

Product datasheet

Specifications



EasyLogic PM2230, Power & Energy meter, up to the 31st harmonic, LCD display, RS485, class 0.5S

METSEPM2230

Main

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| Range | EasyLogic |
| Product name | EasyLogic PM2200 |
| Device short name | PM2230 |
| Product or component type | Power meter |

Complementary

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| Device application | Power monitoring Sub billing |
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| Power quality analysis | total harmonic distortion up to the 31st harmonic |
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| Type of measurement | Apparent power min/max, total Active and reactive power min/max, total Current min/max, avg Voltage min/max, avg Frequency min/max, avg Total current harmonic distortion THD (I) per phase Total voltage harmonic distortion THD (U) per phase Power factor min/max, avg Apparent energy total Active and reactive energy total |
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| Metering type | Calculated neutral current Active power P, P1, P2, P3 Current I, I1, I2, I3 Peak demand power PM, QM, SM Voltage U, U21, U32, U13, V, V1, V2, V3 Peak demand currents Reactive power Q, Q1, Q2, Q3 Demand power P, Q, S Unbalance current Active, reactive, apparent energy (signed, four quadrant) Apparent power S, S1, S2, S3 |
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| Accuracy class | Class 1 reactive energy conforming to IEC 62053-24 Class 0.5S active energy conforming to IEC 62053-22 Class 5 harmonic distortion (I THD & U THD) |
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| Measurement accuracy | Apparent power +/- 0.5 % Active energy +/- 0.5 % Reactive energy +/- 1 % Active power +/- 0.5 % Voltage +/- 0.5 % Power factor +/- 0.01 Current +/- 0.5 % Frequency +/- 0.05 % |
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| Measurement current | 5...6000 mA |
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| Measurement voltage | 35...480 V AC 50/60 Hz between phases 20...277 V AC 50/60 Hz between phase and neutral 480...999000 V AC 50/60 Hz with external VT |
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| Frequency measurement range | 45...65 Hz |
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| [Us] rated supply voltage | 80...277 V AC 45...65 Hz +/- 10 % 100...277 V DC +/- 10 % |
| Network frequency | 60 Hz 50 Hz |
| Ride-through time | 50 ms 120 V AC typical 50 ms 230 V AC typical 50 ms 125 V DC typical |
| [In] rated current | 5 A 1 A |
| Maximum power consumption in VA | 8 VA at 277 V AC |
| Maximum power consumption in W | 3.3 W (power lines (AC)) 3.3 W at 277 V (power lines (DC)) |
| Input impedance | Current (impedance <= 0.3 mOhm) Voltage (impedance > 5 MOhm) |
| Tamperproof of settings | Protected by access code |
| Display type | Backlit LCD |
| Display colour | Monochrome |
| Display resolution | 128 x 128 pixels |
| Demand intervals | Configurable from 1 to 60 min |
| Information displayed | Demand current (past value) Demand current (present value) Demand power (past value) Demand power (present value) Voltage Current Frequency Energy consumption Harmonic distortion Power factor Active power Apparent power Reactive power Unbalanced in % Harmonic amplitude |
| Control type | 4 x button |
| Local signalling | Red LED: output signal 1...9999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication |
| Number of inputs | 0 |
| Number of outputs | 0 |
| Communication port protocol | Modbus RTU at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation 2500 V |
| Communication port support | Screw terminal block: RS485 |
| Data recording | Energy consumption logs Power logs Time stamping Min/max for 8 parameters |
| Function available | Real time clock |
| Sampling rate | 64 samples/cycle |
| Cybersecurity | Enable/disable communication ports |
| Communication service | Remote monitoring |
| Language | Russian French Portuguese English Spanish Chinese German |
| Product certifications | CE conforming to IEC 61010-1 CULus conforming to UL 61010-1 CULus conforming to CSA C22.2 No 61010-1 RCM EAC |

C-Tick

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| Mounting mode | Clip-on |
| Mounting position | Vertical |
| Mounting support | Framework |
| Provided equipment | 1 x installation guide |
| Measurement category | Category III 480 V Category II 480...600 V |
| Electrical insulation class | Double insulation Class II |
| Flame retardance | V-0 conforming to UL 94 |
| Connections - terminals | Current transformer: screw connection (bottom) 6 Voltage inputs: screw connection (top) 4 |
| Material | Polycarbonate |
| Width | 96 mm |
| Depth | 76.09 mm total: 61.64 mm embedded: |
| Height | 96 mm |
| Net weight | 300 g |
| Compatibility code | PM2230 |

Environment

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| Service life | 7 year(s) |
| IP degree of protection | IP54 front: conforming to IEC 60529 IP30 body: conforming to IEC 60529 |
| Relative humidity | 5...95 % at 50 °C |
| Pollution degree | 2 |
| Ambient air temperature for operation | -10...60 °C |
| Ambient air temperature for storage | -25...70 °C |
| Operating altitude | <= 2000 m |
| Electromagnetic compatibility | Electrostatic discharge 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 conforming to IEC 61000-4-4 Surge immunity test conforming to IEC 61000-4-5 Conducted RF disturbances conforming to IEC 61000-4-6 Magnetic field at power frequency conforming to IEC 61000-4-8 Voltage dips and interruptions immunity test conforming to IEC 61000-4-11 Emission tests conforming to FCC part 15 class A |
| Overvoltage category | III |

Packing Units

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| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 11.94 cm |
| Package 1 Width | 12.19 cm |
| Package 1 Length | 8.89 cm |
| Package 1 Weight | 0.37 kg |

Offer Sustainability

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| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |

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| EU RoHS Directive | Compliant EU RoHS Declaration |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS declaration |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |

Recommended replacement(s)