# **Product datasheet**

Specification





# power meter PowerLogic PM5310, modbus, up to 31st Harmonic, 256KB 2DI/2DO 35 alarms

METSEPM5310

#### Main

| Range                     | PowerLogic        |
|---------------------------|-------------------|
| Product Name              | PowerLogic PM5000 |
| Device Short Name         | PM5310            |
| Product Or Component Type | Power meter       |

### Complementary

| Complementary                   |  |
|---------------------------------|--|
| Power Quality Analysis          | up to the 31st harmonic  |
| Device Application              | Multi-tariff Power monitoring  |
| Type Of Measurement             | Current Voltage Frequency Power factor Energy Active and reactive power                                |
| Supply Voltage                  | 90450 V AC 4565 Hz<br>100300 V DC  |
| Network Frequency               | 50 Hz<br>60 Hz   |
| [In] Rated Current              | 1 A<br>5 A   |
| Type Of Network                 | 1P + N<br>3P<br>3P + N   |
| Maximum Power Consumption In Va | 11 VA at 415 V   |
| Ride-Through Time               | 80 ms 120 V AC typical<br>100 ms 230 V AC typical<br>100 ms 415 V AC typical<br>50 ms 125 V DC typical |
| Display Type                    | Monochrome graphic LCD   |
| Display Resolution              | 128 x 128 pixels   |
| Sampling Rate                   | 64 samples/cycle   |
| Measurement Current             | 58500 mA   |
| Analogue Input Type             | Voltage (impedance 5 MOhm) Current (impedance <= 0.3 mOhm)   |
| Measurement Voltage             | 35760 V AC 4565 Hz between phases<br>20440 V AC 4565 Hz between phase and neutral                      |
| Frequency Measurement Range     | 4565 Hz  |
| Number Of Inputs                | 2 digital  |

| 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                  | 2 digital   |
| Information Displayed              | Tariff (4)  |
| <b>Communication Port Protocol</b> | Modbus RTU and ASCII at 9.6, 19.2 and 38.4 kbauds even/odd or none - 2 wires, |
|                                    | insulation 2500 V   |
|                                    | JBUS  |
| Communication Port Support         | RS485   |
| Data Recording                     | Eventless   |
| Data Necoraling                    | Event logs Min/max of instantaneous values                                    |
|                                    |   |
|                                    | Alarm logs  |
|                                    | Data logs   |
|                                    | Time stamping   |
|                                    | Maintenance logs  |
| Memory Capacity                    | 256 kB  |
| Connections - Terminals            | Voltage circuit: screw terminal block4  |
|                                    | Control circuit: screw terminal block2  |
|                                    | Current transformer: screw terminal block6                                    |
|                                    | Input/output circuit: screw terminal block6                                   |
|                                    | Relay output: screw terminal block4   |
|                                    | Ethernet network: RJ45 connector  |
| Mounting Mode                      | Flush-mounted   |
| Mounting Support                   | Framework   |
| Standards                          | EN 50470-3  |
|                                    | IEC 62053-24  |
|                                    | IEC 60529   |
|                                    | EN 50470-1  |
|                                    |   |
|                                    | UL 61010-1  |
|                                    | IEC 62053-22:2020   |
|                                    | IEC 61557-12:2015   |
|                                    | 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                         | 430 g   |
|                                    |   |

## **Environment**

| Electromagnetic Compatibility           | Conducted and radiated emissions class A conforming to EN 55011  |
|---|--|
| , | Limits for harmonic current emissions class A conforming to IEC 61000-3-2                                  |
|   | Immunity to conducted disturbances - test level: 150 kHz80 MHz level 3 conforming                          |
|   | to IEC 61000-4-6   |
|   | Voltage dips and interruptions immunity test level 4 conforming to IEC 61000-4-11                          |
|   | 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  |
|   | Limitation of voltage changes, voltage fluctuations and flicker in low-voltage conforming to IEC 61000-3-3 |
|   | Electrostatic discharge - test level: 8 kV level 4 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 level 4 conforming to IEC 61000-4-4                          |
|   | Surge immunity test level 4 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                       | 595 % at 50 °C non-condensing  |
| Pollution Degree                        | 2  |
| Ambient Air Temperature For             | -2570 °C meter   |
| Operation                               | -2070 °C display   |
|   | -2520 °C (with reduced performance) display  |
| Ambient Air Temperature For<br>Storage  | -4085 °C   |
| Operating Altitude                      | 2000 m CAT III   |
| operating militade                      |  |

# **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             | 492.0 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             | 6.4 kg   |
| Unit Type Of Package 3       | P12      |
| Number Of Units In Package 3 | 288      |
| Package 3 Height             | 105.0 cm |
| Package 3 Width              | 80.0 cm  |
| Package 3 Length             | 120.0 cm |
| Package 3 Weight             | 156.0 kg |

## Sustainability Screen Premium\*

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

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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   |