## Product data sheet Characteristics

# METSEPM2130

EasyLogic PM2130 - Power & Energy meter - up to 31st H - 7S - RS485 - class 0.5



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Range	EasyLogic	
Product name	EasyLogic PM2100	
Device short name	PM2130	
Product or component type	Power meter	

Complementary		7
Device application	Power monitoring Sub billing	#
Power quality analysis	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)	bo sood for debarmining suitshilling
Metering type	Demand current I1, I2, I3 Peak demand power PM, QM, SM Voltage U21, U32, U13, V1, V2, V3 Peak demand currents Active, reactive, apparent energy (signed, four quadrant) Active power P, P1, P2, P3 Calculated neutral current Demand power P, Q, S Unbalance current Reactive power Q, Q1, Q2, Q3 Apparent power S, S1, S2, S3	Rolainear. This documentation is not intended as a sufferfit tie for and is not to be used for determining suitability or reliability or reliability or reliability or reliability or the suitability or reliability or
Accuracy class	Class 0.5S (active energy according to IEC 62053-22) Class 1 (reactive energy according to IEC 62053-24) Class 5 (harmonic distorsion (I THD & U THD)	tet ion ion ion
Measurement accuracy	+/- 0.5 % active energy +/- 0.5 % active power +/- 0.5 % apparent power +/- 0.05 % frequency +/- 1 % reactive energy +/- 0.5 % current	edainar This douma

Measurement current  \$ 5.600 n/M2 Protection  Measurement voltage  \$ 5.600 n/M2 Protection  \$ 5.		+/- 0.5 % voltage
Measurement voltage  35, 450 V AC 50000 Hz between phases 20, 277 V AC 5000 Hz between phases 20, 277 V AC 5000 Hz between phases 40, 989000 V AC 5060 Hz with external VT  Frequency measurement range 45, 56 Hz 44, 277 V AC 47-10 % (45, 65 Hz)  Network frequency 80 Hz 80	Measurement current	·
[Us] rated supply voltage  44277 V DC +/- 10 %  Network frequency  50 Hz  60 Hz  [In] rated current  1 A 5 A  Power consumption in VA  8 VA at 240 V AC  Power consumption in W  3.3 W power lines (AC) < 2 W power lines (AC) < 2 W power lines (AC) < 2 W power lines (AC) < 3 M power lines (AC) < 2 W power lines (AC) < 3 M power lines (AC) < 4 W power lines (AC) < 2 W power lines (AC) < 2 W power lines (AC) < 4 W power lines (AC) < 2 W power lines (AC) < 2 W power lines (AC) < 2 W power lines (AC) < 3 M power lines (AC) < 4 W power lines (AC) < 4 W power lines (AC) < 5 W power lines (AC) < 9 W power lines (AC) < 10 W power lines  W p	-	35480 V AC 50/60 Hz between phases 20277 V AC 50/60 Hz between phase and neutral
Network frequency	Frequency measurement range	4565 Hz
[In] rated current 1	[Us] rated supply voltage	
S A Power consumption in VA 8 VA at 240 V AC Power consumption in W 3.3 W power lines (AC) < 2 W power lines (DC) Analogue input type 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 Refresh time Configurable from 1 to 60 min Information displayed Voltage Current Frequency Energy consumption Harmonic distortion Demand power past value Demand power present value Red LED : module operation and integrated communication Red LED : output signal 19999000 pulser k, h (kWh, kVAh, kVARh)  Conmunication port protocol Modbus RTU 2 wires, : 4800 tps, 9600 bps, 19200 bps, 38.4 Ktbps, even/odd or none, insulation: 2500 V Communication port support  Function available Real time clock Sampling rate 64 samples/cycle Ethemet service Enable/Disable serial ports Cultus conforming to LEC 61010-1 EAC CUltus conforming to CSA C22.2 No 61010-1 EAC CUltus conforming to CIp-on	Network frequency	
Power consumption in W 3.3 W power lines (AC) 4.2 W power lines (DC) Analogue input type Current (impedance 0.3 mOhm) Voltage (impedance 5.1 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 Refresh time Configurable from 1 to 60 min Information displayed Voltage Current Frequency Energy consumption Harmonic distortion Demand current past value Demand power present value Demand power present value Demand power present value Demand power present value Power factor Active power Reactive power React	[In] rated current	
Analogue input type Current (impedance 0.3 mOhm) Voltage (impedance 0.5 mOhm) Voltage (impedance 0.5 mOhm) Voltage (impedance 0.5 mOhm) Voltage (impedance 0.5 mOhm)  Display yolour Red Messages display capacity Display digits 12 digit(s) - 14.2 mm in height Refresh time Configurable from 1 to 60 min Information displayed Voltage Current Frequency Energy consumption Harmoric distortion Demand current past value Demand current past value Demand power past valu	Power consumption in VA	8 VA at 240 V AC
Voltage (impedance 5 MChm) 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 digits) - 14.2 mm in height  Refresh time Configurable from 1 to 80 min  Information displayed Voltage Current Frequency Energy consumption Harmonic distortion Demand current past value Demand current past value Demand power past value Demand power past value Demand power past value Demand power past value Power factor Active power Unbalanced in %  Control type 3 x button  Control type 3 x button  Communication port protocol Modbus RTU 2 wires, : 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V  Communication port support Screw terminal block : RS485  Data recording Min/Max for 8 parameters Power logs Time stamping Energy consumption logs  Function available Real time clock  Sampling rate 64 samples/cycle  Ethernet service Enable/Disable serial ports  CULus conforming to UEA C22.2 No 61010-1 RCM CCTick  Mounting mode Clip-on	Power consumption in W	
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 Refresh time Configurable from 1 to 60 min Information displayed Voltage Current Frequency Energy consumption Harmonic distortion Demand current past value Demand power present value Power factor Active power Reactive power Unbalanced in %  3 to uton  Control type 3 to uton Bodbus RTU 2 wires; ±800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V  Communication port support  Screw terminal block: RS485  Data recording Min/Max for 8 parameters Power logs Time stamping Energy consumption logs  Function available Real time clock  Sampling rate 64 samples/cycle Ethernet service Remote monitoring  Communication service Remote monitoring  Product certifications CE conforming to CEs 0101-1 CULus conforming to CSA C22.2 No 61010-1 RCM C-Tick  Mounting mode Clip-on	Analogue input type	
Display colour  Messages display capacity  3 fields of 4 characters  Display digits  12 digit(s) - 14.2 mm in height  Refresh time  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 past value Demand power present value Power factor Active power Reactive power Reactive power Reactive power Unbalanced in %  Green LED: module operation and integrated communication Red LED: output signal 19999000 pulser (k. h. (kWh, kVARh)  Communication port protocol  Communication port support  Screw terminal block: RS485  Data recording  Min/Max for 8 parameters Power logs Time stamping Energy consumption logs  Function available  Real time clock  Sampling rate  64 samples/cycle Ethernet service  Fabile/Disable serial ports  Communication service  Remote monitoring  C E conforming to CSA C22.2 No 61010-1  CULus conforming to CSA C22.2 No 61010-1  RCM C-Tick  Mounting mode  Clip-on	Tamperproof of settings	Protected by access code
Messages display capacity  Jisplay digits  12 digit(s) - 1.4.2 mm in height  Refresh time  Configurable from 1 to 60 min  Information displayed  Voltage Current Frequency Energy consumption Harmonic distortion Demand current past value Demand current past value Demand power past value Demand power past value Power factor Active power Apparent power Reactive power Unbalanced in %  Control type  3 x button  Communication port protocol  Modbus RTU 2 wires, : 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V  Communication port support  Screw terminal block : RS485  Data recording  Min/Max for 8 parameters Power logs Time stamping Energy consumption logs  Function available  Real time clock  Sampling rate  64 samples/cycle  Ethernet service  Remote monitoring  Product certifications  Cip-on  Mounting mode  Clip-on	Display type	7 segments LED
Display digits 12 digit(s) - 14.2 mm in height  Refresh time 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 past value Power factor Active power Apparent power Reactive power Unbalanced in %  Control type 3 x button  Communication port protocol Modbus RTU 2 wires; : 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V  Communication port support Screw terminal block : RS485  Data recording Min/Max for 8 parameters Power logs Time stamping Energy consumption logs  Function available Real time clock  Sampling rate 64 sampless/cycle  Ethernet service Enable/Disable serial ports COMMUNICATION C	Display colour	Red
Refresh time Configurable from 1 to 60 min Information displayed Voltage Current Frequency Energy consumption Harmonic distortion Demand current present value Demand power past value Demand power present value Power factor Active power Apparent power Reactive power Unbalanced in %  Control type 3 x button  Conmunication port protocol Modbus RTU 2 wires, : 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V  Communication port support Screw terminal block : RS485  Data recording Min/Max for 8 parameters Power logs Time stamping Energy consumption logs  Function available Real time clock Sampling rate 64 samples/cycle  Ethernet service Enable/Disable serial ports  Communication service Remote monitoring Product certifications  CE conforming to UL 61010-1 EAC CULus conforming to USA C22.2 No 61010-1 RCM RCM C-Tick  Mounting mode  Cip-on	Messages display capacity	3 fields of 4 characters
Information displayed  Voltage Current Frequency Energy consumption Harmonic disbortion Demand current past value Demand power present value Demand power present value Demand power present value Demand power present value Power factor Active power Apparent power Reactive power Unbalanced in %  Control type  3 x button  Control type  3 x button  Communication port protocol  Modbus RTU 2 wires, : 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V  Communication port support  Screw terminal block : RS485  Data recording  Min/Max for 8 parameters Power logs Time stamping Energy consumption logs  Function available  Real time clock  Sampling rate  64 samples/cycle Ethernet service  Enable/Disable serial ports  Communications ervice  Remote monitoring  CE conforming to UE 61010-1 CULus conforming to UE 61010-1 CULus conforming to UE 61010-1 RCM CULus conforming to CSA C22.2 No 61010-1 RCM CULus conforming to CSA C22.2 No 61010-1 RCM CULus conforming to CSA C22.2 No 61010-1 RCM CULis conforming to CSA C22.2 No 61010-1	Display digits	12 digit(s) - 14.2 mm in height
Current Frequency Energy consumption Harmonic distortion Demand current past value Demand power past value Power factor Active power Apparent power Reactive power Unbalanced in %  Control type  3 x button  Control type  3 x button  Communication port protocol Modbus RTU 2 wires, : 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V  Communication port support Screw terminal block: RS485  Data recording Min/Max for 8 parameters Power logs Time stamping Energy consumption logs  Function available Real time clock Sampling rate 64 samples/cycle Ethernet service Enable/Disable serial ports  Communication service Remote monitoring  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 RCM C-Tick Mounting mode Clip-on	Refresh time	Configurable from 1 to 60 min
Core LED : module operation and integrated communication Red LED : output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh)   Communication port protocol   Modbus RTU 2 wires, : 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V	information displayed	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
Red LED : output signal 19999000 pulse/ k_h (kWh, kVAh, kVARh)  Communication port protocol  Modbus RTU 2 wires, : 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps, even/odd or none, insulation: 2500 V  Communication port support  Screw terminal block : RS485  Data recording  Min/Max for 8 parameters Power logs Time stamping Energy consumption logs  Function available  Real time clock  Sampling rate  64 samples/cycle  Ethernet service  Enable/Disable serial ports  Communication service  Remote monitoring  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  Mounting mode  Clip-on	Control type	3 x button
Communication port support  Screw terminal block : RS485  Data recording  Min/Max for 8 parameters Power logs Time stamping Energy consumption logs  Function available  Real time clock  Sampling rate  64 samples/cycle  Ethernet service  Enable/Disable serial ports  Communication service  Remote monitoring  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  Mounting mode  Clip-on	Local signalling	
Data recording  Min/Max for 8 parameters Power logs Time stamping Energy consumption logs  Function available  Real time clock  Sampling rate  64 samples/cycle  Ethernet service  Enable/Disable serial ports  Communication service  Remote monitoring  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  Mounting mode  Clip-on	Communication port protocol	
Power logs Time stamping Energy consumption logs  Function available Real time clock  Sampling rate 64 samples/cycle  Ethernet service Enable/Disable serial ports  Communication service Remote monitoring  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  Mounting mode Clip-on	Communication port support	Screw terminal block : RS485
Sampling rate 64 samples/cycle  Ethernet service Enable/Disable serial ports  Communication service Remote monitoring  Product certifications CE conforming to IEC 61010-1	Data recording	Power logs Time stamping
Ethernet service Enable/Disable serial ports  Communication service Remote monitoring  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  Mounting mode Clip-on	Function available	Real time clock
Communication service  Remote monitoring  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  Cip-on	Sampling rate	64 samples/cycle
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  Mounting mode  Clip-on	Ethernet service	Enable/Disable serial ports
CULus conforming to UL 61010-1  EAC  CULus conforming to CSA C22.2 No 61010-1  RCM  C-Tick  Mounting mode  Clip-on	Communication service	Remote monitoring
	Product certifications	CULus conforming to UL 61010-1 EAC CULus conforming to CSA C22.2 No 61010-1 RCM
Mounting position Vertical	Mounting mode	Clip-on
	Mounting position	Vertical
Mounting support Framework	Mounting support	Framework
Provided equipment Installation guide 1	Provided equipment	Installation guide 1

Measurement category	Category III up to <= 480 V Category II up to > 480600 V
Electrical insulation class	Double insulation Class II
Flame retardance	V-0 conforming to UL 94
Connections - terminals	Current transformer : bottom screw connection x 6 Voltage inputs : top screw connection x 4
Material	Polycarbonate
Cut-out dimensions	90 x 90 mm
Width	96 mm
Depth	76.09 mm total 61.64 mm embedded
Height	96 mm
Product weight	300 g

### Environment

Service life	> 7 yr
IP degree of protection	IP30 (body) conforming to IEC 60529 IP51 (front) conforming to IEC 60529
Relative humidity	595 % 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 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

### Offer Sustainability

Sustainable offer status	Not Green Premium product	
RoHS (date code: YYWW)	Compliant - since 1601 - Schneider Electric declaration of conformity	
	Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
	Reference not containing SVHC above the threshold	
Product environmental profile	Available	
	Product environmental	

