# Product data sheet
## Characteristics

# METSEPM8240
## PowerLogic PM8000 - PM8240 Panel mount meter - intermediate metering


### Main

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|---|---|
| Range | PowerLogic |
| Product name | PowerLogic PM8000 |
| Device short name | PM8240 |
| Product or component type | Power meter |

### Complementary

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| Power quality analysis | Power quality monitoring IEC 62586<br>Programmablity (logic and math functions)<br>Voltage sag and swell detection<br>Waveform capture<br>Harmonic distortion<br>Up to the 63rd harmonic<br>Power quality measurement IEC 61000-4-30 : class S<br>Compliance report EN 50160 |
| Device application | WAGES metering<br>Power monitoring |
| Type of measurement | Power factor (per phase, rms)<br>Apparent power (per phase, rms)<br>Active and reactive power (per phase, rms)<br>Power factor (total)<br>Apparent power (total)<br>Active and reactive power (total)<br>Frequency<br>Voltage<br>Current |
| Supply voltage | 120...300 V DC +/- 10 %<br>90...415 V AC +/- 10 % (45...65 Hz) |
| Network frequency | 50 Hz<br>60 Hz |
| [In] rated current | 1 A<br>10 A<br>5 A |
| Poles description | 1P + N<br>3P<br>3P + N |
| Power consumption in VA | 18...36 VA at 415 V AC |
| Display type | Colour TFT LCD |
| Display resolution | 320 x 240 pixels QVGA |
| Sampling rate | 256 samples/cycle |
| Measurement current | 50 mA...10 A |
| Analogue input type | Voltage (impedance 5 MOhm)<br>Current (impedance 0.3 mOhm) |
| Measurement voltage | 100...690 V AC 42...69 Hz between phases<br>57...400 V AC 42...69 Hz between phase and neutral |
| Frequency measurement range | 42...69 Hz |
| Number of inputs | 3 digital 60 V DC<br>3 digital 30 V AC |

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|---|---|
| Measurement accuracy | +/- 0.2 % active energy<br>+/- 0.1 % voltage<br>+/- 0.1 % current |
| Accuracy class | Class 0.2 (current according to IEC 61557-12)<br>Class 0.2 (voltage according to IEC 61557-12)<br>Class 0.5 (power factor according to IEC 61557-12)<br>Class 0.5S (reactive energy according to IEC 62053-24)<br>Class 0.2 (active power according to IEC 61557-12)<br>Class 0.2 (active energy according to ANSI C12.20)<br>Class 0.2S (active energy according to IEC 62053-22) |
| Number of outputs | 1 pulse |
| Information displayed | Harmonic distortion<br>Energy consumption<br>Power<br>Frequency<br>Current<br>Voltage |
| Communication port protocol | RSTP 801.1d 2004<br>Ethernet Modbus TCP/IP daisy chain : 10/100 Mbit/s,<br>Modbus TCP/IP<br>IEC 61850<br>DNP3<br>ION 2-wire, : 115 kbauds,<br>Modbus RTU 2-wire, : 115 kbauds, |
| Communication port support | RS485 (screw terminal block)<br>Ethernet |
| Data recording | Data logs<br>Event logs<br>Min/Max of instantaneous values<br>Sequence of event recording<br>Time stamping<br>Trending/Forecasting<br>GPS synchronisation<br>Alarm logs<br>Harmonics logs<br>Sag and swell logs<br>Waveform logs |
| Memory capacity | 512 MB |
| Web services | Alarm notification by e-mail<br>File upload/download via FTP<br>HTTP server<br>Customizable home page |
| Communication service | NTP time synchronization<br>SMTP e-mail notification<br>SNMP<br>RSTP support |
| Mounting mode | Flush-mounted |
| Mounting support | Framework |
| Installation category | III |
| Safety Construction | CSA C22.2 No 61010-1 : CAT III, 347...600 V ed. 3<br>UL 61010-1 : CAT III, 347...600 V ed. 3<br>EN 61010-1 : CAT III, 400...690 V ed. 3<br>IEC 61010-1 : CAT III, 400...690 V ed. 3 |
| Standards | IEC 61557-12<br>IEC 62053-22<br>IEC 62052-11<br>IEC 62053-24 |
| Product certifications | China RoHS<br>N998<br>CULus<br>CE |
| Width | 96 mm |
| Depth | 77.5 mm |
| Height | 96 mm |
| Product weight | 581 g |

## Environment

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|---|---|
| Electromagnetic compatibility | • surge withstand, conforming to IEEE C37.90.1<br>• conducted RF disturbances 2...150 Hz, conforming to CLC/TR 50579<br>• conducted and radiated emissions, conforming to ICES-003<br>• conducted and radiated emissions, conforming to FCC Part 15<br>• conducted and radiated emissions, conforming to EN 55011<br>• conducted and radiated emissions, conforming to EN 55022<br>• immunity to impulse waves, conforming to IEC 61000-4-12<br>• voltage dips and interruptions immunity test, conforming to IEC 61000-4-11<br>• magnetic field at power frequency, conforming to IEC 61000-4-8<br>• conducted RF disturbances, conforming to IEC 61000-4-6<br>• surge immunity test, conforming to IEC 61000-4-5<br>• electrical fast transient/burst immunity test, conforming to IEC 61000-4-4<br>• radiated radio-frequency electromagnetic field immunity test, conforming to IEC 61000-4-3<br>• electrostatic discharge, conforming to IEC 61000-4-2 |
| IP degree of protection | IP30 (body) conforming to IEC 60529<br>IP54 (front) conforming to IEC 60529 |
| Relative humidity | 5...95 % |
| Ambient air temperature for operation | -25...70 °C |
| Ambient air temperature for storage | -40...85 °C |
| Operating altitude | 3000 m |

## Offer Sustainability

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|---|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 1425 - Schneider Electric declaration of conformity |
| REACh | Reference not containing SVHC above the threshold |
| Product environmental profile | Available Download Product Environmental |
| Product end of life instructions | Available Download End Of Life Manual |