

# Product datasheet

Specifications



power meter PowerLogic PM5320,  
ethernet, up to 31st Harmonic,  
256KB 2DI/2DO 35 alarms

METSEPM5320

## Main

|                           |                   |
|---------------------------|-------------------|
| Range                     | PowerLogic        |
| Product name              | PowerLogic PM5000 |
| Device short name         | PM5320            |
| 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 + N<br>3P                                                                                 |
| 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                                                                                                                                                                                                                                                 |
| 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 TCP/IP at 10/100 Mbit/s, insulation 2500 V<br>BACnet IP                                                                                                                                                                                            |
| Communication port support  | ETHERNET                                                                                                                                                                                                                                                  |
| Data recording              | Maintenance logs<br>Alarm logs<br>Min/max of instantaneous values<br>Event logs<br>Time stamping<br>Data 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                   | IEC 62053-22<br>EN 50470-1<br>IEC 60529<br>IEC 61557-12<br>UL 61010-1<br>EN 50470-3<br>IEC 62053-24                                                                                                                                                       |
| Product certifications      | CE conforming to IEC 61010-1<br>CULus conforming to UL 61010-1                                                                                                                                                                                            |
| Width                       | 96 mm                                                                                                                                                                                                                                                     |
| Depth                       | 72 mm                                                                                                                                                                                                                                                     |
| Height                      | 96 mm                                                                                                                                                                                                                                                     |
| Product weight              | 430 g                                                                                                                                                                                                                                                     |

## Environment

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electromagnetic compatibility | Limitation of voltage changes, voltage fluctuations and flicker in low-voltage class A 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 level 3 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<br>Limits for harmonic current emissions class A conforming to IEC 61000-3-2<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>Radiated radio-frequency electromagnetic field immunity test conforming to IEC 61000-4-3 |
| 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             | 11.0 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             | 7.096 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             | 206.4 kg |

Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                           |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>                                                                            |
| Mercury free               | Yes                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                         |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                               |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                                     |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Recommended replacement(s)