# METSEPM2130

EasyLogic PM2130, Power & Energy meter, up to the 31st harmonic, LED display, RS485, class 0.5S





#### Main

EasyLogic
EasyLogic PM2100
PM2130
Power meter

#### Complementary

Device application	Sub billing Power monitoring
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	Peak demand currents Active power P, P1, P2, P3 Demand power P, Q, S Reactive power Q, Q1, Q2, Q3 Apparent power S, S1, S2, S3 Active, reactive, apparent energy (signed, four quadrant) Voltage U, U21, U32, U13, V, V1, V2, V3 Current I, I1, I2, I3 Calculated neutral current Unbalance current Peak demand power PM, QM, SM
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	50 Hz 60 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	1 A 5 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	7 segments LED
Display colour	Red
Messages display capacity	3 fields of 4 characters
Display digits	12 digit(s) - 14.2 mm in height
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 %
Control type	Unbalanced in %  3 x button
Control type Local signalling	
	3 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh)
Local signalling	3 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	3 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	3 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  0  Modbus RTU at 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps even/odd or none - 2
Number of inputs Number of outputs Communication port protocol	3 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  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	3 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  Power logs Time stamping Energy consumption logs
Local signalling  Number of inputs  Number of outputs  Communication port protocol  Communication port support  Data recording	3 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  Power logs Time stamping Energy consumption logs Min/max for 8 parameters
Local signalling  Number of inputs  Number of outputs  Communication port protocol  Communication port support  Data recording  Function available	3 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  Power logs Time stamping Energy consumption logs 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	3 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  Power logs Time stamping Energy consumption logs Min/max for 8 parameters  Real time clock  64 samples/cycle
Number of inputs  Number of outputs  Communication port protocol  Communication port support  Data recording  Function available  Sampling rate  Cybersecurity	3 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  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  Power logs Time stamping Energy consumption logs Min/max for 8 parameters  Real time clock 64 samples/cycle Enable/disable communication ports
Local signalling  Number of inputs  Number of outputs  Communication port protocol  Communication port support  Data recording  Function available  Sampling rate  Cybersecurity  Communication service	3 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  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  Power logs Time stamping Energy consumption logs Min/max for 8 parameters  Real time clock 64 samples/cycle  Enable/disable communication ports  Remote monitoring  CE conforming to IEC 61010-1[RETURN]CULus conforming to UL 61010-1[RETURN]CULus conforming to CSA C22.2 No
Number of inputs  Number of outputs  Communication port protocol  Communication port support  Data recording  Function available  Sampling rate  Cybersecurity  Communication service  Product certifications	3 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  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  Power logs Time stamping Energy consumption logs Min/max for 8 parameters  Real time clock  64 samples/cycle  Enable/disable communication ports  Remote monitoring  CE conforming to IEC 61010-1[RETURN]CULus conforming to UL 61010-1[RETURN]CULus conforming to CSA C22.2 No 61010-1[RETURN]RCM[RETURN]EAC[RETURN]C-Tick
Number of inputs Number of outputs Communication port protocol  Communication port support  Data recording  Function available Sampling rate Cybersecurity Communication service  Product certifications  Mounting mode	3 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  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  Power logs Time stamping Energy consumption logs Min/max for 8 parameters  Real time clock 64 samples/cycle  Enable/disable communication ports  Remote monitoring  CE conforming to IEC 61010-1[RETURN]CULus conforming to UL 61010-1[RETURN]CULus conforming to CSA C22.2 No 61010-1[RETURN]RCM[RETURN]EAC[RETURN]C-Tick  Clip-on
Local signalling  Number of inputs  Number of outputs  Communication port protocol  Communication port support  Data recording  Function available  Sampling rate  Cybersecurity  Communication service  Product certifications  Mounting mode  Mounting position	3 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  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  Power logs Time stamping Energy consumption logs Min/max for 8 parameters  Real time clock  64 samples/cycle  Enable/disable communication ports  Remote monitoring  CE conforming to IEC 61010-1[RETURN]CULus conforming to UL 61010-1[RETURN]CULus conforming to SA C22.2 No 61010-1[RETURN]RCM[RETURN]EAC[RETURN]C-Tick  Clip-on  Vertical
Number of inputs Number of outputs Communication port protocol  Communication port support Data recording  Function available Sampling rate Cybersecurity Communication service Product certifications  Mounting mode Mounting position Mounting support	3 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  Power logs Time stamping Energy consumption logs Min/max for 8 parameters  Real time clock 64 samples/cycle Enable/disable communication ports  Remote monitoring  CE conforming to IEC 61010-1[RETURN]CULus conforming to UL 61010-1[RETURN]CULus conforming to UL 61010-1[RETURN]CULus conforming to CSA C22.2 No 61010-1[RETURN]RCM[RETURN]EAC[RETURN]C-Tick  Clip-on  Vertical  Framework
Local signalling  Number of inputs  Number of outputs  Communication port protocol  Communication port support  Data recording  Function available  Sampling rate  Cybersecurity  Communication service  Product certifications  Mounting mode  Mounting position  Mounting support  Provided equipment	3 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  Power logs Time stamping Energy consumption logs Min/max for 8 parameters  Real time clock 64 samples/cycle  Enable/disable communication ports  Remote monitoring  CE conforming to IEC 61010-1[RETURN]CULus conforming to UL 61010-1[RETURN]CULus conforming to CSA C22.2 No 61010-1[RETURN]RCM[RETURN]EAC[RETURN]C-Tick  Clip-on  Vertical  Framework  1 x installation guide  Category III 480 V
Number of inputs Number of outputs Communication port protocol  Communication port support Data recording  Function available Sampling rate Cybersecurity Communication service Product certifications  Mounting mode Mounting position Mounting support Provided equipment Measurement category	3 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  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  Power logs Time stamping Energy consumption logs Min/max for 8 parameters  Real time clock 64 samples/cycle  Enable/disable communication ports  Remote monitoring  CE conforming to IEC 61010-1[RETURN]CULus conforming to UL 61010-1[RETURN]CULus conforming to CSA C22.2 No 61010-1[RETURN]RCM[RETURN]EAC[RETURN]C-Tick  Clip-on  Vertical  Framework  1 x installation guide  Category III 480 V Category III 480600 V  Class II
Number of inputs Number of outputs Communication port protocol Communication port support Data recording  Function available Sampling rate Cybersecurity Communication service Product certifications  Mounting mode Mounting position Mounting support Provided equipment Measurement category  Electrical insulation class	3 x button  Red LED: output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh) Green LED: module operation and integrated communication  0  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  Power logs Time stamping Energy consumption logs Min/max for 8 parameters  Real time clock  64 samples/cycle  Enable/disable communication ports  Remote monitoring  CE conforming to IEC 61010-1[RETURN]CULus conforming to UL 61010-1[RETURN]CULus conforming to CSA C22.2 No 61010-1[RETURN]RCM[RETURN]EAC[RETURN]C-Tick  Clip-on  Vertical  Framework  1 x installation guide  Category III 480 V Category III 480 V Category II 480600 V  Class II Double insulation

Width	96 mm	
Depth	76.09 Mm total: 61.64 mm embedded:	
Height	96 mm	
Net weight	300 g	
Compatibility code	PM2130	

### 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

PCE
1
11.500 cm
12.000 cm
12.500 cm
407.000 g
S03
18
30.000 cm
30.000 cm
40.000 cm
7.726 kg

## Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	☑ REACh Declaration	
EU RoHS Directive	Compliant with Exemptions	
Mercury free	Yes	
China RoHS Regulation	☑ China RoHS Declaration	
RoHS exemption information	₽¥Yes	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End Of Life Information	
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