EasyLogic PM2230 - Power & Energy meter - up to 31stH - LCD - RS485 - class 0.5S

METSEPM2230

Range	EasyLogic
Product name	EasyLogic PM2200
Device short name	PM2230
Product or component type	Power meter

Complementary	
Device application	Power monitoring Sub billing
Power quality analysis	total harmonic distortion up to the 31st harmonic
Type of measurement	Apparent power min/max, total Active and reactive power min/max, total Current min/max, avg Voltage min/max, avg Frequency min/max, avg Total current harmonic distortion THD (I) per phase Total voltage harmonic distortion THD (U) per phase Power factor min/max, avg Apparent energy total Active and reactive energy total
Metering type	Calculated neutral current Active power P, P1, P2, P3 Current I, I1, I2, I3 Peak demand power PM, QM, SM Voltage U, U21, U32, U13, V, V1, V2, V3 Peak demand currents Reactive power Q, Q1, Q2, Q3 Demand power P, Q, S Unbalance current Active, reactive, apparent energy (signed, four quadrant) Apparent power S, S1, S2, S3
Accuracy class	Class 1 reactive energy conforming to IEC 62053-24 Class 0.5S active energy conforming to IEC 62053-22 Class 5 harmonic distorsion (I THD & U THD)
Measurement accuracy	Apparent power +/- 0.5 % Active energy +/- 0.5 % Reactive energy +/- 1 % Active power +/- 0.5 % Voltage +/- 0.5 % Power factor +/- 0.01 Current +/- 0.5 % Frequency +/- 0.05 %
Measurement current	56000 mA

Frequency measurement range 45...65 Hz

Measurement voltage

35...480 V AC 50/60 Hz between phases

20...277 V AC 50/60 Hz between phase and neutral 480...999000 V AC 50/60 Hz with external VT

[Us] rated supply voltage	80277 V AC 4565 Hz +/- 10 % 100277 V DC +/- 10 %
Network frequency	60 Hz 50 Hz
Ride-through time	50 ms 120 V AC typical 50 ms 230 V AC typical 50 ms 125 V DC typical
[In] rated current	5 A 1 A
Maximum power consumption in VA	8 VA at 277 V AC
Maximum power consumption in W	3.3 W (power lines (AC)) 3.3 W at 277 V (power lines (DC))
Input impedance	Current (impedance <= 0.3 mOhm) Voltage (impedance > 5 MOhm)
Tamperproof of settings	Protected by access code
Display type	Backlit LCD
Display colour	Monochrome
Display resolution	128 x 128 pixels
Demand intervals	Configurable from 1 to 60 min
Information displayed	Demand current (past value) Demand power (past value) Demand power (past value) Demand power (present value) Voltage Current Frequency Energy consumption Harmonic distortion Power factor Active power Apparent power Reactive power Unbalanced in %
	Harmonic amplitude
Control type	4 x button
Control type  Local signalling	
	4 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh)
Local signalling	4 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh)  Green LED: module operation and integrated communication
Local signalling  Number of inputs	4 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh)  Green LED: module operation and integrated communication  0
Local signalling  Number of inputs  Number of outputs	4 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  Modbus RTU at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation
Local signalling  Number of inputs  Number of outputs  Communication port protocol	4 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  Modbus RTU at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation 2500 V
Local signalling  Number of inputs  Number of outputs  Communication port protocol  Communication port support	4 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  Modbus RTU at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation 2500 V  Screw terminal block: RS485  Energy consumption logs Power logs Time stamping
Local signalling  Number of inputs  Number of outputs  Communication port protocol  Communication port support  Data recording	A x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  Modbus RTU at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation 2500 V  Screw terminal block: RS485  Energy consumption logs Power logs Time stamping Min/max for 8 parameters
Local signalling  Number of inputs  Number of outputs  Communication port protocol  Communication port support  Data recording  Function available	A x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  Modbus RTU at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation 2500 V  Screw terminal block: RS485  Energy consumption logs Power logs Time stamping Min/max for 8 parameters  Real time clock
Local signalling  Number of inputs  Number of outputs  Communication port protocol  Communication port support  Data recording  Function available  Sampling rate	A x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  Modbus RTU at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation 2500 V  Screw terminal block: RS485  Energy consumption logs Power logs Time stamping Min/max for 8 parameters  Real time clock  64 samples/cycle
Local signalling  Number of inputs  Number of outputs  Communication port protocol  Communication port support  Data recording  Function available  Sampling rate  Cybersecurity	Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  Modbus RTU at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation 2500 V  Screw terminal block: RS485  Energy consumption logs Power logs Time stamping Min/max for 8 parameters  Real time clock  64 samples/cycle  Enable/disable communication ports

	C-Tick
Mounting mode	Clip-on
Mounting position	Vertical
Mounting support	Framework
Provided equipment	1 x installation guide
Measurement category	Category II 480 V Category II 480600 V
Electrical insulation class	Double insulation Class II
Flame retardance	V-0 conforming to UL 94
Connections - terminals	Current transformer: screw connection (bottom) 6 Voltage inputs: screw connection (top) 4
Material	Polycarbonate
Width	96 mm
Depth	76.09 mm total: 61.64 mm embedded:
Height	96 mm
Product weight	300 g
Compatibility code	PM2230
Environment	
Service life	7 year(s)
IP degree of protection	IP54 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	-2570 °C
Operating altitude	<= 2000 m
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
Overvoltage category	III
Packing Units	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.94 cm
Package 1 Width	12.19 cm
Package 1 Length	8.89 cm
Package 1 Weight	0.37 kg
Offer Sustainability	
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration

EU RoHS Directive	Compliant
	EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Recommended replacement(s)