

Product datasheet

Specifications



EasyLogic PM2120 - Power & Energy meter - up to 15th H - LED - RS485 - class 1

METSEPM2120

Main

Range	EasyLogic
Product name	EasyLogic PM2100
Device short name	PM2120
Product or component type	Power meter

Complementary

Device application	Sub billing Power monitoring
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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	Current I, I1, I2, I3 Peak demand power PM, QM, SM Active, reactive, apparent energy (signed, four quadrant) Peak demand currents Active power P, P1, P2, P3 Calculated neutral current Voltage U, U21, U32, U13, V, V1, V2, V3 Unbalance current Reactive power Q, Q1, Q2, Q3 Demand power P, Q, S Apparent power S, S1, S2, S3
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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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Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Us] rated supply voltage	44...277 V AC 45...65 Hz +/- 10 % 44...277 V DC +/- 10 %
Network frequency	50 Hz 60 Hz
Ride-through time	100 ms 120 V AC typical 400 ms 230 V AC typical 50 ms 125 V DC typical
[In] rated current	1 A 5 A
Maximum power consumption in VA	6 VA at 277 V AC
Maximum power consumption in W	3.3 W (power lines (AC)) 2 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	7 segments LED
Display colour	Red
Messages display capacity	3 fields of 4 characters
Display digits	12 digit(s) - 14.2 mm in height
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 %
Control type	3 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	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
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
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	PM2120

Environment

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

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.6 cm
Package 1 Width	6.72 cm
Package 1 Length	10.16 cm
Package 1 Weight	302.5 g

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
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)