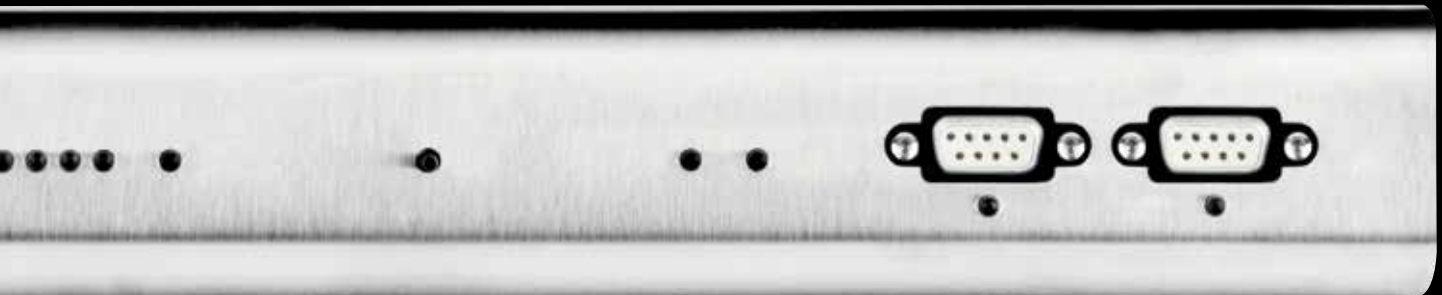


eBox Echos3

REMOTE CONTROL



*All images are proprietary from Elenos and are for indicative purposes only.
Technical data can be subject to change without notice.



our technologies





Brochure

eBox

Ebox is a remote control unit equipped with an HTTP web interface and SNMP protocol. It is configured to be used with all Elenos transmitters, exciters, amplifiers, and protection systems and exchange units. It is also able to provide information on a large number of parameters related to the operation of the equipment, and allows for remote control and management. The user can interface any device with an E.box from a PC, Tablet or Smartphone device.

eBox

Elenos has equipped all of its FM transmitters with the possibility to be fully managed and controlled remotely by the use of this Ethernet interface device ("E. Box"), through which the operator can perform almost all of the operations that would be done in local mode at the site of the equipment. The connections are based either on SNMP browser or through a website. All the E. Box devices allow for remote firmware upgrades and can be interchanged between any of various types of equipment in the Elenos product lines. It is compatible with all current production equipment and may also be retrofitted to other Elenos equipment no longer in production. An IP connection is required to be able to use the E.box device and can be used over both wired or wireless networks in private or public networks.

Features:

- | Total control of the transmitter via PC and latest generation mobile devices (smartphones and tablets, regardless of their operating systems).
- | Wide range of user custom options.
- | Ability to enable or disable SNMP traps.
- | Very large number of variables and traps can be managed.
- | Intuitive and effective graphic user interface.

Echos3

Echos3 is a simple and effective remote control unit, which allows to connect ELENOS transmitters and environmental sensors, and to transfer the necessary information for complete control by the operator.

Echos3

Echos3 Telemetry by Elenos is a remote command system and a remote control system that allows you to monitor up to 8 analog signals and up to 8 digital signals and to alter the state of 8 relays. The inputs and outputs are easily programmable, by setting the means and the desired management protocols via a PC connection. Echos3 is useful for accessing the main operating parameters of the transmitter. It is possible to establish a remote connection with the device to analyze the details of voltage, currents, temperature, power, efficiency, and to send commands and change the status of operation via Hyperterminal. It is also possible to analyze the state of signals at the analog and digital inputs, which may have come from the transmitters themselves or by other sensors present in the station. Echos3 is able to send and receive SMS, through which it is possible to analyze the main operating data of the apparatus and send commands. In the case of a power failure, Echos3 is able to send an SMS alert.

Features:

- | Broad spectrum of data to be analyzed in "transparent" mode.
- | Sending of SMS alert in the case of power failure.
- | "TERM" application software for most immediate usage.
- | GSM/GPRS modem.
- | Easy installation and set up.



Datasheet

eBox

eBox | Echos3

DIMENSIONS	
Dimensions : W-H-D	105.5x47x22.5mm
Weight	95 gr
Position	Inside the transmitter.(In this case some limitation is present.Please verify whit costomer). Outside the transmitter (there are not specific limitations for assembly: the module must be attached to a surface close to the transmitter using 4 screws)
CONNECTORS	
Ethernet connector	RJ45 with logic speed 10-100 Mbit/sec
EIA485 connector	DB9 Male
Mains connector	MicroFit 2P Male
BUTTONS	
Reset/Timeout	to reset the unit
Wd Act.	to stop the watchdog activity
485 En.	to disable the transmission
LEDS	
485 Tx (yellow)	transmission active
485 Rx (yellow)	reception active
Reset/Timeout (red)	reset or watchdog active
Wd Act. (green)	watchdog enabled
485 En. (green)	transmission enabled
TIMES	
Restoring manual commands	60 min
Watchdog	30 sec
Reset	2.5 sec
Debounce buttons	0.5 sec
Signal activity filter	0.25 sec
FUNCTIONS AND PROTOCOLS	
Hostlink	yes
Web server	yes
SNMP agent	yes
SMTP protocol	yes (option ondemand)
MONITORED DEVICES	
Exciter Indium series (from 20 W to 5000 W)	124 slave OID, 26 traps
ETG2000/ETG3500	126 slave OID, 26 traps
E5000	128 slave OID, 20 traps
E2000/E3000	121 slave OID, 20 traps
ET7000 (2x3.5 KW)	311 slave OID, 81 traps (webserver on demand)
ET10000 (2x5 KW)	311 slave OID, 81 traps
ET15000 (3x5 KW)	357 slave OID, 94 traps
Echos6	180 slave OID, 42 traps
ET10000 (3x3.5 KW)	311 slave OID, 81 traps (webserver on demand)
ET15000 (5x3.5 KW)	311 slave OID, 81 traps (webserver on demand)
ET20000 (4x5 KW)	357 slave OID, 94 traps
INSTALLATION REQUIREMENTS	
Power supply	External source with voltage 9-28 Vdc. Conform to a limited power source in accordance with EN60950-1 (limited to 28 Vdc and 1A)
Power consumption	2.5 W max (280-90 mA@12 V)
ENVIRONMENT	
Temperature range (operating)	-5 ÷ +45 °C, 23 ÷ 113 °F
Temperature range (non operating)	-20 ÷ +55 °C, -4 ÷ 131 °F
Humidity range (operating)	95% @ 40 °C, 104 °F
Humidity range (non operating)	90% @ 55 °C, 131 °F
Altitude range (operating)	<3000 meters / <9840 Feet
Altitude range (non operating)	<15000 meters / < 49200 Feet
STANDARDS	
Electromagnetic compatibility	EN55022:2006+A1:07 EN55024:1998+A1:01+A2:03
Security	EN60950-1:2006+A11:09 EN62311:2008

GENERAL DATA

RS232/RS485	Yes
Adjustments	Signaling led
Dimensions : rack units	1U
Dimensions W-H-D	48.5 cm - 4,4 cm - 30 cm
Weight	5 kg
Mounting in standard rack 19"	yes
Operating type	h24 no stop (with internal battery)

CONNECTORS

Digital output/input	MCD 0.5/12-G1-2.5 (combicon)
Analog input	DB9 Male
IEE485	DB9 Male
CPU	DB9 Female
Modem	DB9 Female
Reecrwe battery	12 V 1 A

INSTALLATION REQUIREMENTS

Power supply	120-240 Vac 50-60 Hz (presettable)
Power consumption	36 VA max
Breaker curve	C
Current consumption @ 220 Vac	0.2 A max
Breaker flow @ 220Vac	2 A
Cable section @ 220 Vdc	AWG 18 - 0,75 mmq
Current consumption @ 110Vac	0,4 A Max.
Breaker flow @ 110Vac	4 A
Cable section @ 12 Vdc	AWG 15 - 1,5 mmq

ENVIRONMENT

Temperature range (operating)	-5 ÷ +45 °C, 23 ÷ 113 °F
Temperature range (non operating)	-20 ÷ +55 °C, -4 ÷ 131 °F
Humidity range (operating)	95% @ 40 °C, 104 °F
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