Product datasheet

Specifications

panel mount meter EasyLogic PM1220H, class 1, RS485, LCD

METSEEM1220HCL1

Main

Range	EasyLogic
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 distorsion (I THD & U THD) Active power Active energy
Metering type	Average current Iavg Phase currents Active power P, P1, P2, P3 Active, reactive, apparent energy (signed, four quadrant) Rotation speed Average voltage Vavg Calculated neutral current Unbalance current Unbalance voltage Frequency Voltage U21, U32, U13, V1, V2, V3 Demand power P, Q, S Power factor and displacement PF (signed, four quadrant) Phase current I1, I2, I3 RMS
Counter functions	ON hour counting ON-load hour counting Power interruption
[Us] rated supply voltage	48...277 V AC/DC
Network frequency	50 Hz 60 Hz
[In] rated current	1 A 5 A
type of network	3P 2P + N 1P + N 3P + N 2P
Maximum power consumption in VA	4 VA at 240 V
Maximum power consumption in W	2 W at 240 V
Display type	LCD display

Display colour	Monochrome
Display digits	12 digit(s)
Communication of data	Reading of measurements All counters Revolution speed Last cleared log 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	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 distorsion (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) LED: voltage indication
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	9.65 cm
Package 1 Width	21.08 cm
Package 1 Length	24.13 cm
Package 1 Weight	544.311 g

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.

How this information helps you

Environmental footprint

Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Compliant with Exemptions
SCIP Number	1e118aef-b19c-4467-88e5-d3127183205f
REACh Regulation	REACh Declaration
China RoHS Regulation	China RoHS declaration

Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
WEEE	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Take-back	**No**