# **Product datasheet**





## dual power and energy meter EasyLogic PM1230H, LCD screen, Class 0.5

METSEPM1230HCL5

### Main

Range	EasyLogic
Product or component type	Dual source energy meter

Power quality analysis	total harmonic distortion
Device application	Main or redundant power monitoring
	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	Calculated neutral current
	Rotation speed
	Phase currents
	Active power P, P1, P2, P3
	Unbalance current
	Power factor and displacement PF (signed, four quadrant)
	Active, reactive, apparent energy (signed, two quadrant)
	Reactive power Q, Q1, Q2, Q3
	Apparent power S, S1, S2, S3
	Demand power P, Q, S
	Frequency
	Voltage U21, U32, U13, V1, V2, V3
	Unbalance voltage
	Phase current I1, I2, I3 RMS
	Average voltage Vavg
	Average current lavg
Counter functions	Power interruption
	ON-load source 1 hour counting
	ON-load source 2 hour counting
	ON hour counting
[Us] rated supply voltage	48277 V AC 4565 Hz
	48277 V DC
Network frequency	60 Hz
Network frequency	50 Hz
	30 HZ
[In] rated current	5 A
	1 A
type of network	3P + N
type of network	3P
	2P
	1P + N
	IF T IN

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	Backlit LCD
Display colour	Monochrome
display resolution	122 x 32 pixels
communication of data	Reading of measurements All counters Instantaneous and demand values Last cleared log Revolution speed
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	35480 V AC 5060 Hz between phases 35277 V AC 5060 Hz between phase and neutral 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 %  Reactive power +/- 0.5 %  Apparent power +/- 0.5 %  Active energy +/- 0.5 %  Apparent energy +/- 0.5 %  Harmonic distorsion (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 19999000 pulse/ k_h (kWh, kVAh, kVARh) Red LED: alternate source 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	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) 2.083.31 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) Secondary circuit: screw clamp terminals (bottom) 0.333.31 mm² cable(s) Relay output: screw clamp terminals (rear) 0.333.31 mm² cable(s)	
Tightening torque	Current circuit: 0.91 N.m Philips No 2 screwdriver Voltage circuit: 0.91 N.m Philips No 2 screwdriver Control circuit: 0.91 N.m Philips No 2 screwdriver Communication: 0.50.6 N.m Philips no 1 screwdriver Secondary circuit: 0.50.6 N.m Philips no 1 screwdriver Relay output: 0.50.6 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	Outside : 13 mm Panel : 52 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	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**

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	350.0 g



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-CO2 products.

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

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
<b>Environmental Disclosure</b>	Product Environmental Profile
Circularity Profile	End of Life Information