

# Product datasheet

Specifications



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

|                                 |  |
|---------------------------------|--|
| Power quality analysis          | up to the 31st harmonic  |
| Device application              | Multi-tariff<br>Power monitoring   |
| Type of measurement             | Current<br>Voltage<br>Frequency<br>Power factor<br>Energy<br>Active and reactive power                 |
| supply voltage                  | 90...450 V AC 45...65 Hz<br>100...300 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             | 5...8500 mA  |
| Analogue input type             | Voltage (impedance 5 MOhm)<br>Current (impedance <= 0.3 mOhm)  |
| Measurement voltage             | 35...760 V AC 45...65 Hz between phases<br>20...440 V AC 45...65 Hz between phase and neutral          |
| Frequency measurement range     | 45...65 Hz   |
| Number of inputs                | 2 digital  |

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 %<br>Reactive energy +/- 2 %<br>Active power +/- 0.5 %<br>Apparent power +/- 0.5 %<br>Frequency +/- 0.05 %<br>Power factor +/- 0.5<br>Current +/- 0.5 %<br>Voltage +/- 0.5 %<br>Apparent energy +/- 0.5 %<br>Reactive power +/- 2 % |
| Accuracy class              | Class 0.5S active energy conforming to IEC 62053-22   |
| Number of outputs           | 2 digital   |
| Information displayed       | Tariff (4)  |
| Communication port protocol | Modbus RTU and ASCII at 9.6, 19.2 and 38.4 kbauds even/odd or none - 2 wires,<br>insulation 2500 V<br>JBUS  |
| Communication port support  | RS485   |
| Data recording              | Event logs<br>Min/max of instantaneous values<br>Alarm logs<br>Data logs<br>Time stamping<br>Maintenance logs   |
| Memory capacity             | 256 kB  |
| Connections - terminals     | Voltage circuit: screw terminal block4<br>Control circuit: screw terminal block2<br>Current transformer: screw terminal block6<br>Input/output circuit: screw terminal block6<br>Relay output: screw terminal block4<br>Ethernet network: RJ45 connector  |
| Mounting mode               | Flush-mounted   |
| Mounting support            | Framework   |
| Standards                   | EN 50470-3<br>IEC 62053-24<br>IEC 60529<br>EN 50470-1<br>UL 61010-1<br>IEC 62053-22:2020<br>IEC 61557-12:2015<br>IEC 62053-23:2020<br>IEC 62052-11:2020<br>IEC 62052-31:2015  |
| Product certifications      | CE conforming to IEC 61010-1<br>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<br>Limits for harmonic current emissions class A conforming to IEC 61000-3-2<br>Immunity to conducted disturbances - test level: 150 kHz...80 MHz level 3 conforming to IEC 61000-4-6<br>Voltage dips and interruptions immunity test level 4 conforming to IEC 61000-4-11<br>Conducted RF disturbances level 3 conforming to IEC 61000-4-6<br>Magnetic field at power frequency level 4 conforming to IEC 61000-4-8<br>Conducted and radiated emissions class B conforming to EN 55022<br>Limitation of voltage changes, voltage fluctuations and flicker in low-voltage conforming to IEC 61000-3-3<br>Electrostatic discharge - test level: 8 kV level 4 conforming to IEC 61000-4-2<br>Radiated radio-frequency electromagnetic field immunity test conforming to IEC 61000-4-3<br>Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4<br>Surge immunity test level 4 conforming to IEC 61000-4-5<br>Voltage dips and interruptions immunity test conforming to IEC 61000-4-11 |
| IP degree of protection               | IP54 display: conforming to IEC 60529<br>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<br>-20...70 °C display<br>-25...-20 °C (with reduced performance) display  |
| Ambient air temperature for storage   | -40...85 °C  |
| Operating altitude                    | 2000 m CAT III<br>3000 m CAT II  |





## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 11.000 cm |
| Package 1 Width              | 12.600 cm |
| Package 1 Length             | 12.600 cm |
| Package 1 Weight             | 473.000 g |
| Unit Type of Package 2       | S03       |
| Number of Units in Package 2 | 12        |
| Package 2 Height             | 30.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 6.333 kg  |
| Unit Type of Package 3       | P06       |
| Number of Units in Package 3 | 96        |
| Package 3 Height             | 75.000 cm |
| Package 3 Width              | 60.000 cm |
| Package 3 Length             | 80.000 cm |
| Package 3 Weight             | 62.012 kg |

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

|  |   |
|--|---|
| <div>Environmental footprint</div>  |   |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Use Better   |   |
| <div>Materials and Substances</div> |   |
| <a href="#">EU RoHS Directive</a>  | Compliant with Exemptions   |
| Use Again  |   |
| <div>Repack and remanufacture</div> |   |
| Circularity Profile  | <a href="#">End of Life Information</a>   |
| Take-back  | No  |
| WEEE   | <div>The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins</div> |