

# Product datasheet

Specifications



## EasyLogic PM2220 - Power & Energy meter - up to 15th H - LCD - RS485 - class 1

METSEPM2220

### Main

Range	EasyLogic
Product name	EasyLogic PM2200
Device short name	PM2220
Product or component type	Power meter

### Complementary

Device application	Power monitoring Sub billing
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Power quality analysis	total harmonic distortion up to the 15th 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	Active, reactive, apparent energy (signed, four quadrant) Current I, I1, I2, I3 Peak demand currents Peak demand power PM, QM, SM Unbalance current Active power P, P1, P2, P3 Reactive power Q, Q1, Q2, Q3 Demand power P, Q, S Voltage U, U21, U32, U13, V, V1, V2, V3 Apparent power S, S1, S2, S3 Calculated neutral current
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Accuracy class	Class 1 active energy conforming to IEC 62053-21 Class 1 reactive energy conforming to IEC 62053-24 Class 5 harmonic distortion (I THD & U THD)
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Measurement accuracy	Apparent power +/- 1 % Active energy +/- 1 % Reactive energy +/- 1 % Active power +/- 1 % 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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<b>[Us] rated supply voltage</b>	44...277 V AC 45...65 Hz +/- 10 % 44...277 V DC +/- 10 %
<b>Network frequency</b>	50 Hz 60 Hz
<b>Ride-through time</b>	100 ms 120 V AC typical 400 ms 230 V AC typical 50 ms 125 V DC typical
<b>[In] rated current</b>	1 A 5 A
<b>Maximum power consumption in VA</b>	6 VA at 277 V AC
<b>Maximum power consumption in W</b>	3.3 W (power lines (AC)) 2 W at 277 V (power lines (DC))
<b>Input impedance</b>	Current (impedance <= 0.3 mOhm) Voltage (impedance > 5 MOhm)
<b>Tamperproof of settings</b>	Protected by access code
<b>Display type</b>	Backlit LCD
<b>Display colour</b>	Monochrome
<b>Display resolution</b>	128 x 128 pixels
<b>Demand intervals</b>	Configurable from 1 to 60 min
<b>Information displayed</b>	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
<b>Control type</b>	4 x button
<b>Local signalling</b>	Red LED: output signal 1...9999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication
<b>Number of inputs</b>	0
<b>Number of outputs</b>	0
<b>Communication port protocol</b>	Modbus RTU at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation 2500 V
<b>Communication port support</b>	Screw terminal block: RS485
<b>Data recording</b>	Time stamping Min/max for 8 parameters
<b>Function available</b>	Real time clock
<b>Sampling rate</b>	64 samples/cycle
<b>Cybersecurity</b>	Enable/disable communication ports
<b>Communication service</b>	Remote monitoring
<b>User language</b>	Spanish French English Russian Portuguese German Chinese
<b>Product certifications</b>	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

<b>Mounting mode</b>	Clip-on
<b>Mounting position</b>	Vertical
<b>Mounting support</b>	Framework
<b>Provided equipment</b>	1 x installation guide
<b>Measurement category</b>	Category III 480 V Category II 480...600 V
<b>Electrical insulation class</b>	Double insulation Class II
<b>Flame retardance</b>	V-0 conforming to UL 94
<b>Connections - terminals</b>	Current transformer: screw connection (bottom) 6 Voltage inputs: screw connection (top) 4
<b>Material</b>	Polycarbonate
<b>Width</b>	96 mm
<b>Depth</b>	76.09 mm total: 61.64 mm embedded:
<b>Height</b>	96 mm
<b>Product weight</b>	300 g
<b>Compatibility code</b>	PM2220

## Environment

<b>Service life</b>	7 year(s)
<b>IP degree of protection</b>	IP54 front: conforming to IEC 60529 IP30 body: conforming to IEC 60529
<b>Relative humidity</b>	5...95 % at 50 °C
<b>Pollution degree</b>	2
<b>Ambient air temperature for operation</b>	-10...60 °C
<b>Ambient air temperature for storage</b>	-25...70 °C
<b>Operating altitude</b>	<= 2000 m
<b>Electromagnetic compatibility</b>	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
<b>Overvoltage category</b>	III

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	8.9 cm
<b>Package 1 Width</b>	12.2 cm
<b>Package 1 Length</b>	11.7 cm
<b>Package 1 Weight</b>	270 g

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>

<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	Yes
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>

**Recommended replacement(s)**