

METSEPM5650

power meter PowerLogic PM5650, 2 ethernet,
up to 63th Harmonic, 1,1MB, waveform,
4DI/2DO 52 alarms



Main

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|---------------------------|-------------------|
| Range | PowerLogic |
| Product name | PowerLogic PM5000 |
| Device short name | PM5650 |
| Product or component type | Power meter |

Complementary

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| Power quality analysis | Up to the 63rd harmonic Waveform capture Voltage sag and swell detection |
| Metering type | Measured neutral current Calculated ground current |
| Device application | Gateway WAGES metering Power monitoring Multi-tariff |
| Type of measurement | Current Voltage Frequency Power factor Energy Active and reactive power |
| Supply voltage | 100...300 V DC 90...528 V AC 45...65 Hz |
| Network frequency | 60 Hz 50 Hz |
| [In] rated current | 1 A 5 A |
| Type of network | 3P + N 3P 1P + N |
| Maximum power consumption in VA | 16 VA at 480 V |
| Ride-through time | 35 Ms 120 V AC typical 129 Ms 230 V AC typical 50 ms 125 V DC typical |
| Display type | Monochrome graphic LCD |
| Display resolution | 128 x 128 pixels |
| Sampling rate | 128 samples/cycle |
| Measurement current | 50...10000 mA |
| Analogue input type | Voltage (impedance 5 MOhm) Current (impedance <= 0.3 mOhm) |
| Measurement voltage | 20...400 V AC 45...65 Hz between phase and neutral 20...828 V AC 45...65 Hz between phases |
| Frequency measurement range | 45...65 Hz |
| Number of inputs | 4 digital |

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| Measurement accuracy | Apparent power +/- 0.5 % Frequency +/- 0.05 % Active energy +/- 0.2 % Reactive energy +/- 1 % Active power +/- 0.2 % Voltage +/- 0.1 % Power factor +/- 0.005 Current +/- 0.15 % Reactive power +/- 1 % |
| Accuracy class | Class 0.2S active energy conforming to IEC 62053-22 |
| Number of outputs | 2 digital |
| Information displayed | Tariff (8) |
| Communication port protocol | Modbus RTU and ASCII at 9.6, 19.2 and 38.4 kbauds even/odd or none - 2 wires, insulation 2500 V JBUS Modbus TCP/IP at 10/100 Mbit/s, insulation 2500 V Ethernet Modbus TCP/IP daisy chain BACnet IP DNP3 over ethernet |
| Communication port support | RS485 ETHERNET |
| Communication gateway | Ethernet/serial |
| Data recording | Event logs Maintenance logs Min/Max of instantaneous values Data logs Alarm logs Time stamping |
| Memory capacity | 1.1 MB |
| Web services | Alarm notification by e-mail Web server Diagnostic via predefined web pages Real time viewing of data |
| Ethernet service | SNTP client SNMP-Traps |
| Connections - terminals | Voltage circuit: screw terminal block4 Control circuit: screw terminal block2 Current transformer: screw terminal block6 RS485 link: screw terminal block4 Digital input: screw terminal block8 Digital output: screw terminal block4 Ethernet network: RJ45 connector2 |
| Mounting mode | Flush-mounted |
| Mounting support | Framework |
| Standards | EN 50470-3 IEC 61557-12:2015 IEC 62053-22:2020 IEC 62053-24 IEC 60529 EN 50470-1 UL 61010-1 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 | 450 g |

Environment

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| Electromagnetic compatibility | Limits for harmonic current emissions class A conforming to IEC 61000-3-2 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 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 | 5...95 % at 50 °C non-condensing |
| Pollution degree | 2 |
| Ambient air temperature for operation | -25...70 °C |
| Ambient air temperature for storage | -40...85 °C |
| Operating altitude | <= 3000 m |

Packing Units

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|------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 11.5 cm |
| Package 1 Width | 12.5 cm |
| Package 1 Length | 12.5 cm |
| Package 1 Weight | 646 g |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 12 |
| Package 2 Height | 30 cm |
| Package 2 Width | 30 cm |
| Package 2 Length | 40 cm |
| Package 2 Weight | 8.133 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 96 |
| Package 3 Height | 75 cm |
| Package 3 Width | 80 cm |
| Package 3 Length | 60 cm |
| Package 3 Weight | 73.064 kg |

Offer Sustainability

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|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation |  REACH Declaration |
| EU RoHS Directive | Compliant with Exemptions |
| Mercury free | Yes |
| China RoHS Regulation |  China RoHS Declaration |
| RoHS exemption information |  Yes |
| 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 |