Product datasheet

Specifications

Green Premium™

power meter PowerLogic PM5100, without communication, up to 15th Harmonic, 1DO 33 alarms

METSEPM5100

Main

Range	PowerLogic
Product Name	PowerLogic PM5000
Device Short Name	PM5100
Product Or Component Type	Power meter

Complementary

Power Quality Analysis	up to the 15th harmonic
Device Application	Power monitoring
Type Of Measurement	Current Voltage Frequency Power factor Energy Active and reactive power
Supply Voltage	90...450 V AC 45...65 Hz 100...300 V DC
Network Frequency	60 Hz 50 Hz
[In] Rated Current	5 A 1 A
Type Of Network	3P + N 1P + N 3P
Maximum Power Consumption In Va	11 VA at 415 V
Ride-Through Time	80 ms 120 V AC typical 100 ms 230 V AC typical 100 ms 415 V AC typical 50 ms 125 V DC typical
Display Type	Monochrome graphic LCD
Display Resolution	128 x 128 pixels
Sampling Rate	64 samples/cycle
Measurement Current	50…8500 mA
Analogue Input Type	Voltage (impedance 5 MOhm) Current (impedance <= 0.3 mOhm)
Measurement Voltage	35…760 V AC 45...65 Hz between phases 20…400 V AC 45...65 Hz between phase and neutral
Frequency Measurement Range	45…65 Hz
Number Of Inputs	0

Disclaimer: 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

Measurement Accuracy	Active energy +/- 0.5 % Reactive energy +/- 2 % Active power +/- 0.5 % Apparent power +/- 0.5 % Frequency +/- 0.05 % Power factor +/- 0.5 Current +/- 0.5 % Voltage +/- 0.5 % Apparent energy +/- 0.5 % Reactive power +/- 2 %
Accuracy Class	Class 0.5S active energy conforming to IEC 62053-22
Number Of Outputs	1 pulse (energy)
Communication Port Protocol	-
Communication Port Support	-
Data Recording	Min/max of instantaneous values Time stamping
Connections - Terminals	Voltage circuit: screw terminal block4 Control circuit: screw terminal block2 Current transformer: screw terminal block6 Input/output circuit: screw terminal block6 RS485 link: screw terminal block4
Mounting Mode	Flush-mounted
Mounting Support	Framework
Standards	EN 50470-1 IEC 62053-22:2020 UL 61010-1 IEC 62053-24 IEC 61557-12:2015 EN 50470-3 IEC 60529 IEC 62053-23:2020 IEC 62052-11:2020 IEC 62052-31:2015
Product Certifications	CE conforming to IEC 61010-1 CULus conforming to UL 61010-1
Width	96 mm
Depth	72 mm
Height	96 mm
Net Weight	380 g

Environment

Electromagnetic Compatibility	Limits for harmonic current emissions class A conforming to IEC 61000-3-2 Electrostatic discharge level 4 conforming to IEC 61000-4-2 Conducted RF disturbances level 3 conforming to IEC 61000-4-6 Magnetic field at power frequency level 4 conforming to IEC 61000-4-8 Conducted and radiated emissions class B conforming to EN 55022 Immunity to conducted disturbances - test level: 150 kHz...80 MHz conforming to IEC 61000-4-6 Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 Radiated radio-frequency electromagnetic field immunity test conforming to IEC 61000-4-3 Surge immunity test conforming to IEC 61000-4-5 Voltage dips and interruptions immunity test conforming to IEC 61000-4-11
Ip Degree Of Protection	IP54 display: conforming to IEC 60529 IP30 rear: conforming to IEC 60529
Relative Humidity	5…95 % at 50 °C non-condensing
Pollution Degree	2
Ambient Air Temperature For Operation	-25…70 °C meter -20…70 °C display -25…-20 °C (with reduced performance) display

Ambient Air Temperature For Storage	-40…85 °C
Operating Altitude	2000 m CAT III

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	11.0 cm
Package 1 Width	12.6 cm
Package 1 Length	12.6 cm
Package 1 Weight	550.0 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	12
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	6.54 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	96
Package 3 Height	50.0 cm
Package 3 Width	80.0 cm
Package 3 Length	60.0 cm
Package 3 Weight	61.44 kg

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

Well-being performance

Mercury Free

Rohs Exemption Information	Yes

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information