Product datasheet

Specifications



EASYLOGIC PM1120H P&E THD RS485 CL 1.0

METSEPM1120HCL10RS

Main

Range	EasyLogic
Product name	EasyLogic PM11XXH RS
Device short name	PM1120H
Product or component type	Energy meter

Complementary

Power quality analysis	total harmonic distortion
Device application	Energy 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	Reactive power Q, Q1, Q2, Q3 Rotation speed Voltage U21, U32, U13, V1, V2, V3 Power factor and displacement PF (signed, four quadrant) Unbalance current Frequency Demand power P, Q, S Apparent power S, S1, S2, S3 Phase currents Active power P, P1, P2, P3 Active, reactive, apparent energy (signed, two quadrant) Phase current I1, I2, I3 RMS Average current Iavg Average voltage Vavg Calculated neutral current Unbalance voltage
Counter functions	ON-load hour counting Power interruption ON hour counting
[Us] rated supply voltage	48...277 V AC 45...65 Hz 48...277 V DC
Network frequency	60 Hz 50 Hz
[In] rated current	1 A 5 A
type of network	2P + N 2P 3P 3P + N 1P + N

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

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	8 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	All counters Instantaneous and demand values Reading of measurements Last cleared log Revolution speed
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	46…277 V AC 50...60 Hz between phase and neutral 80…480 V AC 50...60 Hz between phases 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 % Active power +/- 1 % Apparent power +/- 1 % Active energy +/- 1 % Reactive energy +/- 2 % Apparent energy +/- 1 % Harmonic distortion (I THD & U THD) +/- 5 %
Accuracy class	Class 1 active energy conforming to IEC 62053-21 Class 1 reactive energy conforming to IEC 62053-24
Demand intervals	1 s
Local signalling	Green LED: activity Red LED: output signal 1...9999000 pulse/ k_h (kWh, kVAh, kVARh)
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	Screw connector: 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)
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
Wire stripping length	Current circuit: 3.68 mm Voltage circuit: 7 mm Control circuit: 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	Outside : 13 mm Panel : 49 mm
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 Height	4.88 cm
Package 1 Width	9.6 cm
Package 1 Length	9.6 cm
Package 1 Weight	265 g

Unit Type of Package 2	S03
Number of Units in Package 2	18
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	4770 g
Unit Type of Package 3	P06
Number of Units in Package 3	144
Package 3 Height	105 cm
Package 3 Width	60 cm
Package 3 Length	80 cm
Package 3 Weight	38.2 kg

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**134 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**49 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**3 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**82 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**1 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
SCIP Number	**2e6b556c-15aa-4f88-b35e-16e68ae215e5**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**

Use Again

Repack and remanufacture

Recyclability potential, in %	**10**
End of life manual availability	**End of Life Information**
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**