

Product data sheet

Specifications



EASYLOGIC PM1130H DUAL P&E RLY RS CL 0.5

METSEPM1130HCL05RS

Main

Range	EasyLogic
Product name	EasyLogic PM11XXH RS
Device short name	PM1130H
Product or component type	Dual source energy meter

Complementary

Power quality analysis	total harmonic distortion
Device application	Energy monitoring Main or redundant power monitoring
Type of measurement	Current Voltage Frequency Power factor Phase angle RPM Peak demand power Harmonic distortion (I THD & U THD) Active power Active energy

Metering type	Unbalance current Power factor and displacement PF (signed, four quadrant) Reactive power Q, Q1, Q2, Q3 Average current Iavg Active, reactive, apparent energy (signed, two quadrant) Active power P, P1, P2, P3 Frequency Calculated neutral current Voltage U21, U32, U13, V1, V2, V3 Unbalance voltage Rotation speed Demand power P, Q, S Phase currents Apparent power S, S1, S2, S3 Phase current I1, I2, I3 RMS Average voltage Vavg
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Counter functions	ON-load source 1 hour counting ON hour counting ON-load source 2 hour counting Power interruption
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[Us] rated supply voltage	48...277 V AC 45...65 Hz 48...277 V DC
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Network frequency	60 Hz 50 Hz
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[In] rated current	5 A 1 A
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Type of network	2P 2P + N
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	3P 1P + N 3P + N
Maximum power consumption in VA	4 VA at 240 V between phase and neutral
Maximum power consumption in W	2 W at 240 V
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
Communication of data	Last cleared log Reading of measurements All counters Revolution speed Instantaneous and demand values
Tamperproof of settings	Protected by access code
Sampling rate	32 samples/cycle
Measurement current	5...6000 mA
Signal	Voltage (impedance 5 MOhm)4 x Current 0.005...10 A (impedance 0.3 MOhm)6 x
Measurement voltage	35...480 V AC 50...60 Hz between phases 35...277 V AC 50...60 Hz between phase and neutral 277...999000 V AC 50...60 Hz with external VT
Frequency measurement range	45...65 Hz
Measurement accuracy	Current +/- 0.5 % Voltage +/- 0.5 % Frequency +/- 0.05 % Power factor +/- 0.01 Reactive power +/- 2 % Reactive energy +/- 2 % Active power +/- 0.5 % Apparent power +/- 0.5 % Active energy +/- 0.5 % Apparent energy +/- 0.5 % Harmonic distortion (I THD & U THD) +/- 5 %
Accuracy class	Class 2 reactive energy conforming to IEC 62053-23 Class 0.5 active energy conforming to IEC 62053-22
Number of outputs	1 relay
Output voltage	300 V AC@2 A
Demand intervals	1 s
Local signalling	Green LED: activity Red LED: output signal 1...9999000 pulse/ k_h (kWh, kVAh, kVARh) Red LED: alternate source
Communication port protocol	Modbus at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation 2500 V
Communication port support	RS485
Data recording	Energy consumption logs
Material	Polycarbonate
Flame retardance	V-0 conforming to UL 94
Mounting mode	Flush-mounted
Mounting support	Framework
Provided equipment	Installation guide
Installation category	III
Type of installation	Indoor installation
Measurement category	Category III 480 V
Electrical insulation class	Class II

Connections - terminals	Current circuit: screw clamp terminals (bottom) 2.08...3.31 mm² cable(s) Voltage circuit: screw clamp terminals (top) 0.82...3.31 mm² cable(s) Control circuit: screw clamp terminals (top) 0.82...3.31 mm² cable(s) Communication: screw clamp terminals (bottom) 0.33...3.31 mm² cable(s) Secondary circuit: screw clamp terminals (bottom) 0.33...3.31 mm² cable(s) Relay output: screw clamp terminals (rear) 0.33...3.31 mm² cable(s)
Tightening torque	Current circuit: 0.9...1 N.m Philips No 2 screwdriver Voltage circuit: 0.9...1 N.m Philips No 2 screwdriver Control circuit: 0.9...1 N.m Philips No 2 screwdriver Communication: 0.5...0.6 N.m Philips no 1 screwdriver Secondary circuit: 0.5...0.6 N.m Philips no 1 screwdriver Relay output: 0.5...0.6 N.m Philips no 1 screwdriver
Wire stripping length	Current circuit: 3.68 mm Voltage circuit: 7 mm Control circuit: 7 mm Communication: 7 mm 7 mm
Standards	IEC 61010-1:ed. 3 UL 61010-1:ed. 3
Product certifications	CE conforming to IEC 61010-1 CULus conforming to UL 61010-1 CULus conforming to CSA C22.2 No 61010-1 C-Tick
Width	96 mm
Depth	13 mm outside: 52 mm panel:
Height	96 mm
Net weight	300 g

Environment

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 Emission tests conforming to FCC part 15 subpart C Emission tests conforming to FCC part 15 subpart E
Overvoltage category	III
IP degree of protection	IP51 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	-20...70 °C
Operating altitude	<= 2000 m
Service life	7 year(s)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	285 g
Package 1 Height	5.04 cm
Package 1 width	9.6 cm
Package 1 Length	9.6 cm
Unit Type of Package 2	S03

Number of Units in Package 2	18
Package 2 Weight	5130 g
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Unit Type of Package 3	CAR
Number of Units in Package 3	18
Package 3 Weight	8060 g
Package 3 Height	270 mm
Package 3 width	270 mm
Package 3 Length	385 mm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information