



1ssue Number 7.1 30/09/2021



Features and Benefits

- Gas and water measurements and multi-tariff management in only one instrument
- Easy variable scrolling by means of the front joystick
- Pulsed or Modbus output options
- Two digital outputs (alarms or/and pulses) or RS485 communication port

Technical Overview

The PM-EM24 DIN-rail mounted energy analyser is designed for active and reactive energy metering.

When using the optional RS-485 ModBus output it is possible to connect up to three additional pulse inputs from other metering equipment enabling all consumption data to be read from just one meter. PM-EM24 features eight user-selectable applications are available to allow fast setup, with lockable programme selector, and joystick control of up to 31 LCD display pages.

Standard meters are non-MID. For billing use, add annex -D option. Extra system information is required please contact Sontay Support. contact Sontay Support.

Product Codes

PM-EM24-P Energy analyser with pulsed output

PM-EM24-M Energy analyser with Modbus output

Option (add to part code above)

-D Annex -D Certification

Accessory

PM-PMK Panel door mounting kit

Specification

Measurements:

 $\label{eq:VLN} \text{System} \qquad \qquad \text{VLL, VLN, Admd max, var, VA, W,}$

Wdmd, Wdmd max, VAdmd, VAdmd max, PF, Hz;

Single-phase VLL, VLN, A, W, var, VA, PF,

Admd, kWh, kvarh, Hour counter

Frequency 45 to 65 Hz

Display 3 lines (1 x 8 digit., 2 x 4 digit.) Housing Nylon PA66, self-extinguishing UL

94 V-0

Mounting Din-rail

Output types:

Pulse Open collector

Modbus RS485

RS 485:

Address Programmable, 1 to 247,
Baud-rate Programmable, 4800, 9600 bit/s
Sampling rate 1600 samples /s @ 50Hz

1900 samples/s @ 60Hz

Display refresh time 750m/s

Ambient:

Humidity 0 to 90% (non-condensing)

Temperature -25 to +55°C
Protection: IP50 (front)
Dimensions: 90 x 71 x 65mm

Country of origin Italy

Conformity EMC, LVD, CE & UKCA Marked

NOTE: Full operating instructions and user manual are supplied with mthe meter.





At the end of the products useful life please dispose as per the local regulations. Do not dispose of with normal household waste

CE FR



PM-EM24 Energy Analyser Issue Number 7.1

Overview

Characteristics

Measurements: System: VLL, VLN, Admd max, var, VA, W, Wdmd, Wdmd max, VAdmd, VAdmd max, PF, Hz; Single-phase: VLL, VLN, A, W, var, VA, PF, Admd, kWh, kvarh, Hour counter

The PM-EM24 DIN-rail mounted energy analyser is designed for active and reactive energy metering. When using the optional RS-485 Modbus output it is possible to connect up to 3 additional pulse inputs from other metering equipment enabling all consumption data to be read from just one meter.

PM-EM24 features 8 user-selectable applications are available to allow fast setup, with lockable programme selector, and joystick control of up to 31 LCD display pages.

Certified according to MID Directive, Annex "B" "Type examination" relevant to active electrical energy meters (see EU Directive 2004/22/EC, Annex MI-003)

Applications

- 3-Phase, 3-wire balanced & unbalanced load
- 3-Phase, 4-wire balanced & unbalanced load
- 2-Phase, 3-wire
- 1-Phase, 2-wire

Front Panel Description

1. Joystick

To program the configuration parameters and scroll the variables on the display.

2. LED

Red LED blinking proportional to the energy being measured.

3. Display

LCD-type with alphanumeric indications to:

- display configuration parameters;
- display all the measured variables.

4. Selector

To select the desired display pages and to lock the programming.

5. Connections

Screw terminal blocks for instrument wiring.

