


Description

Input and output signal management module, designed for DIN rail mounting (3 modules) and AC power supply. It has 4 analog inputs and 2 analog outputs (0...20 mA / 4...20 mA / 0...10 V), 1 potential-free digital input and 1 relay output. Serial communication for Modbus RTU via RS-485 and Modbus TCP/IP via Wi-Fi. Advanced design with integrated automation functions, allowing the device to operate autonomously, without depending on a control system.

Featured Features

- Alarm management, to detect values within or outside the range and activate the relay output.
- Automatic unit conversion, directly displaying the measurement in the corresponding physical unit.
- Hourmeter function, records the time the digital input remains active, key for monitoring usage and obtaining the CAE.
- Integrated web server, with an intuitive and user-friendly interface for advanced configurations via Wi-Fi.

Application

- Industrial process control.
- Accounting for electricity or water consumption.
- Management of public lighting and air conditioning.
- Energy monitoring in buildings, hotels, or retail spaces.
- Access control and supply management in marinas, campsites, or multi-user spaces.

Electrical data

Power supply	100 .. 264 VAC
Frequency	50 .. 60 Hz
Maximum consumption	4 .. 7 VA

Environmental conditions

Humidity	5% .. 95%
Storage temperature	-20 .. +70 °C
Operating temperature	-10 .. +50 °C
Maximum working altitude	2000 m

Mechanical data

Surround material	Self-extinguishing V0 plastic
Protection degree	IP 40 (front), IP 30 (unmounted)
Dimensions	52,5 x 118 x 70 (mm)
Weight	190 g
Mounting	DIN rail

Characteristics and electrical safety

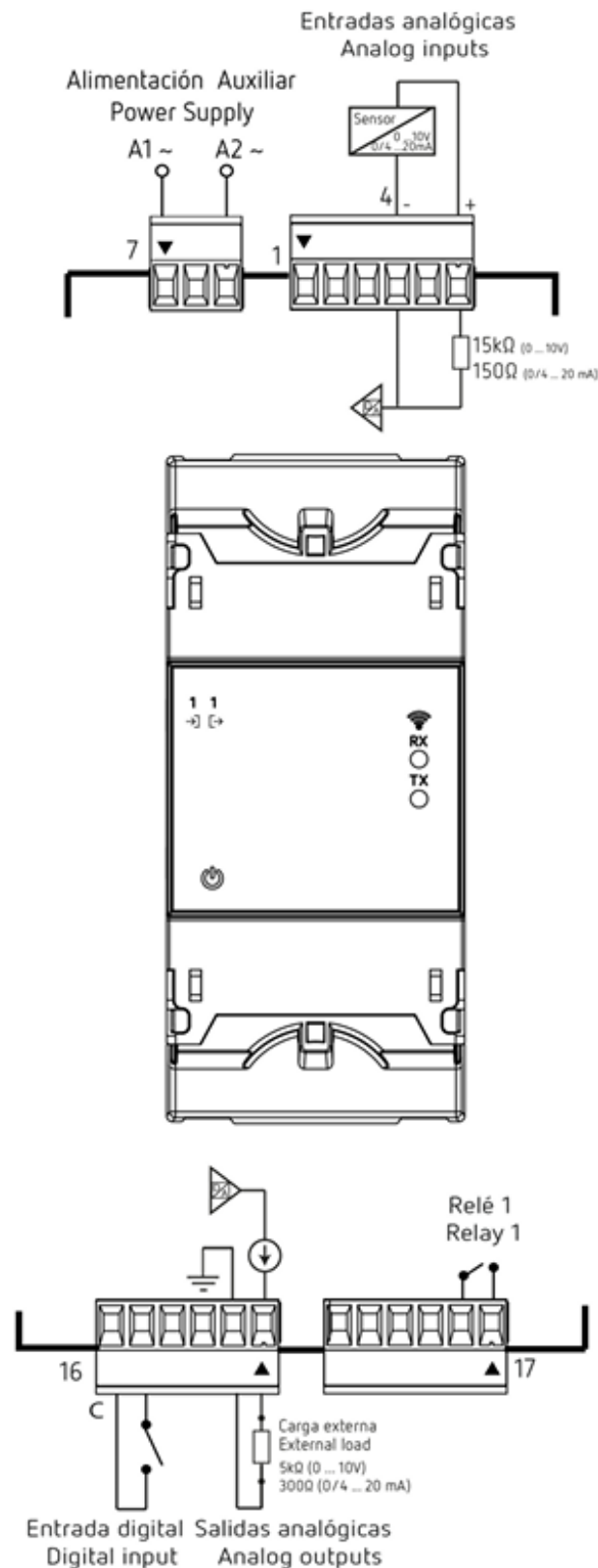
Certifications	CE
Electrical safety	CAT III 300 V according to EN 61010
Electric shock protection	Double insulation class II
Normative	UNE-EN 55022, UNE-EN 55016-2-1, UNE-EN 61000-4-2, UNE-EN 61000-4-4, UNE-EN 61000-4-5, UNE-EN 61000-4-6, UNE-EN 61000-4-8, UNE-EN 61000-4-11, UNE-EN 61000-4-20, UNE-EN 60068-2-1, UNE-EN 60068-2-2, UNE-EN 60068-2-78, UNE-EN 61010-1, ETSI EN 301-489-1 v2.2.3, ETSI EN 301-489-17 v3.3.1

User interface	
Led	6 led
Serial interface	
Type	RS-485 three threads (A+/S GND/ B-) (RX/GND/TX)
Transmission speed	9600, 19200, 38400, 57600, 115200 bps configurable
Data bits	8
Parity	No parity
Stop bit	1
Characteristics of analog inputs	
Amount	4
Input range	0 .. 10 V, 2 .. 10 V 0 .. 20 mA, 4 .. 20 mA
Type	Voltage Current
Resolution	4096 points
Digital input features	
Amount	1
Type	Free of potential
Analog output features	
Amount	2
Current mode	0-20 mA, 4-20 mA
Voltage mode	0-10 V, 2-10 V
Characteristics digital outputs	
Amount	1
Type	Relay
Rated Current	5 AAC / 250 VAC (with resistive load)
Nominal voltage	250 V ~ / 30 VDC
Electrical life	1 x 10 ⁵ (250 VAC / 5 A)
Wireless communication	
Band	2,4 GHz, IEEE 802.11 b: 20 dBm / IEEE 802.11 n: 14 dBm
Type	Wi-Fi

Installation

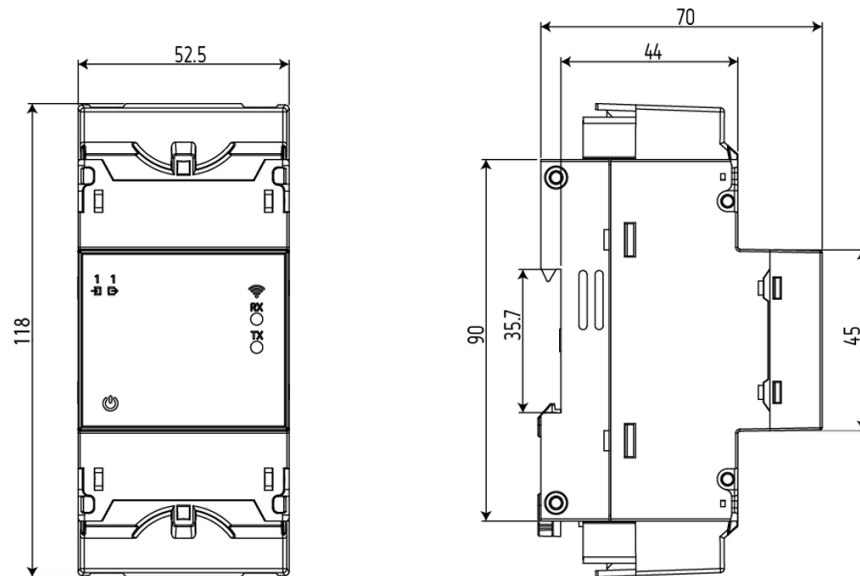
The equipment is installed on a DIN rail, leaving all the connections inside an electrical panel.

The equipment must be connected to a power supply circuit protected with type gI (IEC 269) or type M fuses, between 0.5 and 1 A. A magneto-thermal switch or equivalent device must be provided to disconnect the equipment from the power supply network. The power supply circuit of the equipment will be connected with a cable with a minimum section of 1 mm².

Electrical wiring


Dimensions

(Dimensions in mm)


RS-485 communication

The equipment has an RS-485 type communication port for reading and writing the device parameters. To do this, the equipment uses the Modbus/RTU communication protocol. By default, it is configured with the peripheral number 97 (in hexadecimal 61) and communication speed 192000 bps, 8, N, 1. By means of the address change command we can assign any other address (at most FF in hexadecimal which is equivalent to peripheral 255).

If you do not remember the slave number, you can retrieve the default address (97 decimal or 61 in hexadecimal):

- Remove auxiliary power to the equipment
- Permanently activate the button located on the front of the equipment
- Powered up again, stop pressing the button and the equipment automatically recovers the default peripheral number (97 Decimal / 61 Hexadecimal).