

Product data sheet

Characteristics

METSEPM8243

PowerLogic PM8000 - PM8243 DIN rail mount meter - intermediate metering



Main

Range	PowerLogic
Product name	PowerLogic PM8000
Device short name	PM8243
Product or component type	Power meter

Complementary

Power quality analysis	Conforming to EN 50160: 2010 compliance report Conforming to IEEE 519: 2014 compliance report Conforming to IEC 61000-4-30: class S power quality measurement Up to the 63rd harmonic Harmonic distortion Waveform capture Voltage sag and swell detection Programmability (logic and math functions) Conforming to IEC 62586 power quality monitoring
Device application	WAGES metering Power monitoring
Type of measurement	Current Voltage Frequency Active and reactive power total Apparent power total Power factor total Active and reactive power per phase, rms Apparent power per phase, rms Power factor per phase, rms
Supply voltage	90...415 V AC 45...65 Hz +/- 10 % 110...415 V DC +/- 10 %
Network frequency	50 Hz 60 Hz
[In] rated current	1 A 10 A 5 A
Poles description	1P + N 3P + N 3P
Power consumption in VA	18 VA at 415 V AC
Display type	Without display
Sampling rate	256 samples/cycle
Measurement current	50...10000 mA
Analogue input type	Voltage (impedance 5 MΩ) Current (impedance 0.3 mΩ)
Measurement voltage	57...400 V AC 42...69 Hz between phase and neutral 100...690 V AC 42...69 Hz between phases
Frequency measurement range	42...69 Hz
Number of inputs	3 digital 30 V AC 3 digital 60 V DC

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Measurement accuracy	Current +/- 0.1 % Voltage +/- 0.1 % Active energy +/- 0.2 %
Accuracy class	Class 0.2S active energy conforming to IEC 62053-22 Class 0.2 active energy conforming to ANSI C12.20 Class 0.2 active power conforming to IEC 61557-12 Class 0.5S reactive energy conforming to IEC 62053-24 Class 0.5 power factor conforming to IEC 61557-12 Class 0.2 voltage conforming to IEC 61557-12 Class 0.2 current conforming to IEC 61557-12
Number of outputs	1 pulse
Information displayed	Voltage Current Frequency Power Energy consumption Harmonic distortion
Communication port protocol	Modbus RTU at 115 kbauds - 2-wire ION at 115 kbauds - 2-wire DNP3 IEC 61850 Modbus TCP/IP Ethernet Modbus TCP/IP daisy chain at 10/100 Mbit/s RSTP 801.1d 2004
Communication port support	Ethernet Screw terminal block: RS485
Communication network type	IPv6 (internet protocol)
Data recording	Harmonics logs Sag and swell logs GPS synchronisation Time stamping Data logs Trending/Forecasting Waveform logs Alarm logs Sequence of event recording Min/Max of instantaneous values Event logs
Memory capacity	512 MB
Web services	Customizable home page File upload/download via FTP File upload/download via SFTP Web server Alarm notification by e-mail Viewing of captured waveform (FTP) Viewing of captured waveform (web) HTTPS server
Communication service	SMTP e-mail notification DHCP RSTP support NTP time synchronization PTP time synchronization
Cybersecurity	Password protection Port hardening Enable/Disable communication ports Robust security logs Syslog protocol support
Mounting mode	Clip-on
Mounting support	DIN rail
Installation category	III
Safety Construction	III, 400...690 V conforming to IEC 61010-1:ed. 3 III, 400...690 V conforming to EN 61010-1:ed. 3 III, 347...600 V conforming to UL 61010-1:ed. 3 III, 347...600 V conforming to CSA C22.2 No 61010-1:ed. 3
Standards	IEC 61557-12 IEC 62052-11 IEC 62053-22 IEC 62053-24 IEEE 1588 IEC 62586-2 IEC 61326-1

Product certifications	CE CULus N998
Width	90.5 mm
Depth	90.8 mm
Height	90.5 mm
Net weight	528 g

Environment

Electromagnetic compatibility	Electrostatic discharge conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 Surge immunity test conforming to IEC 61000-4-5 Conducted RF disturbances conforming to IEC 61000-4-6 Magnetic field at power frequency conforming to IEC 61000-4-8 Voltage dips and interruptions immunity test conforming to IEC 61000-4-11 Immunity to impulse waves conforming to IEC 61000-4-12 Conducted and radiated emissions conforming to EN 55022 Conducted and radiated emissions conforming to EN 55011 Conducted and radiated emissions conforming to FCC part 15 Conducted and radiated emissions conforming to ICES-003 Conducted RF disturbances (2...150 Hz) conforming to CLC/TR 50579 Surge withstand conforming to IEEE C37.90.1
IP degree of protection	IP30 conforming to IEC 60529
Relative humidity	5...95 %
Ambient air temperature for operation	-25...70 °C
Ambient air temperature for storage	-40...85 °C
Operating altitude	3000 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	0.854 kg
Package 1 Height	14 cm
Package 1 width	14 cm
Package 1 Length	18.5 cm
Unit Type of Package 2	BB1
Number of Units in Package 2	1
Package 2 Weight	854 g
Package 2 Height	13.5 cm
Package 2 width	13.5 cm
Package 2 Length	18.4 cm
Unit Type of Package 3	S03
Number of Units in Package 3	8
Package 3 Weight	7.487 kg
Package 3 Height	30 cm
Package 3 width	30 cm
Package 3 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<input checked="" type="checkbox"/> REACH Declaration
EU RoHS Directive	Compliant <input checked="" type="checkbox"/> EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	<input checked="" type="checkbox"/> Yes
China RoHS Regulation	<input checked="" type="checkbox"/> China RoHS Declaration
Environmental Disclosure	<input checked="" type="checkbox"/> Product Environmental Profile

Circularity Profile

 End Of Life Information

WEEE

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
