Datalogger
X-RWU

Opzioni

XM2 - USB/485 Interface

XM4 - GSM/GPRS Modem Module

XM5 - Ethernet Network Module

XM7 - Programmable Annual Clocks Module

XM8 - Analog Channels, Galvanically Insulated

XM9 - PT 100 Interfaced probes

XM10 - Room Temperature Module

XM11 - Room Temperature and Humidity Module

XM15 - Interfaced Loads Relay Module
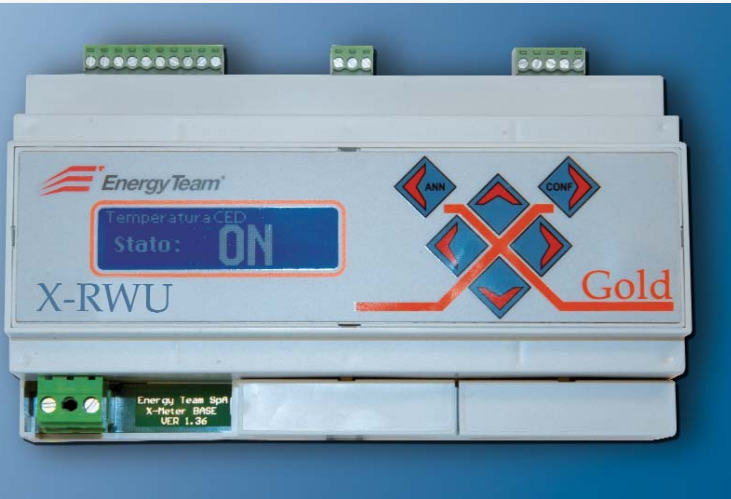
XM - Load Control

XM UPS - Micro UPS

ES3 - Supervisory software

> Graphic display with settable font size
> Configurability of each channel
> 8 digital inputs self-powered at 12 VDC
> 4 Optomos digital outputs (100mA - 24VDC)
> 1Mb of internal flash memory
> RS 485 Communication Port
> 6-key keyboard with audible click
> Clock and Calendar
> Guide container DIN rail 46277 (9 modules)
> Removable terminals for easy mounting
> Expansion and modularity (GSM modem, LAN card, analog channels, temperature, programmable timer)

To Monitor, Archive, Manage
> Conditions of the installation
> Alarms
> Analogue measurements (4-20mA, 0-10V, etc.)
> Process temperature
> Room temperature
> Measurements registered by several meters

Conformity - Applicable regulation
> EN 55011(class A)
> EN 61000-4-2 -EN 61000-4-5
> EN 61000-4-6
> EN 61000-4-11
> EN 61000-4-3
> EN 61000-4-4
> EN 60204-1

Technical features
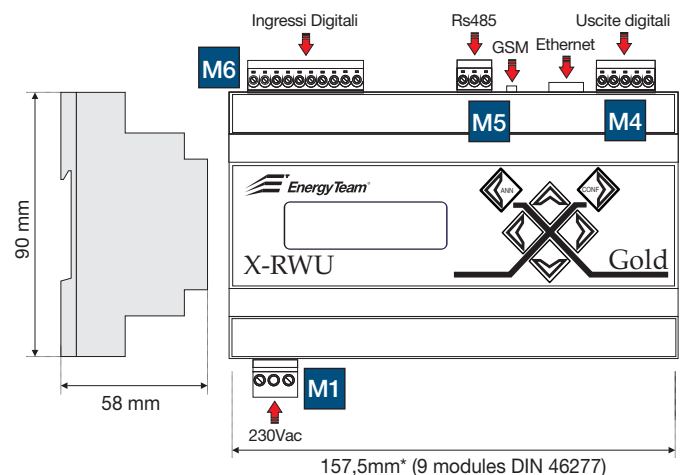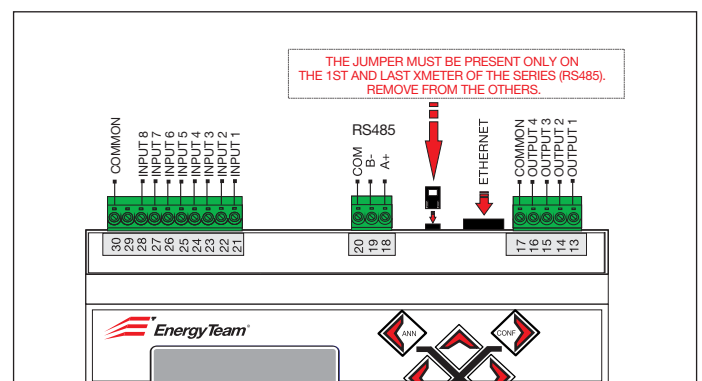
	Units of measure
Power supply	
Tensione alimentazione	100-250 Vac
Frequency	50-60 Hz
Consumption	Va 5
General	
8 Digital inputs	
Digital input frequency	10 Hz Max.
4 Optomos outputs	100 mA/24 Vdc
Protection Degree	IP 20
Weight	gr 400
Dimensions LxHxW 9 modules DIN	mm 157,5x90x58
Display	Graphic
Temperature working range	-10 °C + 55 °C
Relative humidity	95% without condensation

Dimensions and terminal board

*consider as dimensions 159 mm

M1	Power supply	*Cable section maximum*: ø 2 mm² (16AWG)
M4	Digital outputs	*Cable section maximum*: ø 0.75 mm² (18AWG)
M5	Rs485	*Cable section maximum*: ø 0.75 mm² (18AWG) Belden 9841
M6	Digital inputs	*Cable section maximum*: ø 0.75 mm² (18AWG)

Serial I/O connection

THE JUMPER MUST BE PRESENT ONLY ON THE 1ST AND LAST XMETER OF THE SERIES (RS485). REMOVE FROM THE OTHERS.

Options

XM2 - A Bridge Module 232/485
B Bridge Module USB/485

The conversion module Bridge 232/485 with 230Vac in 4 DIN module container, can be used to convert the 485 signal coming from the X-RWU in serial 232 to communication port of the Personal Computer. Is also available the version USB/485. This module allows to convert the 485 signal coming from X-RWU to USB communication port of the Personal Computer. Galvanic insulation of the USB connection ensures the maximum protection to Personal Computer against noise, interferences and overvoltage from the field. Designed with industrial features. Isn't necessary a bulky external power supply because it is self powered.

XM4 - GSM/GPRS Module

The Gsm/Gprs Modem module inside the X-RWU device allows the forwarding of E-mails and SMS associated to conditions and alarms coming from the "field". In addition, thanks to this module it is possible to control the X-RWU device by remote modality, for the data publication service via Web, through our site www.energyteam.it.

XM5 - Ethernet Module

The Ethernet board inside the device allows the connection of X-RWU to the Ethernet network or Intranet of the company from various data collection and monitoring stations through a simple IP address.

XM7 - Annual programmable clocks Module

The firmware module "programmable clocks with perpetual annual calendar" allows to enable the Nr. 4 Optomos outputs of the X-RWU DIN for the automatic control function to switch specific utilities on and off (controllable loads ex: lights, motors, fans, etc.). For each X-RWU is possible programming up to 12 daily profiles + 2 special periods + 20 special days. Each profile defines 8 changes in state within the 24 hours/day for each of the 4 associated loads. Up to 128 X-RWU can be connected for a total of 512 controllable loads.

XM8 - Galvanically Insulated Analogical Channel

Inserted in a 1 Module DIN container, it allows to interface voltage or current signals coming from the field to the X-RWU device's inputs, allowing the displaying and storing of the measured values. The X-RWU device is able to power up to 2 XM8 modules, any additional module have to be supported through a 12Vdc external supplier (not included). Are available 11 possible interface configurations for voltage and current signals. Guaranteed accuracy to 0.5% at full-scale.

XM9 Module for Interfacing probes PT100-500-1000

Inserted in a 1 Mod. Din container, it allows the interfacing of the PT100, PT500 and PT1000 probes to X-Meter's inputs, allowing the displaying and the storage of the detected temperatures. X-Meter device can supply up to 2 XM8 modules, eventual modules in excess have to be supplied by an external 12 Vdc supplier (not included). Accuracy is guaranteed at 0,5% Full-scale.

XM10 - Room temperature Module

Container suitable for wall installation. It can read the room temperature (range -10°C ÷ +65°C ±1,5°C) and transfer it to the X-RWU device's inputs and to enable the displaying and storing of the measured temperatures. The X-RWU device is able to power up to 2 XM10 modules, any additional modules have to be supported through a 12Vdc external supplier (not included). It is particularly suitable to monitor and save the room temperatures in Ced, LV/MV panels, warehouses.

XM11 - Room temperature and humidity Module

Container suitable for wall installation. It can read the room temperature and humidity and transfer it to the X-RWU device's inputs and to enable the displaying and storing of the measured temperatures and humidity. The X-RWU device is able to power up to 2 XM11 modules, any additional module have to be supported through a 12Vdc external supplier (not included). As applications it's particularly suitable to monitor and save the room temperatures and humidity values in the food sector. Humidity range (Relative hum. 0÷100%) Accuracy ±2% in the range of relative hum. 10%, 90%; Temp. Range (-10°C ÷ +65°C). Accuracy ±0,8°C at 25°C ± 0,3°C.

XM15 - Load interface relay Module

For using the 4 outputs and driving standard loads, inserted in 230Vac single phase networking, it's necessary to interface them to XM15 Module. Powered at 230Vac, it provides 4 independent relays, with ability to switch any load up to 16A.

XM18 - Management loads

Through the control of the 4 outputs, carried out by a sophisticated algorithm, it's possible to intervene actively in the management of electrical loads, in order to remove or contain the contracted power exceeds with energy supplier.

XM-UPS - UPS DIN Dedicated

Uninterruptible group very small in 6 modules Din container, with modern batteries (lithium polymer), dedicated to supply apparatus X-RWU to a maximum of 4 hours. Essential to maintain the alarm functions even in the absence of tension apparatus.

ES3 - Supervision Software

Supervisory and control Software. You can request the technical documentation or visit our site www.energyteam.it.

Potential of apparatus

Storage of historical data

> Monitoring and storage of analogical sizes: 4 ÷ 20mA, 0 ÷ 10V, etc.
> Monitoring and storage of external exceeding measured range and room temperatures

SMS
Device alarm and exceeding measured thresholds.

> Acquisition and archiving conditions arriving from the field
> Acquisition and storage from other meters with pulsed output

> Management programmable clocks
> Forwarding of SMS concerning conditions coming from fields
> Forwarding of Email concerning conditions coming from fields
> Forwarding of SMS of alarms that can be set on the measured values
> Forwarding of Email of conditions that can be set on the measured values

Acquisition of other meters

> Connecting to a PC and to a series of other apparatuses through supervision and control software
> Remote readable apparatus with the possibility to access the Internet data publishing service

Data publication on WEB