# METSEPM2230

EasyLogic PM2230, Power & Energy meter, up to the 31st harmonic, LCD display, RS485, class 0.5S





### Main

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

Complementary

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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	
Measurement voltage	35480 V AC 50/60 Hz between phases 20277 V AC 50/60 Hz between phase and neutral 480999000 V AC 50/60 Hz with external VT	
Frequency measurement range	4565 Hz	
[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 current (present 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	
Local signalling	Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication	
Number of inputs	0	
Number of outputs	0	
Communication port protocol	Modbus RTU at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2 wires, insulation 2500 V	
Communication port support	Screw terminal block: RS485	
Data recording	Energy consumption logs Power logs Time stamping Min/max for 8 parameters	
Function available	Real time clock	
Sampling rate	64 samples/cycle	
Cybersecurity	Enable/disable communication ports	
Communication service	Remote monitoring	
User language	Russian French Portuguese English Spanish Chinese German	
Product certifications	CE conforming to IEC 61010-1 CULus conforming to UL 61010-1 CULus conforming to CSA C22.2 No 61010-1 RCM EAC C-Tick	
Mounting mode	Clip-on	
Mounting position	Vertical	
Mounting support	Framework	
Provided equipment	1 x installation guide	

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

3		
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

Groon Promium product	
Green Fremium product	
REACh Declaration	
Compliant EU RoHS Declaration	
Yes	
China RoHS Declaration	
₽¥Yes	
Product Environmental Profile	
End Of Life Information	
	Compliant EU RoHS Declaration  Yes  China RoHS Declaration  Yes  Product Environmental Profile