# **Product datasheet**

Specifications





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

METSEEM1220HCL1

#### Main

Range	EasyLogic
Product Or Component Type	Energy meter

### Complementary

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 lavg
	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	48277 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
	2 W = + 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	56000 mA
Signal	Voltage (impedance 5 MOhm)4 x Current 0.00510 A (impedance 0.3 MOhm)6 x
Measurement Voltage	46277 V AC 5060 Hz between phase and neutral
measurement voltage	80480 V AC 5060 Hz between phases
	277999000 V AC 5060 Hz with external VT
Frequency Measurement Range	4565 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 19999000 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
Installation Category Type Of Installation	III Indoor installation
Type Of Installation	Indoor installation
Type Of Installation Measurement Category	Indoor installation Category III 480 V
Type Of Installation Measurement Category Electrical Insulation Class	Indoor installation Category III 480 V Class II Current circuit: screw clamp terminals (bottom) 2.083.31 mm <sup>2</sup> cable(s) Voltage circuit: screw clamp terminals (top) 0.823.31 mm <sup>2</sup> cable(s)
Type Of Installation Measurement Category Electrical Insulation Class	Indoor installation Category III 480 V Class II Current circuit: screw clamp terminals (bottom) 2.083.31 mm² cable(s) Voltage circuit: screw clamp terminals (top) 0.823.31 mm² cable(s) Control circuit: screw clamp terminals (top) 0.823.31 mm² cable(s)
Type Of Installation Measurement Category Electrical Insulation Class	Indoor installation Category III 480 V Class II Current circuit: screw clamp terminals (bottom) 2.083.31 mm <sup>2</sup> cable(s) Voltage circuit: screw clamp terminals (top) 0.823.31 mm <sup>2</sup> cable(s)
Type Of Installation Measurement Category Electrical Insulation Class	Indoor installation Category III 480 V Class II Current circuit: screw clamp terminals (bottom) 2.083.31 mm² cable(s) Voltage circuit: screw clamp terminals (top) 0.823.31 mm² cable(s) Control circuit: screw clamp terminals (top) 0.823.31 mm² cable(s)
Type Of Installation Measurement Category Electrical Insulation Class Connections - Terminals	Indoor installation         Category III 480 V         Class II         Current circuit: screw clamp terminals (bottom) 2.083.31 mm² cable(s)         Voltage circuit: screw clamp terminals (top) 0.823.31 mm² cable(s)         Control circuit: screw clamp terminals (top) 0.823.31 mm² cable(s)         Communication: screw clamp terminals (bottom) 0.333.31 mm² cable(s)         Current circuit: 0.91 N.m Philips No 2 screwdriver         Voltage circuit: 0.91 N.m Philips No 2 screwdriver
Type Of Installation Measurement Category Electrical Insulation Class Connections - Terminals	Indoor installation         Category III 480 V         Class II         Current circuit: screw clamp terminals (bottom) 2.083.31 mm² cable(s)         Voltage circuit: screw clamp terminals (top) 0.823.31 mm² cable(s)         Control circuit: screw clamp terminals (top) 0.823.31 mm² cable(s)         Communication: screw clamp terminals (bottom) 0.333.31 mm² cable(s)         Current circuit: 0.91 N.m Philips No 2 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	13 mm outside: 49 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	595 % at 50 °C
Pollution Degree	2
Ambient Air Temperature For Operation	-1060 °C
Ambient Air Temperature For Storage	-2070 °C
Operating Altitude	<= 2000 m
Service Life	7 year(s)

# **Packing Units**

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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

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## Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Yes

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

## Well-being performance

Rohs Exemption Information

#### **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information