

Compare Products



METSEPM2210

EasyLogic PM2210 - Power & Energy meter - Total Harmonic - LED - Pulse - class 1

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METSEPM2220

EasyLogic PM2220 - Power & Energy meter - up to 15th H - LED - RS485 - class 1

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METSEPM2230

EasyLogic PM2230 - Power & Energy meter - up to 31st H - LED - RS485 - class 0.5

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range	EasyLogic	EasyLogic	EasyLogic
product name	EasyLogic PM2200	EasyLogic PM2200	EasyLogic PM2200
device short name	PM2210	PM2220	PM2230
product or component type	Power meter	Power meter	Power meter
device application	Power monitoring Sub billing	Power monitoring Sub billing	Power monitoring Sub billing
power quality analysis	Total harmonic distortion	Up to the 15th harmonic Total harmonic distortion	Up to the 31st harmonic Total harmonic distortion
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)	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)	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	Active power P, P1, P2, P3 Apparent power S, S1, S2, S3 Demand current I1, I2, I3 Peak demand currents Reactive power Q, Q1, Q2, Q3 Voltage U21, U32, U13, V1, V2, V3 Unbalance current Active, reactive, apparent energy (signed, four quadrant) Calculated neutral current Demand power P, Q, S Peak demand power PM, QM, SM	Active power P, P1, P2, P3 Apparent power S, S1, S2, S3 Demand current I1, I2, I3 Peak demand currents Reactive power Q, Q1, Q2, Q3 Voltage U21, U32, U13, V1, V2, V3 Unbalance current Active, reactive, apparent energy (signed, four quadrant) Calculated neutral current Demand power P, Q, S Peak demand power PM, QM, SM	Active power P, P1, P2, P3 Apparent power S, S1, S2, S3 Demand current I1, I2, I3 Peak demand currents Reactive power Q, Q1, Q2, Q3 Voltage U21, U32, U13, V1, V2, V3 Unbalance current Active, reactive, apparent energy (signed, four quadrant) Calculated neutral current Demand power P, Q, S Peak demand power PM, QM, SM
accuracy class	Class 1 (active energy according to IEC 62053-21) Class 1 (reactive energy according to IEC 62053-24)	Class 1 (active energy according to IEC 62053-21) Class 1 (reactive energy according to IEC 62053-24) Class 5 (harmonic distortion (I THD & U THD))	Class 0.5S (active energy according to IEC 62053-22) Class 1 (reactive energy according to IEC 62053-24) Class 5 (harmonic distortion (I THD & U THD))
measurement accuracy	+/- 0.5 % active energy +/- 0.5 % active power +/- 0.5 % apparent power +/- 0.05 % frequency +/- 1 % reactive energy +/- 0.5 % current +/- 0.5 % voltage +/- 0.01 power factor	+/- 0.5 % active energy +/- 0.5 % active power +/- 0.5 % apparent power +/- 0.05 % frequency +/- 1 % reactive energy +/- 0.5 % current +/- 0.5 % voltage +/- 0.01 power factor	+/- 0.5 % active energy +/- 0.5 % active power +/- 0.5 % apparent power +/- 0.05 % frequency +/- 1 % reactive energy +/- 0.5 % current +/- 0.5 % voltage +/- 0.01 power factor
measurement current	5 mA...6 A	5 mA...6 A	5 mA...6 A
measurement voltage	35...480 V AC 50/60 Hz between phases 20...277 V AC 50/60 Hz between phase and neutral ≤ 999 kV AC 50/60 Hz with external VT	35...480 V AC 50/60 Hz between phases 20...277 V AC 50/60 Hz between phase and neutral ≤ 999 kV AC 50/60 Hz with external VT	35...480 V AC 50/60 Hz between phases 20...277 V AC 50/60 Hz between phase and neutral ≤ 999 kV AC 50/60 Hz with external VT
frequency measurement range	45...65 Hz	45...65 Hz	45...65 Hz
[Us] rated supply voltage	44...277 V AC +/- 10 % (45...65 Hz) 44...277 V DC +/- 10 %	44...277 V AC +/- 10 % (45...65 Hz) 44...277 V DC +/- 10 %	44...277 V AC +/- 10 % (45...65 Hz) 44...277 V DC +/- 10 %

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications.

network frequency	50 Hz 60 Hz	50 Hz 60 Hz	50 Hz 60 Hz
[In] rated current	1 A 5 A	1 A 5 A	1 A 5 A
power consumption in VA	<= 8 VA at 240 V AC AC	<= 8 VA at 240 V AC AC	<= 8 VA at 240 V AC AC
power consumption in W	3.3 W power lines (AC) < 2 W power lines (DC)	3.3 W power lines (AC) < 2 W power lines (DC)	3.3 W power lines (AC) < 2 W power lines (DC)
analogue input type	Current (impedance 0.3 mOhm) Voltage (impedance 5 MOhm)	Current (impedance 0.3 mOhm) Voltage (impedance 5 MOhm)	Current (impedance 0.3 mOhm) Voltage (impedance 5 MOhm)
tamperproof of settings	Protected by access code	Protected by access code	Protected by access code
display type	Backlit LCD	Backlit LCD	Backlit LCD
display colour	Monochrome	Monochrome	Monochrome
display resolution	128 x 128 pixels	128 x 128 pixels	128 x 128 pixels
refresh time	Configurable from 1 to 60 min	Configurable from 1 to 60 min	Configurable from 1 to 60 min
information displayed	Voltage Current Frequency Energy consumption Harmonic distortion Demand current past value Demand current present value Demand power past value Demand power present value Power factor Active power Apparent power Reactive power Unbalanced in % Harmonic amplitude	Voltage Current Frequency Energy consumption Harmonic distortion Demand current past value Demand current present value Demand power past value Demand power present value Power factor Active power Apparent power Reactive power Unbalanced in % Harmonic amplitude	Voltage Current Frequency Energy consumption Harmonic distortion Demand current past value Demand current present value Demand power past value Demand power present value Power factor Active power Apparent power Reactive power Unbalanced in % Harmonic amplitude
control type	4 x button	4 x button	4 x button
local signalling	Red LED : output signal, 1...9999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED : module operating (RUN)	Red LED : output signal, 1...9999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED : module operation and integrated communication	Red LED : output signal, 1...9999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED : module operation and integrated communication
output voltage	Pulse: 20 ms (5...40 V DC, 20 mA max) for 1...9999000 pulse/ k_h (kWh, kVAh, kVARh)		
communication port protocol	POP	Modbus RTU 2 wires, : 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V	Modbus RTU 2 wires, : 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V
sampling rate	64 samples/cycle	64 samples/cycle	64 samples/cycle
Ethernet service	Enable/disable serial ports	Enable/disable serial ports	Enable/disable serial ports
communication service	Remote monitoring	Remote monitoring	Remote monitoring
language	Chinese English French German Portuguese Russian Spanish	Chinese English French German Portuguese Russian Spanish	Chinese English French German Portuguese Russian Spanish
product certifications	CE conforming to IEC 61010-1 CULus conforming to UL 61010-1 EAC CULus conforming to CSA C22.2 No 61010-1 RCM C-Tick	CE conforming to IEC 61010-1 CULus conforming to UL 61010-1 EAC CULus conforming to CSA C22.2 No 61010-1 RCM C-Tick	CE conforming to IEC 61010-1 CULus conforming to UL 61010-1 EAC CULus conforming to CSA C22.2 No 61010-1 RCM C-Tick
mounting mode	Clip-on	Clip-on	Clip-on
mounting position	Vertical	Vertical	Vertical
mounting support	Framework	Framework	Framework
provided equipment	Installation guide 1	Installation guide 1	Installation guide 1

measurement category	Category III up to <= 480 V Category II up to > 480...600 V	Category III up to <= 480 V Category II up to > 480...600 V	Category III up to <= 480 V Category II up to > 480...600 V
electrical insulation class	Class II Double insulation	Class II Double insulation	Class II Double insulation
flame retardance	V-0 conforming to UL 94	V-0 conforming to UL 94	V-0 conforming to UL 94
material	Polycarbonate	Polycarbonate	Polycarbonate
cut-out dimensions	90 x 90 mm	90 x 90 mm	90 x 90 mm
width	96 mm	96 mm	96 mm
depth	76.09 mm total 61.64 mm embedded	76.09 mm total 61.64 mm embedded	76.09 mm total 61.64 mm embedded
height	96 mm	96 mm	96 mm
product weight	300 g	300 g	300 g
service life	> 7 yr	> 7 yr	> 7 yr
IP degree of protection	IP30 (body) conforming to IEC 60529 IP51 (front) conforming to IEC 60529	IP30 (body) conforming to IEC 60529 IP51 (front) conforming to IEC 60529	IP30 (body) conforming to IEC 60529 IP51 (front) conforming to IEC 60529
relative humidity	5...95 % 50 °C	5...95 % 50 °C	5...95 % 50 °C
pollution degree	2	2	2
ambient air temperature for operation	-10...60 °C	-10...60 °C	-10...60 °C
ambient air temperature for storage	-25...70 °C	-25...70 °C	-25...70 °C
operating altitude	<= 2000 m	<= 2000 m	<= 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 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 Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 Emission tests conforming to FCC part 15 class A Voltage dips and interruptions immunity test conforming to IEC 61000-4-11	Electrostatic discharge conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test conforming to IEC 61000-4-3 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 Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 Emission tests conforming to FCC part 15 class A Voltage dips and interruptions immunity test conforming to IEC 61000-4-11	Electrostatic discharge conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test conforming to IEC 61000-4-3 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 Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 Emission tests conforming to FCC part 15 class A Voltage dips and interruptions immunity test conforming to IEC 61000-4-11
overvoltage category	III	III	III
Sustainable offer status	Not Green Premium product	Not Green Premium product	Not Green Premium product
communication port support		Screw terminal block : RS485	Screw terminal block : RS485
data recording		Time stamping Min/max for 8 parameters	Time stamping Power logs Energy consumption logs Min/max for 8 parameters
function available		Real time clock	Real time clock
Product environmental profile			Available End of life manual
Product end of life instructions			Available