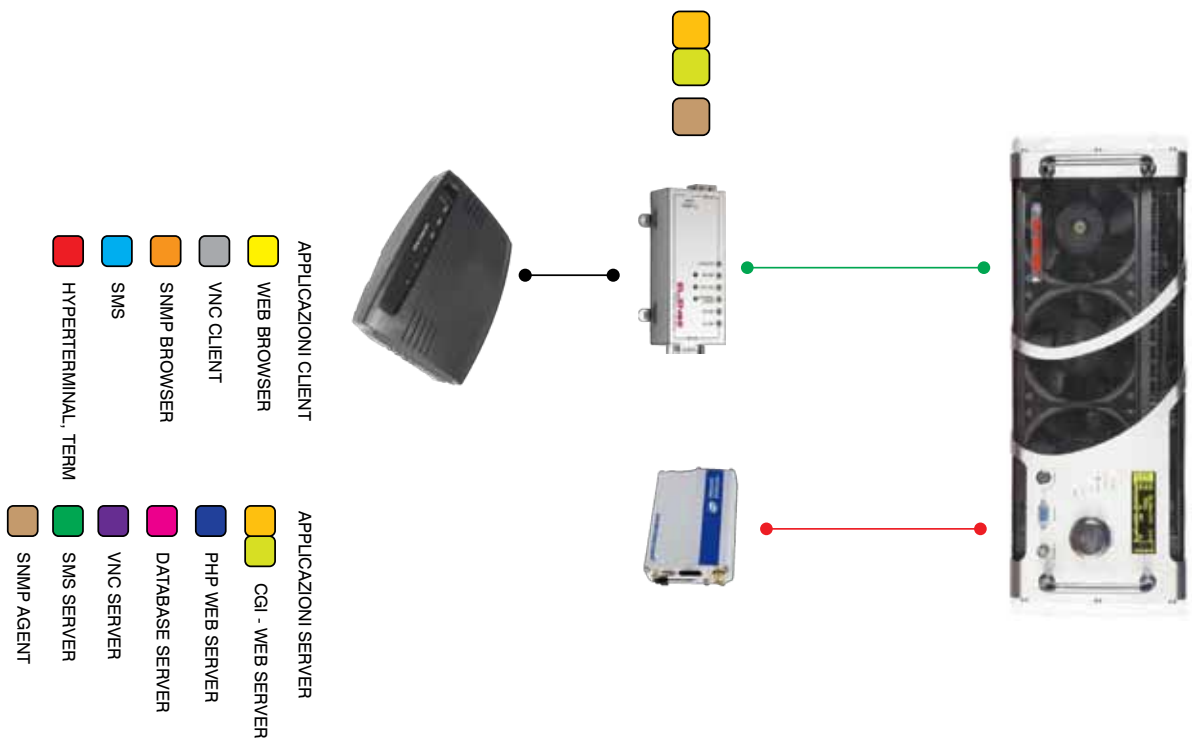
Transmitter connection

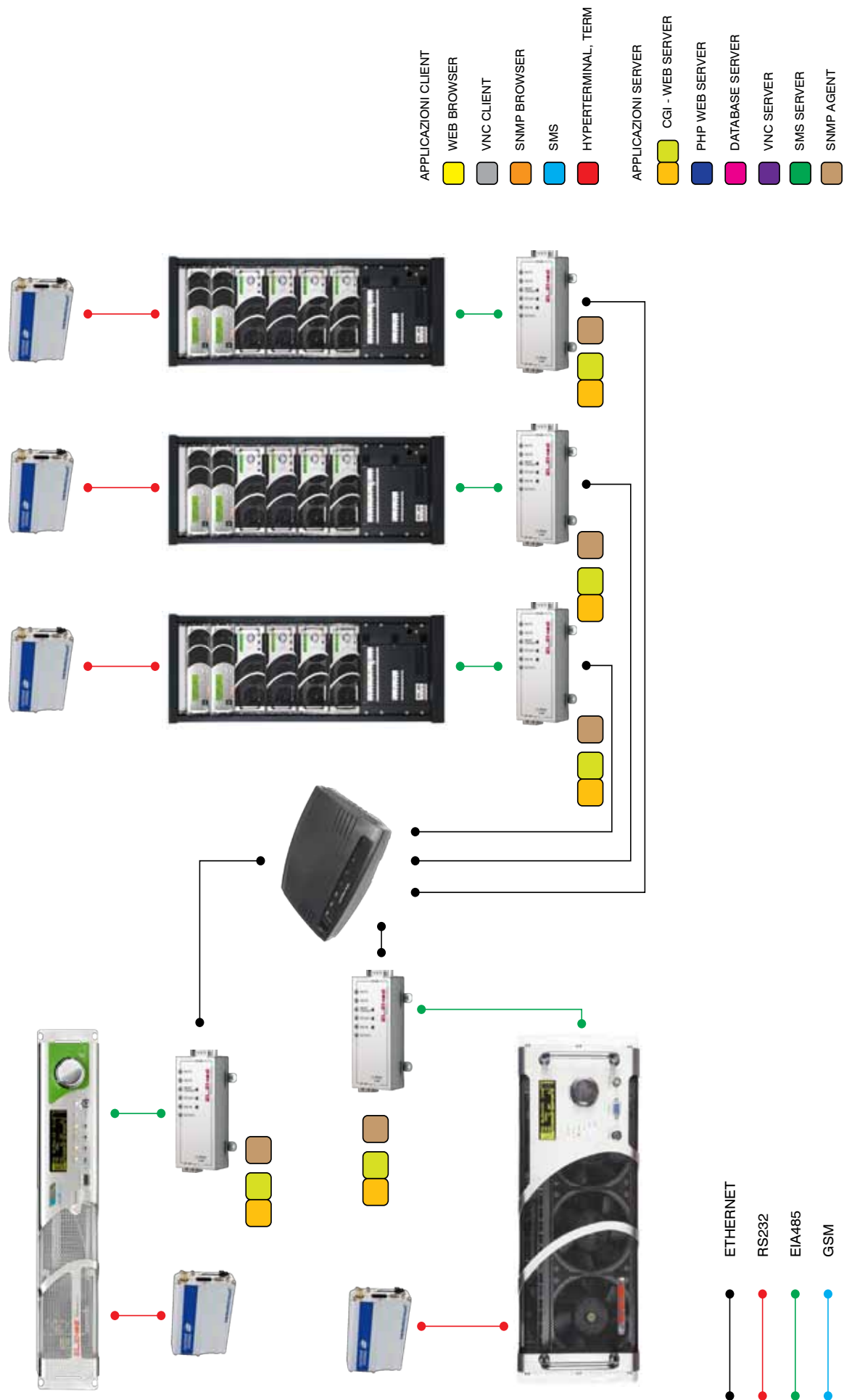


Combined transmitter connection



Amplifier connection





4.2 Shipment

The shipment may only be performed in its original packaging.

4.3 Storage

If you wish, for whatever reason, store the product it is necessary that:

- the temperatures, in the storage, are not exceeded -20° - $+55^{\circ}$ C, with humidity not exceeding 90% at 55° C;
- the equipment must be disconnected from the sources of energy;
- the equipment is clean and there are any dust;
- the equipment is covered with a waterproof sheet.

4.4 Off line and disposal

For all aspects concerning the product disposal, reference should be made the specifications required by European Directives.

However, please note that **the equipment DOES NOT CONTAIN OILS POLLUTION.**

4.5 Purchased product verification

Please note, before installing the equipment, to verify that it has not been damaged during transportation or storage conditions.

Check that all standard components and accessories ordered have been delivered correctly, and if not please contact Elenos for material adjustment.

In this case the package must contain at least :

- n°1 Elenos Ethernet converter module;
- n°1 "User" manual;
- n°1 CD containing the documentation.

Cables, spare parts and other accessories can be obtained by Elenos or Elenos dealers.

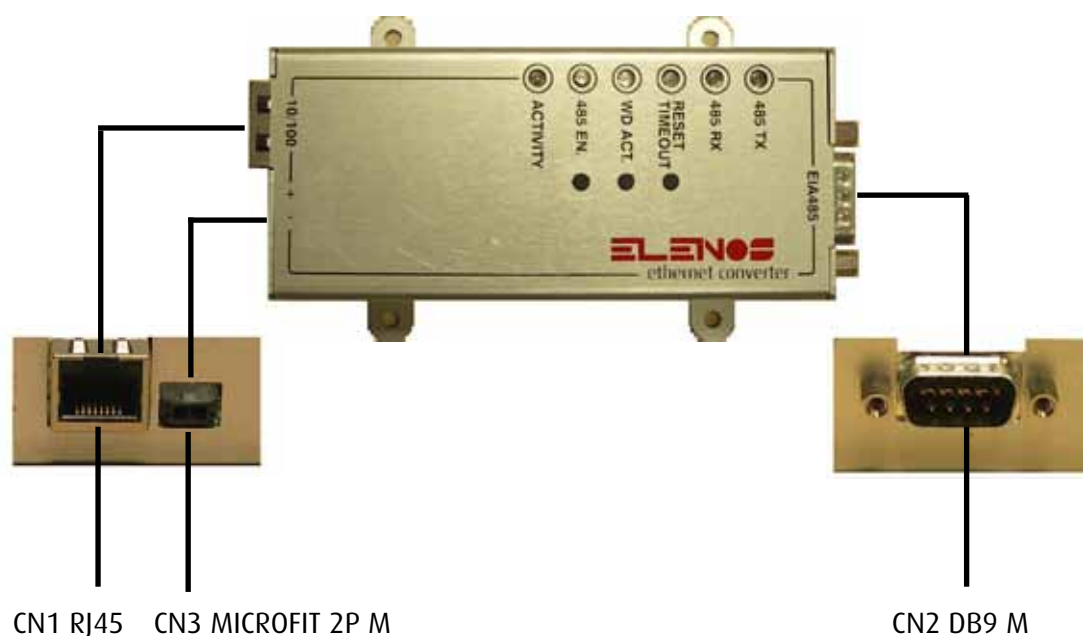
5 Product description

5.1 Device presentation

5.1.1 Connections

The unit is equipped with:

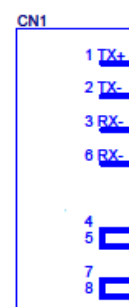
- Ethernet port 10-100 Mbit/sec, on RJ45 connector with logic;
- EIA485 master interface (standard Elenos), on 90° DB9 male connector;
- input to supply, with DC voltage between 9 and 28V, on 0.1"(90°) 2-pin male horizontal Microfit connector.



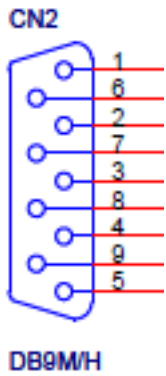
Connect CN1 (RJ45) to Ethernet network through CAT5 ethernet cable.

Pin out CN1 connector.

Connector	Pin	Description	Note
CN1	1	TX+	
	2	TX-	
	3	RX+	
	4	NOT USED	
	5	NOT USED	
	6	RX-	
	7	NOT USED	
	8	NOT USED	



Connect CN2 (DB9 male) to Elenos device through 1-1 BD9 cable. Use, in Elenos apparatus to be monitored, the DB9 connector on the front or on the rear panel (usually is



used the front panel connector). **The important is that the speed of communication between the Ethernet module and transmitter is the same. In particular must be of 38400 BAUD, as in the Ethernet module .** Therefore, set this value in the “COM1 SPEED SET ” user interface of the transmitter (for details to do this setting please see the transmitter manual and pictures appendix).

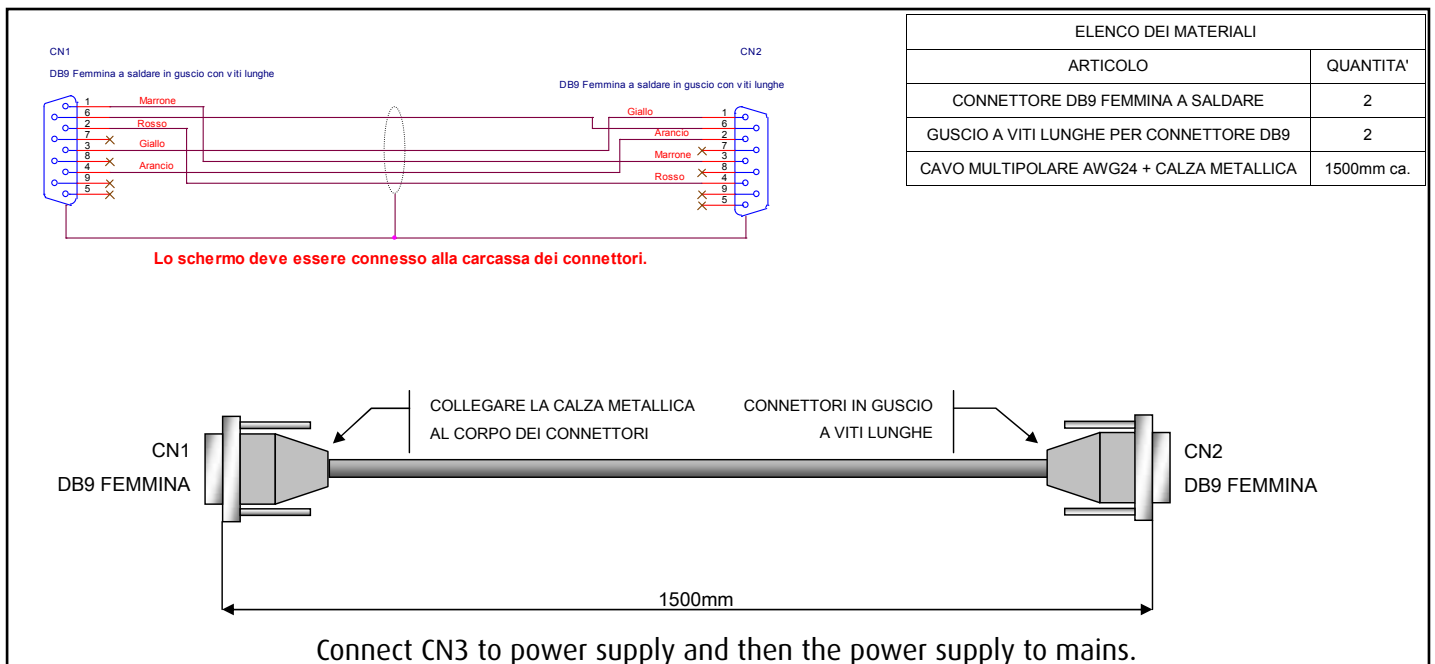
It's different Echos3 unit, where the cable is CAB0535_0 (Elenos code).

Pin out CN2 connector.

Connector	Pin	Description	Note
CN2	1	TX_1	EIA485
	2	/TX_1	EIA485
	3	RX_1	EIA485
	4	/RX_1	EIA485
	5	Common ground	
	6	Common ground	
	7	Common ground	
	8	Common ground	
	9	Common ground	

CAB0535_0 To connect Elenos Ethernet

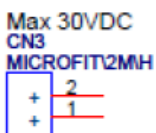
Converter-Echos3



Connect CN3 to power supply and then the power supply to mains.

Pin out CN3 connector.

Connector	Pin	Description	Note
CN3	1	Common ground	
	2	Supply	



Automatically the modem is powered on.

5.1.2 Buttons

There are three button :

- RESET/TIMEOUT _ to reset Elenos Ethernet Converter;
- WD ACT. _ to stop the watch dog activities on Elenos Ethernet Converter;
- 485 EN. _ to disable the transmission of the device connected to Elenos Ethernet Converter on the bus EIA485.

Both the interruption of watch dog that the disabling of the transmission on the EIA485 bus are temporary, and are reactivated automatically after an hour of exclusion and at each restart.

The pressure on the buttons must be for a longer time of 0.5 seconds, otherwise the command is ignored.



5.1.3 Leds

There are six leds :

- 485 TX _ Yellow. This led flashes when Elenos Ethernet Converter transmits a character to the EIA485 bus.
- 485 RX _ Yellow. This led flashes when Elenos Ethernet Converter receives a character from the EIA485 bus.
- RESET/TIMEOUT _ Red. This led lights for manual reset command or for inside watch-dog lasting 2.5 seconds.
- WD ACT. _ Green. This led is on if the internal watch dog is enabled.
- 485 EN. _ Green. This led is on if the transmission on the EIA485 bus is enabled.
- ACTIVITY _ Yellow. This led flashes with a frequency of one second, if the operation of Elenos Ethernet Converter is regular.



5.2 Marks and labels

On the device there is a label that contains the following information:

- MAC address (unique);
- IP address (standard assigned by Elenos).

We suggest to use an additional label, writable with pen, on which write the IP address defined by customer.

Warning: the internet connection with public IP or on private network, network management and communications security are of responsibility of the customer.



Device label



Support label



Warning label



Disposal label

5.3 Configuration and access mode

The unit is almost completely set up by Elenos, the user must only complete the configuration by entering in the configuration file a series of private information (eg. station name, new IP address, etc.).

To do this it's necessary a PC connected to the ethernet network, which is or directly connected to the Elenos Ethernet Converter via crossover cable, or both the PC and the modem unit must be merged within the same switch, using two direct ethernet cables. Access with the PC to the IP address, that Elenos provides by default.

This opens a screen for identification.

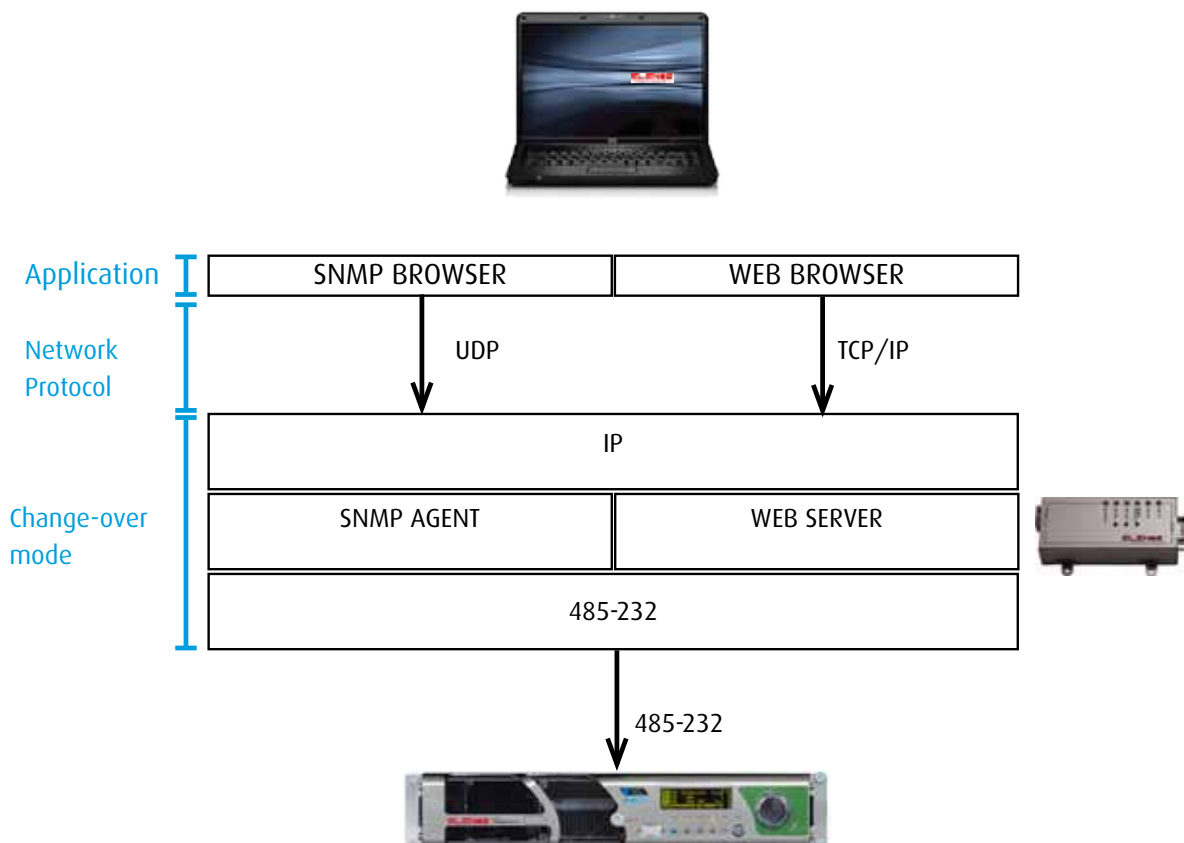
Warning: the username can not be changed, while the password provided, to greater protection, can be changed after the first authentication.

After the login it's opened a page where you can read the configuration file, download it for editing, reload it the device and make it active by pressing "RESET".

Finished the configuration, the unit is ready to be connected as described in the first paragraph and can begin to function normally.

Then the unit can be accessed in different ways:

- access via SNMP browser;
- access via Web browser.



5.3.1 Access via SNMP browser

SNMP is a communication protocol on Ethernet network that allows to read values (GET), write values (SET) and receive allarms (TRAP) about user system. GET and SET operations shipped by default on port 161, and alarm management uses port 162.

Warning: to make available these ports is the responsibility of the computer services administrator.

We list here some tutorial links about SNMP protocol:

<http://net-snmp.sourceforge.net/wiki/index.php/Tutorials>

http://www.cuddletech.com/articles/snmp/snmp_paper.html

http://phoenixalley.com/ebooks/SNMP%20Networking/Manual%20-%20SNMP_Tutorial.pdf

<http://www.youtube.com/watch?v=TiBrB0qxQao>

Elenos Ethernet Converter unit has an SNMP agent.

To be able to communicate with the SNMP agent use an SNMP browser, free choice.

As an example, you can use "iReasoning MIB Browser Free Personal Edition", download it from <http://ireasoning.com/download.shtml>.

For detailed instructions please use the browser Help.

Elenos provides MIB files with the description of the equipment purchased and to be monitored.

In this way you see all the "branches" component the "tree" system and the variables that you may or only read or modify.

The nodes related to Elenos equipment are all those with addresses starting with the sequence .1.3.6.1.4.1.31946.

In general, the structure provides information and commands system, unit information, alarm information, configuration traps.

For each variable you can read SNMP address, the variable type (for example, if it is an integer, a string, meaning of values that are assigned, etc..), transactions that can be made (only reading, writing), a description of its meaning.

Consultation, therefore, is clear and intuitive.

Here you see how the system is structured.

Remember, it is available the documentation "MIB List".

GET/SET operations require passwords (called community) to be inserted. The default GET community is "public" and the default SET community is "private".

Does not give a detailed description because the procedures, for the password introduction and for the use of GET/SET commands, change depending on the used browser.

Another SNMP feature is traps reception.

In order to achieve it :

- be sure to open port 162;
- activate an application on PC to receive traps (such as Trap Receiver utility, in the "Tools" menu, if using iReasoning);
- provide to SNMP agent the address to send the traps.

Following the procedure, launching the Trap Receiver program, you can see all the records that the unit sends to the user.

5.3.2 Access via Web browser.

The communication may be realized directly through any Web browser easy to find.

Here there is the list of browsers without problems of function: Mozilla Firefox 3.x, Microsoft Internet Explorer 7 +, Apple Safari 3 +, Google Chrome 5 +.

The application has been made compatible with browsers on mobile devices like iPhone3+ and Android 2.x operative system.

In case of malfunction due to differences between the various types of browser you can download the updated version of one of those present in the above list.

The interface with web browser is multi-users, so it can accept requests from multiple users simultaneously.

Each user is recognized by an username and a password, and it is associated with a level of operation.

The combination of username, password and level of operation defines an account.

Warning: you can not have two accounts with the same username, but you can bind to two different username the same password.

Username must be between 5 (at least) to 15 characters (no more), with the exception of the characters '|', '!', '""', '%', '&' and '?'.

Password must be from 8 (at least) to 15 characters (no more).

The levels of operation available to the customer in the first release are three:

- Level1_User: it can only read all parameters of the module and Elenos system linked to it.
- Level2_Station Manager: in addition to the privileges of the User, it can change the parameters of the Elenos system linked to it.
- Level3_Network Administrator: in addition to the privileges of the Station Manager, it can change module parameters related to the ethernet, to the functions Hostlink and SNMP agent, if present.

An account of any level can change the password.

The reading of the parameters is allowed to more users at once, while changing the parameters is allowed only one user at a time.

Therefore, when a user with write privileges sends a write command, if the system is free or busy by a member of the lower level, takes possession and its application is executed, while if the system is busy by an user with the same level, his request is rejected by sending a reply message.

For example, if a Station Manager holds the system, it prevents at others Station Manager to change the parameters of the station until he is connected, while at any time Network Administrator can exclude a Station Manager from the system.

A Network Administrator can not exclude an equal level.

A timeout mechanism automatically disable a user if it is inactive for more than 15 minutes.

5.3.2.1 Login screen

Type the IP address in the web browser and it opens the Login screen.

The default IP address is 192.168.4.74.

The default users with whom you can access are :

Level1_User

username : member

password : elenos11

Level2_Station Manager

username : manager

password : elenos11

Level3_Network Administrator

username : administrator

password : elenos11

Warning : username and password are case sensitive.

ELENOS Remote Monitor Monitor Settings Logout ?

Accesso

Nome Utente

Password

Accedi

Elenos 2010

5.3.2.2 Monitor screen

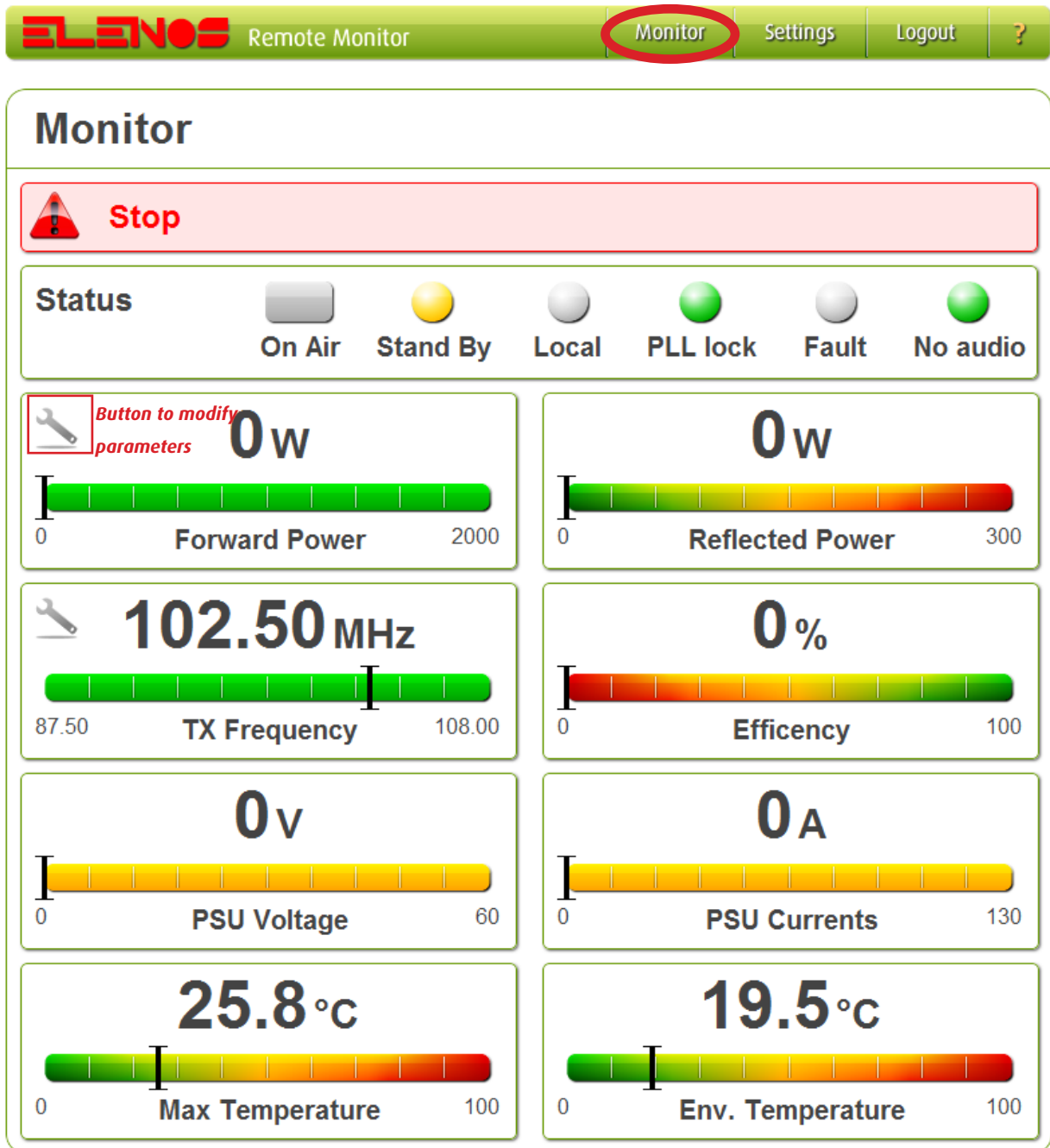
After your login you see automatically Monitor screen, that shows the operating status of the device and, if present, the alarms.

In the status bar, represented by the circle symbol there are LEDs, while the rectangle symbol indicates buttons that can be used to give a command at the apparatus.

This screen shows the basic parameters of functioning of the device connected.

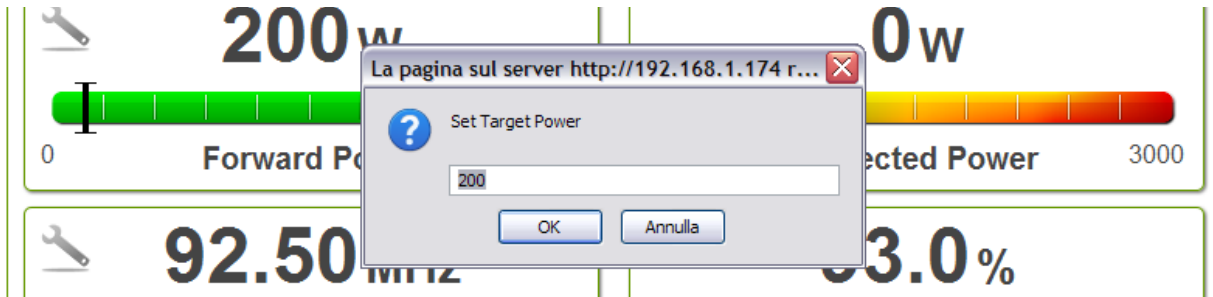
If you can modify them it is shown a special small button next to the parameter to change.

Warning: if the LOCAL led is lit, it indicates that the machine is in manual mode, so transmitted commands will not be executed.



Elenos 2010

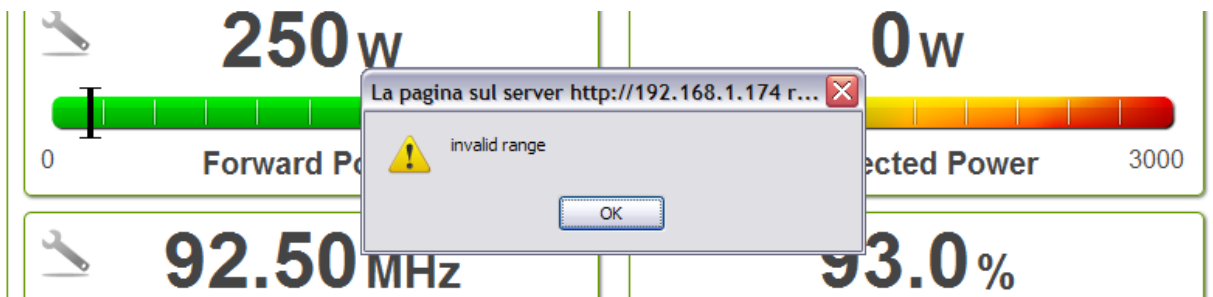
The click on the button, to change the parameter, activates a dialog box for entering the new values.



After validation you will be notified of the outcome of the operation.

If an error occurs a message specifies the reason the problem.

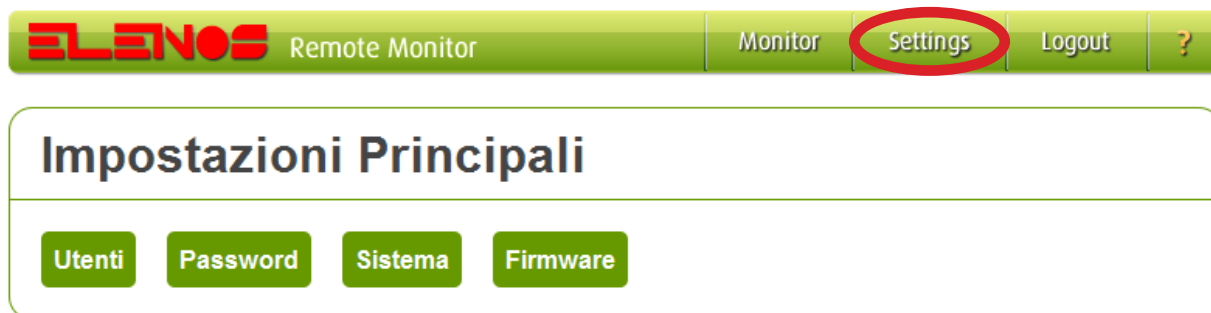
If an invalid parameter is entered the software prevents to set the apparatus, leading him to work in critical condition.



5.3.2.3 Settings screen

Opening the Settings page you can see the menu to configure the system:

- Users_to manage the users who can access the system.
- Password_to change the password to access the system. This operation, for safety reasons, it is recommended after first access, to change the default password provided by Elenos.
- System_to setup the system operating parameters.
- Firmware_to upgrade the firmware of the device. If this operation is incorrectly could compromise the proper functioning of the system.



Elenos 2010

5.3.2.4 Users screen

Specifically, the Users screen lists the users who have access to the system, broken down by group.

For each user are shown username and password.

The screen is visible only to Network Administrator.



5.3.2.5 Password screen

In the Password screen each user can change their password.

The effect of the change password is on at the next return, after having logged out.

The screenshot displays the ELENOS Remote Monitor interface. At the top, a green navigation bar contains the ELENOS logo, the text 'Remote Monitor', and buttons for 'Monitor', 'Settings', 'Logout', and a help icon. Below this, a white box titled 'Impostazioni Principali' contains two buttons: 'Utenti' and 'Password'. The 'Password' button is highlighted with a red circle. To the right, a smaller version of the ELENOS Remote Monitor interface is shown, featuring a white box titled 'Gestione Password'. This box contains three input fields labeled 'Vecchia Password', 'Nuova Password', and 'Confirm Password', followed by a green 'Cambia' button. A green 'Indietro' button is located at the bottom left of the 'Gestione Password' box. The footer of the interface shows 'Elenos 2010'.

5.3.2.6 System screen

System screen shows the operating parameters of the device divided by groups of origin.

ELENOS Remote Monitor

Monitor

Settings

Logout

?

Impostazioni Principali

Utenti

Password

Sistema

Firmware

ELENOS Remote Monitor

Monitor

Settings

Logout

?

Impostazioni Sistema

settings

Numero Seriale

79AM2541H

Versione firmware

V001-T000-S000-M001-W000

Data Firmware

Jan 20 2011

Porta Tunnel

8950

Indirizzo Mac

00:20:4A:BE:94:C2

Indirizzo Ip

192.168.1.174

Indirizzo Gateway

192.168.1.250

Baud Rate

38400

Salva

Snmp

Stato SNMP

1

ID Dispositivo

10

Nome Dispositivo

ETG1600

Nome Responsabile

Descrizione Dispositivo

Luogo Dispositivo

Stato Trap

1

Destinatario 1 Trap

192.168.1.66

Destinatario 2 Trap

192.168.1.25

Community di lettura

Community di scrittura

Salva

Indietro

Elenos 2010

If user has privileges, it can edit the editable parameters.

Warning: the settings on this screen should be performed only by trained person. Setting errors may involve apparatus malfunctioning, also permanent.

The parameters "Tunnel Port", "IP Address", "Gateway Address", "Receiver 1 Trap", "Receiver 2 Trap" have to take any value as long as compatible with the limitations of the Ethernet network to which the device is connected (information available to Network Administrator).

The parameter "Baud Rate" to take only the values 9600 or 38400, depending on the configuration you have set the machine.

The parameter "ID Device" must match the ID assigned to the machine.

For information on how to set and check "Baud Rate" and "ID Device" refer to the section "Use instructions" of the transmitter manual, which describes the user interfaces.

After being edited, the parameters must be saved using the "Save" button.

Each button saves only the parameters of the group.

The new settings are available only after a reboot of the unit, which is obtained when the following message is displayed.

ELENO Remote Monitor Monitor Settings Logout ?

Impostazioni Sistema

settings

Numero Seriale 79AM2541H

Versione firmware V001-T000-S000-M001-W000

Data Firmware Jan 20 2011

Porta Tunnel 8950

Indirizzo Mac 00:20:4A:BE:94:C2

Indirizzo Ip 192.168.1.174

Indirizzo Gateway 192.168.1.250

Baud Rate 38400

Salva

 **Le impostazioni sono state salvate con successo.**
Per rendere effettive le modifiche è richiesto il riavvio del sistema.

Reboot

snmp

Stato SNMP disable

Descrizione Dispositivo Dispositivo

5.3.2.7 Firmware screen

The Firmware screen allows to upload the new firmware.

The user, with the file .romz, must choose that file using the “Browse” button, then clicking on the “Upload” button starts the process of uploading of the new firmware. The uploaded file is checked by the system and automatically at the end of the procedure restarts.

ELENOS Remote Monitor Monitor Settings Logout ?

Impostazioni Principali

Utenti Password Sistema **Firmware**

Aggiornamento Firmware

File .romz [Sfoglia...](#)

[Carica](#)

Stato di avanzamento del caricamento

[Indietro](#)

Elenos 2010

In all these screens, in the event of a failure notification, refer to the explanation of the reports listed below.

Code	Message	Description
16	Communication error	The slave device does not respond or responds incorrectly.
32	Polling mode is not active	A command set-param can not be performed because the RS485 is not available to the module.
33	The host device ID is not enabled	The Elenos ID device that you want to read is not among those qualified.
34	An input memory address is out of range	An address included in the request is outside the allowed values.
35	An input data value is out of range	A data included in the request is outside the allowed values.
48	Missing input data	The list of parameters included in the request is not complete.
49	Wrong input data	One of the parameters included in the request is wrong.
64	Missing hash	The hash parameter was not included in the request.
65	Invalid hash	The hash parameter entered is invalid or has expired.
66	Insufficient rights	A command to change parameters can not be performed because the user does not have sufficient privileges.
67	System busy	A command to change parameters can not be performed because the system is already busy by an account with privileges equal or greater than user.

80	The username already exists	You can not create an account because the username is already included in the list.
81	The username doesn't exist	You can not delete an account because the username is not on the list.
82	Too many accounts	You can not add another account because they were already qualified the maximum number.
83	Session still open	The account that you try to apply for login is already active.
84	Session expired	The login session has expired. Must apply the login again.
127	Generic error	Generic error.

5.4 Technical brochure

DIMENSIONS

DimensionS: W - H - D	105.5 x 47 x 22.5 mm
Weight	95 gr

CONNECTORS

Ethernet connector	RJ45 with logic, speed 10-100Mbit/sec
EIA485 connector	DB9 male
Mains connector	2P male 0.1"

INSTALLATION REQUIREMENTS

Power supply	External source with voltage 9-28 Vdc. Conforms to a limited power source standards in accordance with EN 60950-1 (limited to 28Vdc and 1A).
Power consumption	2.5W max (280-90 mA @ 12V)
Fixing mode	There are not specific limitations for assembly. In general, the module must be attached to a metal surface or less, close to the apparatus/system to be monitored, using screws in the 4 slots on the case.

TIMES

Restoring manual commands	60 min
Watch dog	30 sec
Reset	2.5 sec
Debounce buttons	0.5 sec
Signal activity filter	0.25 sec

FUNCTIONS AND PROTOCOLS

Hostlink	si
Web Server	si
SNMP Agent	si
SMTP Protocol	si

STANDARDS

Electromagnetic Compatibility	EN55022:2006+A1:07 EN55024:1998+A1:01+A2:03
Sicurity	EN60950-1:2006+A11:09 EN62311:2008

ENVIRONMENT

Temperature (operative)	-5 - +45 °C
Temperature (no operative)	-20 - +55 °C
Humidity (operative)	95% @ 40 °C
Humidity (no operative)	90% @ 55 °C
Altitude (operative)	<2000 meter
Altitude (noe operative)	<15000 meter

