Product data sheet
Characteristics

METSEPM8240
Power quality meter, PowerLogic PM8000, Standard, integrated display, 512 MB, 256 s/c

Main

Range	PowerLogic
Product name	PowerLogic PM8000
Device short name	PM8240
Product or Component Type	Power meter

Complementary

Power quality analysis	EN 50160 2010 compliance report IEEE 519 2014 compliance report IEC 61000-4-30 class S power quality measurement Up to the 63rd harmonic Harmonic distortion Waveform capture Voltage sag and swell detection Programmablity (logic and math functions) IEC 62586 power quality monitoring Disturbance direction detection Rapid voltage change
Device Application	Power monitoring WAGES metering
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
Line Rated Current	1 A 5 A 10 A
Poles description	3P + N 3P 1P + N
Power Consumption in VA	18 VA 415 V AC
Display Type	Colour TFT LCD
Display Resolution	320 x 240 pixels QVGA
Sampling rate	256 samples/cycle
Measurement current	50…10000 mA
Analogue input type	Voltage (impedance 5 MOhm) Current (impedance 0.3 mOhm)
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

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.

Number of inputs	3 digital 30 V AC 3 digital 60 V DC
Measurement accuracy	Current +/- 0.1 % Voltage +/- 0.1 % Active energy +/- 0.2 %
Accuracy class	Class 0.2S active energy IEC 62053-22 Class 0.2 active energy ANSI C12.20 Class 0.2 active power IEC 61557-12 Class 0.5S reactive energy IEC 62053-24 Class 0.5 power factor IEC 61557-12 Class 0.2 voltage IEC 61557-12 Class 0.2 current IEC 61557-12
Number of Outputs	1 pulse
Information displayed	Voltage Current Frequency Power Energy consumption Harmonic distortion
Communication port protocol	Modbus RTU 115 kbauds - 2-wire ION 115 kbauds - 2-wire DNP3 IEC 61850 Modbus TCP/IP Ethernet Modbus TCP/IP daisy chain 10/100 Mbit/s RSTP 801.1d 2004
Communication port support	ETHERNET Screw terminal block RS485
Communication Network Type	IPv6 (internet protocol)
Data recording	Min/Max of instantaneous values Waveform logs Sequence of event recording Time stamping Alarm logs Trending/Forecasting Sag and swell logs Harmonics logs GPS synchronisation Data logs Event logs 50 data recorders
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 RSTP support NTP time synchronization DHCP PTP time synchronization
Cybersecurity	Enable/Disable communication ports Password protection Syslog protocol support Robust security logs Port hardening
Mounting Mode	Flush-mounted
Mounting support	Framework
Installation category	III
Safety Construction	III400…690 V conforming to IEC 61010-1:ed. 3 III400…690 V conforming to EN 61010-1:ed. 3 III347…600 V conforming to UL 61010-1:ed. 3 III347…600 V conforming to CSA C22.2 No 61010-1:ed. 3

Standards	IEC 61557-12 IEC 62052-11 IEC 62053-24 IEC 62053-22 IEEE 1588 IEC 62586-2 IEC 61326-1
Product certifications	CE[RETURN]CULus[RETURN]N998
Width	3.78 in (96 mm)
Depth	3.05 in (77.5 mm)
Height	3.78 in (96 mm)
Net Weight	20.49 oz (581 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	Front IP54 IEC 60529 Body IP30 IEC 60529
Relative humidity	5…95 %
Ambient air temperature for operation	-13…158 °F (-25…70 °C)
Ambient Air Temperature for Storage	-40…185 °F (-40…85 °C)
Operating altitude	9842.52 ft (3000 m)

Ordering and shipping details

Category	09797-POWERLOGIC PM8000 HARDWARE
Discount Schedule	PL1
GTIN	3606480701931
Returnability	Yes
Country of origin	CA

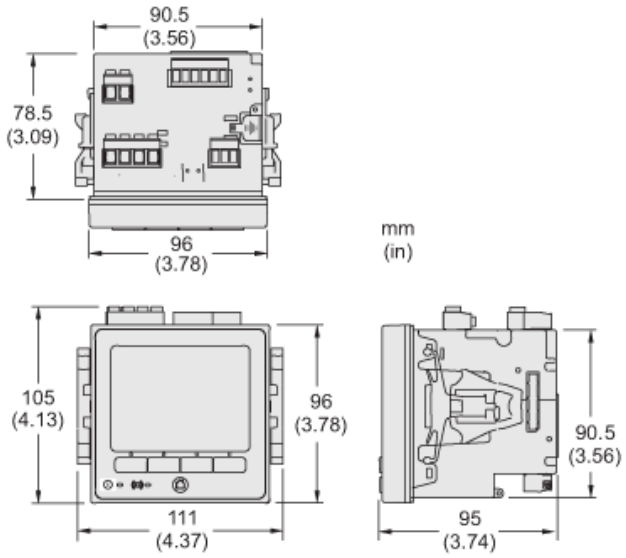
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.51 in (14 cm)
Package 1 Width	5.51 in (14 cm)
Package 1 Length	7.28 in (18.5 cm)
Package 1 Weight	2.10 lb(US) (0.954 kg)

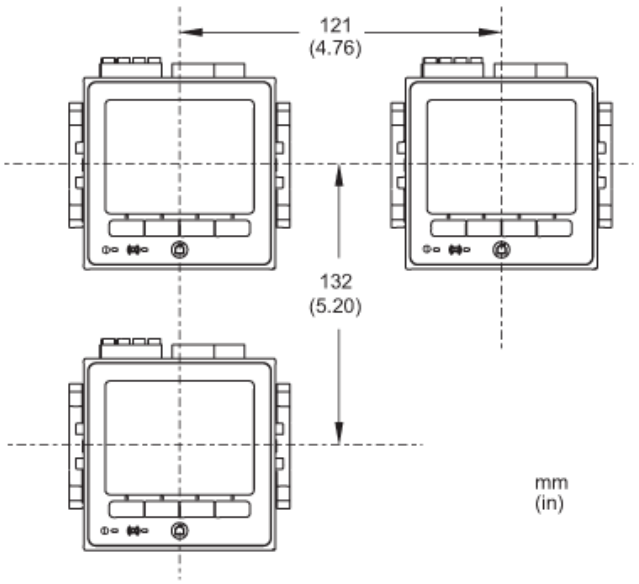
Offer Sustainability

California proposition 65	WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant with Exemptions
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	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.

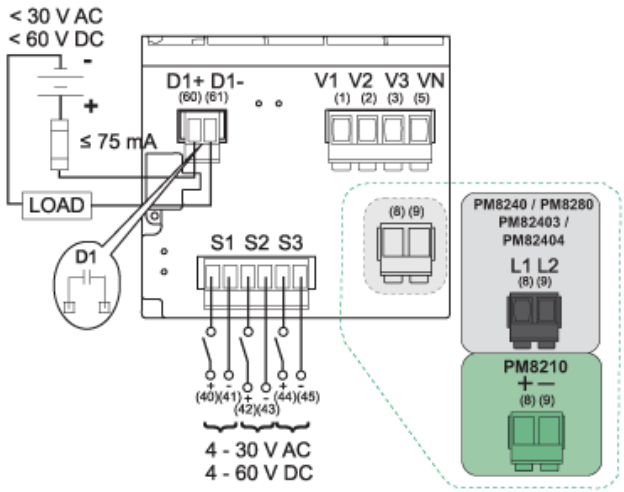
Approximate Dimensions

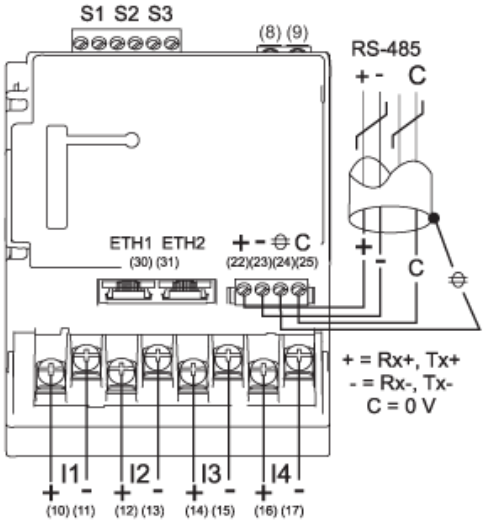


Clearances



Wiring


< 30 V AC
< 60 V DC
≤ 75 mA
LOAD
D1
D1+ D1-
(60) (61)
V1 V2 V3 VN
(1) (2) (3) (5)
S1 S2 S3
(8) (9)
PM8240 / PM8280
PM82403 /
PM82404
L1 L2
(8) (9)
PM8210
(8) (9)
(40)(41) (42)(43) (44)(45)
4 - 30 V AC
4 - 60 V DC


S1 S2 S3
(8) (9)
RS-485
C
ETH1 ETH2
(30) (31)
(22)(23)(24)(25)
+ = Rx+, Tx+
- = Rx-, Tx-
C = 0 V
I1
I2
I3
I4
(10) (11)
(12) (13)
(14) (15)
(16) (17)