Product data sheet
Characteristics

METSEPM1120HCL10RS
EASYLOGIC PM1120H P&E THD RS485 CL 1.0

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	Phase angle RPM Peak demand power Harmonic distorsion (I THD & U THD) Voltage Current Frequency Active power Power factor Active energy
Metering type	Active power P, P1, P2, P3 Apparent power S, S1, S2, S3 Frequency Phase current I1, I2, I3 RMS Phase currents Reactive power Q, Q1, Q2, Q3 Rotation speed Voltage U21, U32, U13, V1, V2, V3 Average voltage Vavg Average current Iavg Unbalance current Unbalance voltage Power factor and displacement PF (signed, four quadrant) Calculated neutral current Demand power P, Q, S Active, reactive, apparent energy (signed, two quadrant)
Counter functions	ON hour counting ON-load hour counting

	Power interruption
[Us] rated supply voltage	48...277 V AC 45...65 Hz 48...277 V DC
Network frequency	50 Hz 60 Hz
[In] rated current	1 A 5 A
Type of network	1P + N 2P 2P + N 3P 3P + N
Power consumption in VA	<= 4 VA at 240 V AC between phase and neutral
Power consumption in W	<= 2 W at 240 V DC
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	Instantaneous and demand values Reading of measurements All counters 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 terminal(s) Current 0.005...10 A (impedance 0.3 MOhm) 6 terminal(s)
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	+/- 2 % reactive energy +/- 0.05 % frequency +/- 0.5 % current +/- 0.5 % voltage +/- 0.01 power factor +/- 2 % reactive power +/- 1 % active power +/- 1 % apparent power +/- 1 % active energy +/- 1 % apparent energy +/- 5 % harmonic distorsion (I THD & U THD)
Accuracy class	Class 1 (active energy according to IEC 62053-21) Class 1 (reactive energy according to IEC 62053-24)
Demand intervals	1 s
Local signalling	Green LED : activity Red LED : output signal
Communication port protocol	Modbus 2 wires, : 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V
Communication port support	RS485 screw connector
Data recording	Energy consumption logs
Material	Polycarbonate
Flame retardance	V-0 UL 94 conforming to UL 94 V-0
Mounting mode	Flush-mounted
Mounting support	Framework
Provided equipment	Installation guide
Installation category	III
Type of installation	Indoor installation
Measurement category	Category III up to 480 V
Electrical insulation class	Class II
Connections - terminals	Current circuit : bottom screw clamp terminals 2.08...3.31 mm²

	Voltage circuit : top screw clamp terminals 0.82...3.31 mm² Control circuit : top screw clamp terminals 0.82...3.31 mm² Communication : bottom screw clamp terminals 0.33...3.31 mm²
Tightening torque	Current circuit : 0.9...1 N.m with Philips No 2 Voltage circuit : 0.9...1 N.m with Philips No 2 Control circuit : 0.9...1 N.m with Philips No 2 Communication : 0.5...0.6 N.m with Philips no 1
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	13 mm outside 49 mm panel
Height	96 mm
Product weight	300 g

Environment

Electromagnetic compatibility	• electrical fast transient/burst immunity test, conforming to IEC 61000-4-4 • conducted RF disturbances, conforming to IEC 61000-4-6 • radiated radio-frequency electromagnetic field immunity test, conforming to IEC 61000-4-3 • voltage dips and interruptions immunity test, conforming to IEC 61000-4-11 • electrostatic discharge, conforming to IEC 61000-4-2 • surge immunity test, conforming to IEC 61000-4-5 • magnetic field at power frequency, conforming to IEC 61000-4-8 • 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	IP30 (body) conforming to IEC 60529 IP51 (front) conforming to IEC 60529
Relative humidity	5...95 % 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 yr

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available