# EasyLogic<sup>™</sup> PM2000 series Technical Datasheet

### The EasyLogic<sup>™</sup> PM2000 multi-function power and energy meter

Offering all the measurement capabilities required to monitor and electrical installation in a single 96 x 96 mm unit, with LED or LCD display options.

### **Applications**

Cost management applications

- · Bill checking to verify that you are only charged for the energy you use
- Aggregation of energy consumption, including WAGES, and cost allocation per area, per usage, per shift or per time
  within the same facility
- Energy cost and usage analysis per zone, per usage or per time period to optimise energy usage

#### Network management applications

- · Metering of electrical parameters to better understand the behaviour of your electrical distribution system
- Power quality analysis







LED display



PM2100 series LED display meter



PM2000 LCD display

Feature selection					
Commercial ref. number	Model				
METSEPM2110	PM2110				
METSEPM2120	PM2120				
METSEPM2125C2AI2AO	PM2125C <sup>+1</sup>				
METSEPM2125C2DI2RO	PM2125C <sup>+1</sup>				
METSEPM2130	PM2130				
METSEPM2210	PM2210				
METSEPM2220	PM2220				
METSEPM2225C2AI2AO	PM2225C <sup>+1</sup>				
METSEPM2225C2DI2RO	PM2225C <sup>+1</sup>				
METSEPM2230	PM2230				
METSEPM2KDGTLIO22	PM2K2DIDO				
METSEPM2KANLGIO22	PM2K2AIAO				
METSEPM2KANLGIO11	PM2K1AIAO				
METSEPM2K2DI2RO	PM2K2DIRO				

See your Schneider Electric representative for complete ordering information.

Introducing EasyLogic PM2000 series, next generation power meter which offers all the measurement capabilities required to monitor an electrical installation in a single  $96 \times 96$  mm unit. PM2000 meters are available in LED and LCD display variants.

#### PM2100 series:

 LED display type: Intuitive navigation with self-guided, three buttons, bright red colour LEDs of 14.2 mm height. Two columns of LEDs indicate the parameter name chosen for display.

#### PM2200 series:

 LCD display type: Monochrome graphical LCD of 128 x 128 pixels lets users read all three phase values simultaneously. The bright display enables easy reading even in extreme lighting conditions and viewing angles. with intuitive menus, multi-language text, icons and graphics.

#### Network management:

- Power Quality analysis: THD % and individual harmonics to 15<sup>th</sup> or 31<sup>st</sup> order.
- Measurement of True PF and Displacement PF.
- Recording Min/Max values of instantaneous parameters with date and timestamp.
- Optional IO modules comprising either 2 Digital Inputs and 2 Outputs, or 2 Analog Inputs and 2 Outputs, or 2 Digital Inputs and 2 Relay Outputs for comprehensive WAGES monitoring.
- Calculates % unbalance for voltage & current.
- Embedded 2 D/I and 2 R/O or 2 A/I and 2 A/O in PM2125 and PM2225 meters.

#### Main characteristics:

- Easy to install: Mounts using two clips, no tools required. Compact 54 mm depth, connectable up to 480 ±10% AC Volts L-L without voltage transformers for installations compliant with measurement category III, and double insulated.
- Easy to operate: Intuitive navigation with self-guided menus and LED for test and calibration on site or lab. Heartbeat LED indicates normal functioning and communication status if connected to RS-485 network.
- Product standard compliance
  - Active energy Class 1.0 as per IEC 62053-21
  - Active energy Class 0.5S as per IEC 62053-22 (partial compliance for active energy test clause only)
  - Reactive energy Class 1.0 as per IEC 62053-24 (partial compliance for reactive energy test clause only)
- Tested in accordance with IEC 62052-11 standard for
  - 5 A, I-nominal
  - 1 A, I-nominal (field settable).

<sup>&</sup>lt;sup>+1</sup> Available in China only

#### Main characteristics: (cont'd)

- Power quality analysis: The PM2000 offers THD % measurements and Individual harmonics up to15th order in PM2x20 and PM2x25C variants and up to 31<sup>st</sup> in PM2x30 variants.
- Load management: Simultaneous display of peak, present, predicted & rising demands of all the four demand parameters (W, VA, VAR, Amps)
- Billing: Tenant billing/utility meter cross check (where local regulations are not applicable).
- Timer: Active load timer, Meter operation timer and Run hours timer. These features help advise maintenance requirements and scheduling.
- Password: Field configurable password for securing set up information and prevent tampering of integrated values.
- Cyber security: Option for disabling RS-485 port through front panel keys against unauthorized access. It helps during installation and trouble shooting of communication network.
- LED display: Auto scaling, 9+3 digits for energy, 4 digits for other parameters.
- LCD display: 5 digits for energy, 5 or 6 digits for other parameters, with auto scaling.
- Daily time snapshot: Snapshot of Avg Voltage, Avg Current, Total Active Power & Energy delivered as measured by the meter at configurable time of day. The static page will be refreshed with new values at a configured time next day.
- Rate counters: 2 configurable counters display values in custom specified units based on energy recorded (e.g., kgCO<sub>2</sub> carbon emission or energy cost).
- Energy preset feature: Write the energy values during maintenance operation or replacement of meters. Configuration is through ION set up utility tool.
- Auto reset: Monthly reset of all energies and max demand based on configurable day of the month at fixed 00 Hrs (PM2220, PM2230).
- Suppression current: To disregard induced or negligible current flowing in the circuit, minimum value of current detection can be settable from 5 to 99 mA, default is 5 mA (all variants).
- Retrofit register: Legacy modbus registers to read 50 parameters (meters with communication port).
- Quadrant based VARh: Available through communication.
- Multi-tariff energy 4 multi tariff registers, can be activated through command, TOU or Input mode with Digital IO card (PM2230).
- Non-resettable energy (Del & Rec values of Wh, VARh, VAh) counter on display and communication that cannot be reset to zero (PM2210/20/30).
- Configurable favorite page: Pick and configure any 4 parameters for display from the list of - V L-L, V L-N, Amps, F, W-tot, VA-tot, VAR-tot, PF and Wh-Del, VAh-Del, VARh-Del (PM2220, PM2230).
- Whetting output voltage: Can be used for excitation of status input signal, available in PM2K2DIRO module.



Rear of PM2000 closed



Rear of PM2000 open



Rear of PM2000 without I/O module

### PM2000 technical specifications

PM2000 technical specifical	tions
General	
Use on LV and MV systems with onsit	e programmable PT/CT ratio
Basic metering with THD %, Individua	al Harmonics, RTC and min/max readings
Instantaneous rms values	
Current	Average line current of 3-phase, per-phase, and calculated neutral current
Voltage	Average voltage of L-L, L-N parameters, and per- phase
Frequency	Any available line
Real, reactive, and apparent power	Total and per-phase value
Displacement power factor	Average and per-phase signed, four quadrant
True Power Factor	Average and per-phase signed, four quadrant
% Unbalance	Among the phase for Amps, V L-N, V L-L
Energy values stored in non-volati	ile memory
Four quadrant measurement for Delivered (Forward or Import) and Received (Reverse or Export) energy	Accumulated energy values for Active, Reactive & Apparent Energy parameters, quadrant basis Net & Total (absolute) values
Timer	Accumulated time counters for active load timer, meter operation timer, run hours and power outage counter
Old Registers	Facilitates retrieval of last cleared energy values
Demand values	
Current average	Present, Last, Predicted, Peak, and Peak Date Time
Active power	Present, Last, Predicted, Peak, and Peak Date Time
Reactive power	Present, Last, Predicted, Peak, and Peak Date Time
Apparent power	Present, Last, Predicted, Peak, and Peak Date Time
Demand sync methods	Thermal, Timed, Command Sync, and Clocked Sync
Demand calculation mode	Sliding, fixed and rolling block
Demand intervals	Settable from 1 to 60 minutes, in steps of 1 minute
Display	
PM2100 series	Bright red colour LED display, 7 segment LED, ~ 14.2 mm height, 3 rows with 4 digits per row, Auto range
PM2200 series	Full scape, monochrome graphical LCD of 128 x 128 pixels with viewable area of 67 x 62.5 mm
Visualization mode for signs	IEC or IEEE type in LCD display meter
Communication	
RS-485 serial	Channel connection Industry standard Modbus RTU protocol
Integration with software	SCADA / DCS / PMS / EMS / BAS / BMS software
Native Plug and Play support	Schneider Electric energy management system software - EcoStruxure™ Power Monitoring Expert, EcoStruxure™ Power Operation, & ION Setup programming support
Min/Max values	
Minimum & Maximum value recording of 3-ph average or total	For 8 parameters, viz., V L-L, V L-N, Amps, PF, Hz, W, VA, VAR with date and time stamp, resettable separately through set up mode
Alarms	
Alarming with time stamping in PM2x30 meters	A different combination of set point driven alarms and digital alarms with 1 s time stamping. The alarms can be programmed and combined to trigger digital outputs, the meter keeps an alarm logs with the active and historical alarms with date and time stamping in 40 registers
Diagnostics	
Diagnostic page	Indicates LED/LCD status, sl number, diag pages for communication, OS & RS version
Lock/ Un-Lock	
Page Lock & Unlock (PM2100 series) Rate 1 counter *2	Unique feature to ensures that commonly referred page is restored in 4 minutes of inactive time
kgCO₂ emission (example)	Rate counter can be configured to display the $CO_2$ emission in kg $CO_2$ format based on the kWh measured either in delivered or received direction.
Rate 2 counter <sup>+2</sup>	
Tariff counter (example)	Rate counter can also be configured to calculate the electricity cost based on the energy consumption in customized currency format.
Configurable snapshot	
Configurable snapshot*2	Snapshot of Avg Voltage, Avg Current, Total Active Power & Energy delivered as measured by the meter at configurable time in Hours:Minutes format. Static page is refreshed with new values by next day at preconfigured time.
	cornigared time.

<sup>+2</sup> Available in PM2220/PM2230 (LCD) meters



Rear of PM2000 with I/O module



Rear of PM2000 with I/O module disconnected

### PM2000 electrical characteristics

#0.5 %  ±0.5 %  ±0.05 %  ±0.05 %  ±0.01  ±0.5 %  ±1.0 %  Class 0.5S as per IEC 62053-22 and Class 1.0 as per IEC 62053-21 for both CT nominal of 5 A and 1 A <sup>-1</sup> 3, complies to IEC 61557-12 Class 0.5 (PM2x30/PM2x25)  Class 1.0 as per IEC 62053-24  ±0.5 %  ±5 % FS for THD % and Individual harmonics  277 V L-N/480V L-L 20-277 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat III 250 V AC L-L  => 5 MΩ  50/60 Hz  < 0.2 VA at 240 V AC L-N
±0.5 %  ±0.05 %  ±0.01  ±0.5 %  ±1.0 %  Class 0.5S as per IEC 62053-22 and Class 1.0 as per IEC 62053-21 for both CT nominal of 5 A and 1 A <sup>-3</sup> , complies to IEC 61557-12 Class 0.5 (PM2x30/PM2x25)  Class 1.0 as per IEC 62053-24  ±0.5 %  ±5 % FS for THD % and Individual harmonics  277 V L-N/480V L-L  20-277 V L-N/480V L-L  20-277 V L-N/35 - 480 V L-L, cat III  20-347 V L-N/35 - 600 V L-L, cat III  2750 V AC L-L  => 5 MΩ  50/60 Hz
±0.5 %  ±0.05 %  ±0.01  ±0.5 %  ±1.0 %  Class 0.5S as per IEC 62053-22 and Class 1.0 as per IEC 62053-21 for both CT nominal of 5 A and 1 A <sup>-3</sup> , complies to IEC 61557-12 Class 0.5 (PM2x30/PM2x25)  Class 1.0 as per IEC 62053-24  ±0.5 %  ±5 % FS for THD % and Individual harmonics  277 V L-N/480V L-L  20-277 V L-N/480V L-L  20-277 V L-N/35 - 480 V L-L, cat III  20-347 V L-N/35 - 600 V L-L, cat III  2750 V AC L-L  => 5 MΩ  50/60 Hz
±0.05 %  ±0.01  ±0.5 %  ±1.0 %  Class 0.5S as per IEC 62053-22 and Class 1.0 as per IEC 62053-21 for both CT nominal of 5 A and 1 A+3, complies to IEC 61557-12 Class 0.5 (PM2x30/PM2x25)  Class 1.0 as per IEC 62053-24  ±0.5 %  ±5 % FS for THD % and Individual harmonics  277 V L-N/480V L-L 20-277 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat III 2750 V AC L-L  => 5 MΩ 50/60 Hz
±0.01  ±0.5 %  ±1.0 %  Class 0.5S as per IEC 62053-22 and Class 1.0 as per IEC 62053-21 for both CT nominal of 5 A and 1 A+3, complies to IEC 61557-12 Class 0.5 (PM2x30/PM2x25)  Class 1.0 as per IEC 62053-24  ±0.5 %  ±5 % FS for THD % and Individual harmonics  277 V L-N/480V L-L 20-277 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat III 750 V AC L-L  => 5 MΩ 50/60 Hz
±0.5 %  ±1.0 %  Class 0.5S as per IEC 62053-22 and Class 1.0 as per IEC 62053-21 for both CT nominal of 5 A and 1 A+3, complies to IEC 61557-12 Class 0.5 (PM2x30/PM2x25)  Class 1.0 as per IEC 62053-24  ±0.5 %  ±5 % FS for THD % and Individual harmonics  277 V L-N/480V L-L 20-277 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat III 750 V AC L-L => 5 MΩ 50/60 Hz
±1.0 %  Class 0.5S as per IEC 62053-22 and Class 1.0 as per IEC 62053-21 for both CT nominal of 5 A and 1 A+3, complies to IEC 61557-12 Class 0.5 (PM2x30/PM2x25)  Class 1.0 as per IEC 62053-24  ±0.5 %  ±5 % FS for THD % and Individual harmonics  279 kV L-L max, secondary voltage depends on VT atio  277 V L-N/480V L-L  20-277 V L-N/35 - 480 V L-L, cat III  20-347 V L-N/35 - 600 V L-L, cat III  2750 V AC L-L  => 5 MΩ  50/60 Hz
Class 0.5S as per IEC 62053-22 and Class 1.0 as per IEC 62053-21 for both CT nominal of 5 A and 1 A <sup>+3</sup> , complies to IEC 61557-12 Class 0.5 (PM2x30/PM2x25) Class 1.0 as per IEC 62053-24 ±0.5 % ±5 % FS for THD % and Individual harmonics  279 kV L-L max, secondary voltage depends on VT atio 277 V L-N/480V L-L 20-277 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat II 750 V AC L-L => 5 MΩ 50/60 Hz
IEC 62053-21 for both CT nominal of 5 A and 1 A+3, complies to IEC 61557-12 Class 0.5 (PM2x30/PM2x25) Class 1.0 as per IEC 62053-24 ±0.5 % ±5 % FS for THD % and Individual harmonics  2099 kV L-L max, secondary voltage depends on VT atio 277 V L-N/480V L-L 20-277 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat III 2750 V AC L-L => 5 MΩ 50/60 Hz
±0.5 %  ±5 % FS for THD % and Individual harmonics  299 kV L-L max, secondary voltage depends on VT atio  277 V L-N/480V L-L  20-277 V L-N/35 - 480 V L-L, cat III  20-347 V L-N/35 - 600 V L-L, cat II  750 V AC L-L  => 5 MΩ  50/60 Hz
±5 % FS for THD % and Individual harmonics  999 kV L-L max, secondary voltage depends on VT atio  277 V L-N/480V L-L  20-277 V L-N/35 - 480 V L-L, cat III  20-347 V L-N/35 - 600 V L-L, cat II  750 V AC L-L  => 5 MΩ  50/60 Hz
atio 277 V L-N/480V L-L 20-277 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat II 750 V AC L-L => 5 MΩ 50/60 Hz
atio 277 V L-N/480V L-L 20-277 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat II 750 V AC L-L => 5 MΩ 50/60 Hz
atio 277 V L-N/480V L-L 20-277 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat II 750 V AC L-L => 5 MΩ 50/60 Hz
20-277 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat II 750 V AC L-L => 5 MΩ 50/60 Hz
20-347 V L-N/35 - 600 V L-L, cat II 750 V AC L-L => 5 MΩ 50/60 Hz
=> 5 MΩ 50/60 Hz
50/60 Hz
< 0.2 VA at 240 V AC L-N
Primary adjustable 1 A to 32768 A Secondary 1 A or 5 A I-nominal field settable
5 mA to 6 A
Continuous 12 A, 10s/hr 50 A, 1s/hr 500 A
< 0.3 mΩ
50/60 Hz
<0.024 VA at 6 A
14- 277 V AC ±10%
80-277 V AC ±10% for PM2x30/PM2x25)
<6 VA at 277 V AC L-N <8 VA for PM2x30 and PM2x25) 15 to 65 Hz
100 ms typical at 120 V AC and maximum burden 50 ms with Analog IO card for PM2x30) 100 ms typical at 230 V AC and maximum burden 50 ms with Analog IO card for PM2x30)
48-277 V DC ±10% (100-277 V DC ±10% for PM2x30/ PM2x25)
< 2 W at 277 V DC < 3.3 W for PM2x30 and PM2x25)
50 ms typical at 125 V DC and maximum burden
B years (when meter is in Power OFF condition)
l s
15 s
5 s
Iph, 2w, L-N Iph, 2w, L-L Iph, 3w, L-L Iph, 3w, L-L with N (2phase) Iph, 3w, Delta, Ungrounded Iph, 3w, Delta, Corner Grounded Iph, 3w, Wye, Ungrounded Iph, 3w, Wye Grounded Iph, 3w, Wye Grounded Iph, 3w, Wye, Resistance Grounded Iph, 4w, Open Delta, Center-Tapped Iph, 4w, Delta, Center-Tapped Iph, 4w, Wye, Ungrounded Iph, 4w, Wye, Ungrounded

 $<sup>^{+3}</sup>$  For 1 A CT nominal, additional error of  $\pm 1$  % from 50 mA to 150 mA,  $\pm 2$  % for current > 10 mA to < 50 mA. Partial standard compliance for Class 0.5S meter type (energy test clause only)  $^{+4}$  Through communication in PM2100 series meters

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### PM2000 series mechanical characteristics

Mechanical characteristics					
Weight	~ 300 gm				
IP degree of protection	IP54 front side, IP30 meter body as per IEC 60529; Upgrade to IP65 front side with Optional accessory kit METSEIP65OP96X96FF				
Material	Polycarbonate meets UL 94V-0 flammability rating				
Dimensions W x H x D	$96 \times 96 \times 54$ mm maximum (depth of the meter from housing mounting flange) and 13 mm (protrusion of meter from housing flange). Meter depth with IO module is 74 mm				
Mounting position	Vertical				
Panel thickness	5 mm maximum				
Environmental characteristics					
Operating temperature	Meter -10 to +60 °C (14 to 140 °F)				
Storage temperature	Meter -25 to +70 °C (-13 to 158 °F)				
Humidity rating	5 to 95 % RH non condensing				
Pollution degree	2				
Altitude	≤ 2000 m (6562 ft) Category III				
Product life	Minimum 7 years				
Electromagnetic compatibility (tested	as per IEC 61326-1)				
Electrostatic discharge	IEC 61000-4-2				
Immunity to radiated field	IEC 61000-4-3				
mmunity to fast transients	IEC 61000-4-4				
mmunity to impulse waves	IEC 61000-4-5				
Conducted immunity	IEC 61000-4-6				
mmunity to magnetic fields	IEC 61000-4-8				
mmunity to voltage dips	IEC 61000-4-11				
Emissions	Emissions FCC Part 15 Class A/CE				
Safety	Elitiopicità i dell'artifo diaggivos				
<u> </u>	OF				
Europe	CE, as per IEC 61010-1 Ed-3				
US and Canada	cULus as per UL61010-1 and CAN/CSA-C22.2 No. 61010-1, for 600V AC				
Measurement Category (Voltage and Current inputs)	CAT III up to 480 V L-L CAT II up to 600 V L-L				
Overvoltage Category (Control power)	CAT III up to 300 V L-N				
Dielectric	As per IEC/UL 61010-1 Ed-3				
Protective Class	II, Double insulated for user accessible parts				
Green premium	EOL, REACH, PEP, RoHS complied				
Other certification	RCM (Australia), EAC (Russia)				
Communication					
RS-485 port	Modbus RTU: 2-Wires, with ground & shield, 4800, 9600, 19200 or 38400 baud, Parity - Even, Odd, None, 1 stop bit if parity is Odd or Even, 2 stop bits if None DLF3000: Firmware update through communication port				
Pulse Output – POP	Max 40 V DC, 20 mA 20 ms ON time				
	Configurable pulse weight from 1 to 9999000 pulses/k_h (kWh, kVAh, or kVARh)				
solation	2.5 kV RMS, double insulated				
Protection features	Password protected for set-up & clearing energy and Min/Max data				
Display language (LCD)	English, Spanish, French, Chinese, German, Portugese, Russian, Turkish				
Technical publication	Printed installation guide (IG) with the meter in multi language (EN, ES, FR, DE, PT, RU, TR, ZH)				
Human machine interface					
Display type	LED display: 7 segment LED, ~ 14.2 mm height, 3 rows with 4 digits per row 2 columns of LEDs, one on each side of the LED panel to indicate the parameters under measurement LCD display: Monochrome graphical LCD of 128 x 128 pixels with viewable area of 67 x 62.5 mm				
Keypad / Buttons	PM2100 series: 3 buttons for navigation & combination of 2 buttons for performing set-up, Lock/unlocking of page, Diagnostic page operation PM2200 series: 4 buttons for intuitive navigation of HMI/ UI pages				
Calibration LED Indicator	Red colour, meter constant is configurable from 1 to 9999000 pulses/k_h (kWh, kVAh, or kVARh)				
Communication activity	Green LED (for indicating RS-485 interface or heart beat pulse)				



Rear of PM2200 with I/O module



Digital I/O module



Analog I/O module

#### PM2000 series electrical characteristics of IO modules

Veltage ratings         18.5 to 36 V DC, OFF 0 to 4 V DC           Input resistance         110 kW           Max Frequency         2 Hz (T ON min = T OFF min = 250 ms)           Detect Time         20 ms           Update time         1 s           Isolation         2.5 kV RMS           Supported models         Available as default feature in PM2130/ PM2225 and Expandable option in PM2130/ PM2220 meter model           Application         Integration of Breaker status or other non-electrical devices like steam, water gas meter through pulse inputs           Display support         Available on PM2230/PM2225 (LCD type)           InPA2130/PM2125 meter, data is available through communication only.           Set up and configuration         Through set-up software           Displat Outputs           Voltage ratings         40 V DC max, 20mA max           On Resistance         50 W max           Meter constant         Configurable from 1 to 9999000 k.h (kWh, kVARh, kVAh)           Pulse width         20, 25, 50, 100 ms           Pulse frequency (typical)         25 kV RMS           Supported models         Available as default feature in PM2128/ PM2225 and Expandable option in PM2130/ PM2230 meter model           Alarm conditions         23 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status           Display support         Avai	Status Inputs (Digital Inputs	
Input rosistance	Status Inputs (Digital Inputs	
Max Frequency         2 Hz (T ON min = T OFF min = 250 ms)           Detect Time         20 ms           Update time         1 s           Isolation         2.5 kW RMS           Supported models         Available as default feature in PM2125/ PM2225 and Expandable option in PM2130/ PM2230 meter model           Application         Integration of Breaker status or other non-electrical devices like sleam, water, gas meter through pulse inputs           Display support         Available on PM2230/PM2225 (LCD type). In PM2130/PM2225 (LCD type). In PM2130/PM2225 (LCD type). In PM2130/PM225 (LCD type). In PM2130/PM225 (LCD type). In PM2130/PM225 (LCD type). In PM2130/PM225 (LCD type). In PM2130/PM226 (LCD type). In PM2130/PM225 (LCD type). In PM2130/PM2125 meter, data is available through communication only           Set up and Configuration         Puse output: configurable for energies upper/lower limit: configurable for parameters with 14 set point: VtI., VtN. aps, FVTHD %, W-tot, VA-tot, VA-tot, PF-avg           Display support         Available on PM2230/PM2225 (LCD type). In PM2130/PM2230 meter model supper/lower limit: configurable for energies upper/lower limit: configurable for energies upper/lower limit: configurable for material savailable through communication only <t< th=""><th></th><th></th></t<>		
Detect Time 1 8 Update time 1 s Isolation 2.5 kV RMS Supported models Available as default feature in PM2126/ PM2225 and Expandable option in PM2130 / PM2230 meter model Expandable option in PM2130 / PM2230 meter model Application devices like steam, water gas meter through pulse inputs (available on PM2230/PM2225 (LCD type). In PM2130/PM2125 meter, data is available through communication only Set up and configuration Through set-up software  Pitiglial Outputs  Voltage ratings 40 V DC max, 20mA max On Resistance 50 W max Meter constant Configurable from 1 to 9999000 k, h (kWh, kVARh, kVAh) Pulse width 20, 25, 50, 100 ms Use available as default feature in PM2126/ PM2225 and Expandable option in PM2130/ PM2230 meter model Alarm conditions 2.5 kV RMS Supported models Available as default feature in PM2128/ PM2225 and Expandable option in PM2130/ PM2230 meter model Alarm conditions 2.3 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status  Display support Available on PM2230/PM2225 (LCD type). In PM2130/ PM2230 meter model Alarm conditions 4.2 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status  Display support Pulse output: configurable for energies upper / lower inmit: configurable for 9 parameters with 14 set point: V L-L, V L-L, V L-N, Amps, F, V-THD %, W-tot, VA-tot, VAR-tot, PF-avg  Display support Available on PM2230/PM2225 (LCD type). In PM2130/PM225 meter, data is available through communication only  Set up and Configuration Through set-up software  Analog inputs  Measurement scale 1 s Accuracy 1 % of Full scale at ambient temp 0.1 %/K for de-rating Voltage rating Typical 12 V (max 30 V)  Power Consumption 2.5 kV RMS  Supported models Expandable option in PM2130/PM2230 meter models Configuration via set up software  Display Available for inputs from flow rates, PPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Power Consumption 2.5 kV RMS  Supported mod		
Update time		
Isolation   2.5 kV RMS		
Augilable as default feature in PM212S/ PM22S and Expandable option in PM2130 PM2230 meter model Application   Integration of Breaker status or other non-electrical devices like steam, water, gas meter through pulse inputs   Available on PM2300/PM225 (LCD type), In PM2130/PM215 meter, data is available through communication only.	· .	
Expandable option in PM2130/PM2230 meter model Application Integration of Breaker status or other non-electrical devices like steam, water, gas meter through pulse inputs Display support Available on PM2230/PM2256 (LCD type). In PM2130/PM2125 meter, data is available through communication only.  Set up and configuration Through set-up software  Digital Outputs  Voltage ratings 40 V DC max, 20mA max On Resistance 50 W max  Meter constant Configurable from 1 to 9999000 k_h (kWh, kVARh, kVAh) Pulse width 20, 25, 50, 100 ms Pulse frequency (typical) 25 Hz Solation 2.5 kV RMS  Supported models Available as default feature in PM2125/ PM2225 and Expandable option in PM2130/ PM2230 meter model Alarm conditions 2.3 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status  Application Pulse view in the status of the regies upper / lower limit: configurable for 9 parameters with 14 v/AR-tot, PF-avg Display support Available on PM2230/PM2225 (LCD type).  Display support Available on PM2230/PM2225 (LCD type).  Fin PM2130/PM215 meter, data is available through communication only  Set up and Configuration Through set-up software  Analog Inputs  Measurement scale 4-20 mA Imput impedance 500 W  Update rate 1 s Accuracy 1 % of Full scale at ambient temp 0.1 %/K for de-rating  Voltage ratings Typical 12 V (max 30 V)  Power Consumption 2.5 kV RMS  Supported models Expandable option in PM2130/PM2230 meter models  Application Configuration Through set-up software  Analog outputs  Set up and configuration Through set up software  Analog outputs  Set up and configuration Through set up software  Analog outputs  Set up and configuration Through set up software  Analog outputs  Set up and configuration Through set up software  Analog outputs  Set up and configuration Through set up software  Analog outputs  Set up and configuration Through set up software  Analog outputs  Set up and configuration Through set up software  Analog outputs can be associated to 40 different instantaneous parameters  Update rate 1 s Accuracy		
devices like steam, water, gas meter through pulse inputs Available on PM2230/PM2225 (LCD type), In PM2130/PM2125 meter, data is available through communication only.  Set up and configuration  Digital Outputs  Voltage ratings 40 V DC max, 20mA max  Meter constant Configurable from 1 to 9999000 k_h (kWh, kVARh, kVAh) Pulse width Pulse width Pulse width Pulse width 20, 25, 50, 100 ms 25 Hz Leakage current 1 micro Amps Isolation 2.5 kV RMS Supported models Available as default feature in PM2125/ PM2225 and Expandable option in PM2130/ PM2230 meter model Alarm conditions 23 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status  Application Pulse output: configurable for energies upper / lower limit: configurable for energies upper / lower limit: configurable for 9 parameters with 14 set point: VL., VN., Amps, F, V-THD %, W-tot, VAR-tot, VRR-tot, VR-R-tot, PE-avg  Display support Available on PM2230/FM225 (LCD type), In PM2130/PM225 meter, data is available through communication only  Set up and Configuration Through set-up software  Aralog inputs  Measurement scale Input impedance Input impedance Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Set up and configuration Through set-up software  Application Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)  Power Consumption Voltage ratings Typical 12 V (max 30 V)	Supported models	
In PM2130/PM2125 meter, data is available through communication only.  Set up and configuration  Through set-up software  Voltage ratings  40 V DC max, 20mA max  On Resistance  50 W max  Meter constant  Configurable from 1 to 9999000 k_h (kWh, kVARh, kVAh)  Pulse width Pulse width Pulse dequency (typical)  25 Hz  Leakage current  1 micro Amps  Isolation  2.5 kV RMS  Supported models  Available as default feature in PM2125/ PM2225 and Expandable option in PM2130/ PM2230 meter model  Alarm conditions  23 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status  Application  Pulse output: configurable for energies upper / lower limit: configurable for energies upper / lower limit: configurable for 9 parameters with 14 set point: V L-L, V L-N, Amps, ft V-THD %, W-lot, VA-tot, VAR-tot, VRA-tot, VRA-	Application	
Set up and configuration Digital Outputs  Voltage ratings 40 V DC max, 20mA max  On Resistance 50 W max  Meter constant Configurable from 1 to 9999000 k_h (kWh, kVARh, kVAh) Pulse width Pulse frequency (typical) 25 Hz Leakage current 1 micro Amps Supported models Available as default feature in PM2125/ PM2225 and Expandable option in PM2130/ PM2230 meter model Alarm conditions 23 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status Application Pulse output: configurable for energies upper / lover limit: configurable for 9 parameters with 14 set point: V L-L, V L-N, Amps, F, V-THD %, W-tot, VAR-tot, YR-Teavg Display support Available on PM2330/PM2225 (LCD type): In PM2130/PM2125 meter, data is available through communication only Set up and Configuration Through set-up software Analog inputs Was source impedance \$ 500 W Update rate 1 s Accuracy 1 % of Full scale at ambient temp 0.1 %/K for de-rating Voltage ratings Typical 12 V (max 30 V)  Power Consumption 2.5 kV RMS Supported models Expandable option in PM2130/PM2230 meter models Application 2.5 kV RMS Supported models Expandable option in PM2130/PM2230 meter models Application 2.5 kV RMS Supported models Expandable option in PM2130/PM2230 meter models Application 2.5 kV RMS Supported models Expandable option in PM2130/PM2230 meter models Application 2.5 kV RMS Supported models Expandable option in PM2130/PM2230 meter models Application Available through communication only Set up and configuration Through set up software  Analog outputs Scale 4-20 mA 6-20 mA 6-	Display support	In PM2130/PM2125 meter, data is available through
Digital Outputs         40 V DC max, 20mA max           Voltage ratings         40 V DC max, 20mA max           On Resistance         50 W max           Meter constant         Configurable from 1 to 9999000 k_h (kWh, kVARh, kVAh)           Pulse width         20, 25, 50, 100 ms           Pulse frequency (typical)         25 Hz           Leakage current         1 micro Amps           Isolation         2.5 kV RMS           Supported models         Available as default feature in PM2125/ PM2225 and Expandable option in PM2130/ PM2230 meter model           Alarm conditions         23 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status           Application         Pulse output: configurable for energies upper / lower limit: configurable for 9 parameters with 14 set point: V L-L, V L-N, Amps, fv V-HID %, W-lot, VA-tot, VAR-tot, VAR-tot, VAR-tot, VAR-tot, VAR-tot, PF-avg           Display support         Available on PM2230/PM225 (LCD type). In PM2130/PM225 (LCD type). In PM2130/PM218 meter, data is available through communication only           Set up and Configuration         Through set-up software           Analog inputs           Measurement scale         4-20 mA           Input impedance         ≤300 W           Max source impedance         >500 W           Update rate         1 s           Accuracy         1 % of Full scale at ambient temp 0.1 %/K	Set up and configuration	*
Voltage ratings 40 V DC max, 20mA max On Resistance 50 W max  Meter constant Configurable from 1 to 9999000 k_h (kWh, kVARh, kVAh) Pulse width 20, 25, 50, 100 ms 25 Ft2 Leakage current 1 micro Amps Isolation 2.5 kV RMS  Supported models Available as default feature in PM2125/ PM2225 and Expandable option in PM2130/ PM2230 meter model Expandable option in PM2130/ PM2250 meter model Expandable option in PM2330/ PM2250 (LCD type).  Application Pulse output: configurable for energies upper / lover limit: configurable for 9 parameters with 14 set point: V L-L, V L-N, Amps, F, V-THD %, W-tot, VA-tot, VAR-tot, PF-avg  Available on PM2230/ PM2235 (LCD type).  In PM2130/PM2235 (LCD type).  In PM2130/PM2235 (LCD type).  Through set-up software  Analog inputs  Measurement scale 4-20 mA Input impedance 3000 W  Update rate 1 s  Accuracy 1 % of Full scale at ambient temp 0.1 %/K for de-rating  Voltage ratings Typical 12 V (max 30 V)  Power Consumption <1.5 W  Isolation 2.5 kV RMS  Supported models Expandable option in PM2130/PM2230 meter models  Application Configuration in PM2130/PM2230 meter models  Application Through set up software  Analog outputs  Scale 4-20 mA  Load impedance 1 s  Accuracy 1 % of Full scale at ambient temp  Voltage ratings Typical 12 V (max 30 V)  Power Consumption   1.5 kV Silvano PM2230 (LCD type). In PM2130 meter, data is available through communication only  Through set up software  Analog outputs  Scale 4-20 mA  Load impedance   4-20 mA  Load impedance   5-5 kV RMS  Supported models   5-5 kV RMS  S		Through set up settware
On Resistance         50 W max           Meter constant         Configurable from 1 to 9999000 k_h (kWh, kVARh, kVAh)           Pulse width         20, 25, 50, 100 ms           Pulse frequency (typical)         25 Hz           Leakage current         1 micro Amps           Isolation         2.5 kV RMS           Supported models         Available as default feature in PM2125/ PM2225 and Expandable option in PM2130/ PM2230 meter model           Alarm conditions         23 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status           Application         Pulse output: configurable for energies upper / lover limit: configurable for 9 parameters with 14 set point: V.L.L, V.L.N, Amps, F. V-THD %, W-tot, VA-tot, VAR-to, FF-avg           Display support         Available on PM2230/PM2225 (LCD type). In PM2130/PM225 meter, data is available through communication only           Set up and Configuration         Through set-up software           Analogi inputs         Amalogi inputs           Measurement scale         4-20 mA           Input impedance         ≤300 W           Max source impedance         >500 W           Update rate         1 s           Accuracy         1 % of Full scale at ambient temp 0.1 %/K for de-rating           Voltage ratings         Typical 12 V (max 30 V)           Power Consumption         <1.5 W		40 V DC may 20mA may
Meter constant		
Pulse width Pulse frequency (typical) 20, 25, 50, 100 ms 25 Hz Leakage current 1 micro Amps 1 solation 2.5 kV RMS  Supported models Available as default feature in PM2125/ PM2225 and Expandable option in PM2130/ PM2230 meter model Expandable option in PM2130/ PM225 model Expandable option in PM2130/ PM25 model Expandable option in PM2130/ PM25 meter data is available through communication only In PM2130 meter M230 meter models In Supported Individual Expandable option in PM2130/ PM2230 meter models In Supported models Individual Expandable option in PM2130/ PM2230 meter models In Supported models In Expandable option in PM2130/ PM2230 meter models In Ex		
Pulse frequency (typical) 25 Hz  Leakage current 1 micro Amps  Isolation 2.5 kV RMS  Supported models Available as default feature in PM2125/ PM2225 and Expandable option in PM2130 / PM2230 meter model  Alarm conditions 23 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status  Application Pulse output: configurable for energies upper / lower limit: configurable for 9 parameters with 14 set point: V L-L, V L-N, Amps, F, V-THD %, W-tot, VA-tot, VAR-tot, PF-avg  Display support Available on PM2230/PM2225 (LCD type). In PM2130/PM2125 meter, data is available through communication only  Set up and Configuration Through set-up software  Analog inputs  Measurement scale 4-20 mA  Input impedance 5300 W  Max source impedance 5500 W  Update rate 1 s  Accuracy 1 % of Full scale at ambient temp 0.1 %/K for de-rating  Voltage ratings Typical 12 V (max 30 V)  Power Consumption 4-1.5 W  Isolation 2.5 kV RMS  Supported models Expandable option in PM2130/PM2230 meter models  Application Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration vase tup software  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration Through set up software  Analog outputs  Scale 4-20 mA  Load impedance 5600 W  Update rate 1 s  Accuracy 1 % of Full scale at ambient temp  Voltage ratings Typical 12 V (max 30 V)  Power Consumption <1.5 W  Isolation 2.5 kV RMS  Supported models Expandable option in PM2130 / PM2230 meter models  Arailog outputs  Scale 4-20 mA  Load impedance 5600 W  Update rate 1 s  Accuracy 1 % of Full scale at ambient temp  Voltage ratings Typical 12 V (max 30 V)  Power Consumption 1.5 W  Isolation 2.5 kV RMS  Supported models Expandable option in PM2130 / PM2230 meter models  Application 2.5 kV RMS  Supported models Expandable option in PM2130 / PM2230 meter models  Analog outputs can be associated to 40 different in		
Solation   2.5 kV RMS	Pulse frequency (typical)	25 Hz
Available as default feature in PM2125/ PM2225 and Expandable option in PM2130/ PM2230 meter model  Alarm conditions  23 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status  Application  Pulse output: configurable for energies upper / lower limit: configurable for 9 parameters with 14 set point: V L-L, V L-N, Amps, F, V-THD %, W-tot, VA-tot, VAR-tot, PF-avg  Display support  Available on PM2230/PM2225 (LCD type). In PM2130/PM2125 meter, data is available through communication only  Set up and Configuration  Through set-up software  Analog inputs  Measurement scale  4-20 mA  Input impedance  5500 W  Update rate  1 s  Accuracy  1 % of Full scale at ambient temp 0.1 %/K for de-rating  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  Expandable option in PM2130/PM2230 meter models  Application  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Through set up software  Analog outputs  Scale  4-20 mA  4-20 mA  4-20 mA  4-20 ma set up software  Analog outputs  Scale  4-20 mA  4-2		•
Expandable option in PM2130/ PM2230 meter model Alarm conditions  23 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status  Application  Pulse output: configurable for energies upper / lower limit: configurable for 9 parameters with 14 set point: V L-I, V L-N, Amps, F, V-THD %, W-tot, VA-tot, VAR-tot, PF-avg  Available on PM2230/PM2225 (LCD type). In PM2130/PM2125 meter, data is available through communication only  Set up and Configuration  Through set-up software  Analog inputs  Measurement scale  4-20 mA Input impedance  3300 W  Max source impedance  1 s Accuracy  1 % of Full scale at ambient temp 0.1 %/K for de-rating Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  Expandable option in PM2130/PM2230 meter models  Application  Configuration via set up software  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration  Through set up software  Analogo outputs  Scale  4-20 mA  Load impedance  5600 W  Update rate  1 s  Accuracy  1 n fe Ill scale at ambient temp  Voltage ratings  Through set up software  Analogo outputs  Scale  4-20 mA  Load impedance  5600 W  Update rate  1 s  Accuracy  1 n fe Ill scale at ambient temp  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  4-20 mA  Load impedance  5600 W  Update rate  1 s  Accuracy  1 n for Ill scale at ambient temp  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  Expandable option in PM2130/ PM2230 meter models  Application  Analog outputs can be associated to 40 different instantaneous parameters  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration  Through set-up software	Isolation	2.5 kV RMS
Application Pulse output: configurable for energies upper / lower limit: configurable for 9 parameters with 14 set point: V L-L, V L-N, Amps, F, V-THD %, W-tot, VA-tot, VAR-tot, PF-avg  Display support Available on PM2230/PM2225 (LCD type). In PM2130/PM2125 meter, data is available through communication only  Set up and Configuration Through set-up software  Analog inputs  Measurement scale 4-20 mA Input impedance 500 W  Update rate 1 s Accuracy 1 % of Full scale at ambient temp 0.1 %/K for de-rating voltage ratings Typical 12 V (max 30 V)  Power Consumption 2.5 kV RMS  Supported models Expandable option in PM2130/PM2230 meter models  Application Configuration in PM2300 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration Through set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration Through set up software  Available on PM2300 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration Through set up software  Analog outputs  Scale 4-20 mA  Load impedance 600 W  Update rate 1 s  Accuracy 1 % of Full scale at ambient temp  Voltage ratings Typical 12 V (max 30 V)  Power Consumption 2.5 kV RMS  Supported models Expandable option in PM2130/ PM2230 meter models  Application 2.5 kV RMS  Supported models Expandable option in PM2130 / PM2230 meter models  Application 2.5 kV RMS  Supported models Expandable option in PM2130 / PM2230 meter models  Application Analog outputs can be associated to 40 different instantaneous parameters  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration Through set-up software	Supported models	
upper / lower limit: configurable for 9 parameters with 14 set point: V L-L, V L-N, Amps, F, V-THD %, W-tot, VA-tot, VAR-tot, PF-avg  Available on PM2230/PM2225 (LCD type). In PM2130/PM2125 meter, data is available through communication only  Set up and Configuration  Analog inputs  Measurement scale  4-20 mA Input impedance  5500 W  Update rate  1 s  Accuracy  1 % of Full scale at ambient temp 0.1 %/K for de-rating voltage ratings  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  Application  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration  Analog outputs  Scale  4-20 mA  Load impedance  4-20 mA  Load impedance  1 s  Accuracy  1 % of Full scale at ambient temp  Voltage ratings  Typical 12 V (max 30 V)  Fower Consumption of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration  Through set up software  Analog outputs  Scale  4-20 mA  4	Alarm conditions	
Display support  Available on PM2230/PM2225 (LCD type). In PM2130/PM2125 meter, data is available through communication only  Set up and Configuration  Through set-up software  Analog inputs  Measurement scale  4-20 mA Input impedance  5300 W  Max source impedance  1 s Accuracy  1 % of Full scale at ambient temp 0.1 %/K for de-rating  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  Application  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available up though communition  1 s Accuracy  Aralog outputs  Scale  4-20 mA  Load impedance  1 s Accuracy  1 % of Full scale at ambient temp  1 s Accuracy  Analog outputs  Scale  4-20 mA  Load impedance  1 s Accuracy  1 % of Full scale at ambient temp  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  Analog outputs  Scale  4-20 mA  Load impedance  1 s Accuracy  1 % of Full scale at ambient temp  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  Application  Analog outputs can be associated to 40 different instantaneous parameters  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  Application  Analog outputs can be associated to 40 different instantaneous parameters  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available on PM2230 (LCD type). In PM2130 meter, data is available on PM2230 (LCD type). In PM2130 meter, data is available on PM2230 (LCD type). In PM2130 meter, data is available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration  Through set-up software	Application	upper / lower limit: configurable for 9 parameters with 14 set point: V L-L, V L-N, Amps, F, V-THD %, W-tot, VA-tot,
Analog inputs         Measurement scale       4-20 mA         Input impedance       ≤300 W         Max source impedance       >500 W         Update rate       1 s         Accuracy       1 % of Full scale at ambient temp 0.1 %/K for de-rating         Voltage ratings       Typical 12 V (max 30 V)         Power Consumption       <1.5 W	Display support	Available on PM2230/PM2225 (LCD type). In PM2130/PM2125 meter, data is available through
Measurement scale       4-20 mA         Input impedance       ≤300 W         Max source impedance       >500 W         Update rate       1 s         Accuracy       1 % of Full scale at ambient temp 0.1 %/K for de-rating         Voltage ratings       Typical 12 V (max 30 V)         Power Consumption       <1.5 W         Isolation       2.5 kV RMS         Supported models       Expandable option in PM2130/PM2230 meter models         Application       Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software         Display       Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only         Set up and configuration       Through set up software         Analog outputs         Scale       4-20 mA         Load impedance       ≤600 W         Update rate       1 s         Accuracy       1 % of Full scale at ambient temp         Voltage ratings       Typical 12 V (max 30 V)         Power Consumption       <1.5 W         Isolation       2.5 kV RMS         Supported models       Expandable option in PM2130/ PM2230 meter models         Application       Analog outputs can be associated to 4	Set up and Configuration	Through set-up software
Measurement scale       4-20 mA         Input impedance       ≤300 W         Max source impedance       >500 W         Update rate       1 s         Accuracy       1 % of Full scale at ambient temp 0.1 %/K for de-rating         Voltage ratings       Typical 12 V (max 30 V)         Power Consumption       <1.5 W         Isolation       2.5 kV RMS         Supported models       Expandable option in PM2130/PM2230 meter models         Application       Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software         Display       Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only         Set up and configuration       Through set up software         Analog outputs         Scale       4-20 mA         Load impedance       ≤600 W         Update rate       1 s         Accuracy       1 % of Full scale at ambient temp         Voltage ratings       Typical 12 V (max 30 V)         Power Consumption       <1.5 W         Isolation       2.5 kV RMS         Supported models       Expandable option in PM2130/ PM2230 meter models         Application       Analog outputs can be associated to 4	Analog inputs	
Input impedance       ≤300 W         Max source impedance       >500 W         Update rate       1 s         Accuracy       1 % of Full scale at ambient temp 0.1 %/K for de-rating         Voltage ratings       Typical 12 V (max 30 V)         Power Consumption       <1.5 W         Isolation       2.5 kV RMS         Supported models       Expandable option in PM2130/PM2230 meter models         Application       Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software         Display       Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only         Set up and configuration       Through set up software         Analog outputs         Scale       4-20 mA         Load impedance       ≤600 W         Update rate       1 s         Accuracy       1 % of Full scale at ambient temp         Voltage ratings       Typical 12 V (max 30 V)         Power Consumption       <1.5 W         Isolation       2.5 kV RMS         Supported models       Expandable option in PM2130/ PM2230 meter models         Application       Analog outputs can be associated to 40 different instantaneous parameters         Disp		
Max source impedance >500 W  Update rate 1 s  Accuracy 1 % of Full scale at ambient temp 0.1 %/K for de-rating  Voltage ratings Typical 12 V (max 30 V)  Power Consumption 2.5 kV RMS  Supported models Expandable option in PM2130/PM2230 meter models  Application Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration Through set up software  Analog outputs  Scale 4-20 mA  Load impedance ≤600 W  Update rate 1 s  Accuracy 1 % of Full scale at ambient temp  Voltage ratings Typical 12 V (max 30 V)  Power Consumption 2.5 kV RMS  Supported models Expandable option in PM2130/ PM2230 meter models  Application Analog outputs can be associated to 40 different instantaneous parameters  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration Through set-up software  Mechanical characteristics  Mechanical dimension 90.5 mm W x 53 mm H x 14.67 mm D (without connector)		4-20 mA
Update rate  Accuracy  1 % of Full scale at ambient temp 0.1 %/K for de-rating  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  Expandable option in PM2130/PM2230 meter models  Application  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration  Through set up software  Analog outputs  Scale  4-20 mA  Load impedance  5600 W  Update rate  1 s  Accuracy  1 % of Full scale at ambient temp  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  Expandable option in PM2130/ PM2230 meter models  Application  Analog outputs can be associated to 40 different instantaneous parameters  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration  Through set-up software  Mechanical characteristics  Mechanical dimension  90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale	
Accuracy  1 % of Full scale at ambient temp 0.1 %/K for de-rating  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  Expandable option in PM2130/PM2230 meter models  Application  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration  Through set up software  Analog outputs  Scale  4-20 mA  Load impedance  1 s  Accuracy  1 % of Full scale at ambient temp  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  2.5 kV RMS  Supported models  Expandable option in PM2130/ PM2230 meter models  Application  Analog outputs can be associated to 40 different instantaneous parameters  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration  Through set-up software  Mechanical characteristics  Mechanical dimension  90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance	≤300 W
Voltage ratings Typical 12 V (max 30 V)  Power Consumption <1.5 W  Isolation 2.5 kV RMS  Supported models Expandable option in PM2130/PM2230 meter models  Application Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration Through set up software  Analog outputs  Scale 4-20 mA  Load impedance ≤600 W  Update rate 1 s  Accuracy 1 % of Full scale at ambient temp  Voltage ratings Typical 12 V (max 30 V)  Power Consumption 2.5 kV RMS  Supported models Expandable option in PM2130/ PM2230 meter models  Application Analog outputs can be associated to 40 different instantaneous parameters  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration Through set-up software  Mechanical characteristics  Mechanical dimension 90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance	≤300 W >500 W
Power Consumption <1.5 W  Isolation 2.5 kV RMS  Supported models Expandable option in PM2130/PM2230 meter models  Application Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration Through set up software  Analog outputs  Scale 4-20 mA  Load impedance ≤600 W  Update rate 1 s  Accuracy 1 % of Full scale at ambient temp  Voltage ratings Typical 12 V (max 30 V)  Power Consumption <1.5 W  Isolation 2.5 kV RMS  Supported models Expandable option in PM2130/ PM2230 meter models  Application Analog outputs can be associated to 40 different instantaneous parameters  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration Through set-up software  Mechanical characteristics  Mechanical dimension 90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate	≤300 W >500 W 1 s
Isolation       2.5 kV RMS         Supported models       Expandable option in PM2130/PM2230 meter models         Application       Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software         Display       Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only         Set up and configuration       Through set up software         Analog outputs         Scale       4-20 mA         Load impedance       ≤600 W         Update rate       1 s         Accuracy       1 % of Full scale at ambient temp         Voltage ratings       Typical 12 V (max 30 V)         Power Consumption       <1.5 W	Measurement scale Input impedance Max source impedance Update rate Accuracy	<pre>&lt;300 W &gt;500 W 1 s 1 % of Full scale at ambient temp 0.1 %/K for de-rating</pre>
Supported models       Expandable option in PM2130/PM2230 meter models         Application       Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software         Display       Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only         Set up and configuration       Through set up software         Analog outputs         Scale       4-20 mA         Load impedance       ≤600 W         Update rate       1 s         Accuracy       1 % of Full scale at ambient temp         Voltage ratings       Typical 12 V (max 30 V)         Power Consumption       <1.5 W	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings	<pre>&lt;300 W &gt;500 W 1 s 1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V)</pre>
Application  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration  Through set up software  Analog outputs  Scale  4-20 mA  Load impedance  \$\frac{600 \text{ W}}{1 \text{ w}} \text{ of Full scale at ambient temp}  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  \$\frac{1.5 \text{ W}}{1.5 \text{ W}} \text{ Supported models}  Application  \$\frac{2.5 \text{ kV RMS}}{2.5 \text{ kV RMS}} \text{ outputs can be associated to 40 different instantaneous parameters}  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration  Through set-up software  Mechanical characteristics  Mechanical dimension  90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption	<pre>&lt;300 W &gt;500 W 1 s 1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V) &lt;1.5 W</pre>
oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set up and configuration  Through set up software  Analog outputs  Scale 4-20 mA  Load impedance ≤600 W  Update rate 1 s  Accuracy 1 % of Full scale at ambient temp  Voltage ratings Typical 12 V (max 30 V)  Power Consumption <1.5 W  Isolation 2.5 kV RMS  Supported models Expandable option in PM2130/ PM2230 meter models  Application Analog outputs can be associated to 40 different instantaneous parameters  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration Through set-up software  Mechanical characteristics  Mechanical dimension 90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation	<pre>&lt;300 W &gt;500 W 1 s 1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V) &lt;1.5 W 2.5 kV RMS</pre>
available through communication only  Set up and configuration Through set up software  Analog outputs  Scale 4-20 mA  Load impedance ≤600 W  Update rate 1 s  Accuracy 1 % of Full scale at ambient temp  Voltage ratings Typical 12 V (max 30 V)  Power Consumption <1.5 W  Isolation 2.5 kV RMS  Supported models Expandable option in PM2130/ PM2230 meter models  Application Analog outputs can be associated to 40 different instantaneous parameters  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration Through set-up software  Mechanical characteristics  Mechanical dimension 90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models	≤300 W  >500 W  1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating  Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/PM2230 meter models
Analog outputs  Scale	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models	≤300 W >500 W 1 s 1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V) <1.5 W 2.5 kV RMS Expandable option in PM2130/PM2230 meter models Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection.
Scale       4-20 mA         Load impedance       ≤600 W         Update rate       1 s         Accuracy       1 % of Full scale at ambient temp         Voltage ratings       Typical 12 V (max 30 V)         Power Consumption       <1.5 W	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application	≤300 W >500 W 1 s 1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V) <1.5 W 2.5 kV RMS Expandable option in PM2130/PM2230 meter models Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software Available on PM2230 (LCD type). In PM2130 meter, data is
Load impedance       ≤600 W         Update rate       1 s         Accuracy       1 % of Full scale at ambient temp         Voltage ratings       Typical 12 V (max 30 V)         Power Consumption       <1.5 W	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application Display Set up and configuration	≤300 W  >500 W  1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/PM2230 meter models  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only
Update rate 1 s  Accuracy 1 % of Full scale at ambient temp  Voltage ratings Typical 12 V (max 30 V)  Power Consumption <1.5 W  Isolation 2.5 kV RMS  Supported models Expandable option in PM2130/ PM2230 meter models  Application Analog outputs can be associated to 40 different instantaneous parameters  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration Through set-up software  Mechanical characteristics  Mechanical dimension 90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application Display Set up and configuration Analog outputs	≤300 W  >500 W  1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/PM2230 meter models  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only
Accuracy  1 % of Full scale at ambient temp  Voltage ratings  Typical 12 V (max 30 V)  Power Consumption  <1.5 W  Isolation  2.5 kV RMS  Supported models  Expandable option in PM2130/ PM2230 meter models  Application  Analog outputs can be associated to 40 different instantaneous parameters  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration  Through set-up software  Mechanical characteristics  Mechanical dimension  90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application Display Set up and configuration Analog outputs	≤300 W  >500 W  1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/PM2230 meter models  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Through set up software
Voltage ratings Typical 12 V (max 30 V)  Power Consumption <1.5 W  Isolation 2.5 kV RMS  Supported models Expandable option in PM2130/ PM2230 meter models  Application Analog outputs can be associated to 40 different instantaneous parameters  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration Through set-up software  Mechanical characteristics  Mechanical dimension 90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application Display Set up and configuration Analog outputs Scale Load impedance	≤300 W  >500 W  1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/PM2230 meter models  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Through set up software  4-20 mA  ≤600 W
Power Consumption       <1.5 W	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application Display Set up and configuration Analog outputs Scale Load impedance Update rate	≤300 W  >500 W  1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/PM2230 meter models  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Through set up software  4-20 mA  ≤600 W  1 s
Isolation 2.5 kV RMS Supported models Expandable option in PM2130/ PM2230 meter models Application Analog outputs can be associated to 40 different instantaneous parameters  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration Through set-up software  Mechanical characteristics  Mechanical dimension 90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application  Display Set up and configuration  Analog outputs Scale Load impedance Update rate Accuracy	≤300 W  >500 W  1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/PM2230 meter models  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Through set up software  4-20 mA  ≤600 W  1 s  1 % of Full scale at ambient temp
Supported models  Expandable option in PM2130/ PM2230 meter models  Application  Analog outputs can be associated to 40 different instantaneous parameters  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration  Through set-up software  Mechanical characteristics  Mechanical dimension  90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application  Display Set up and configuration  Analog outputs Scale Load impedance Update rate Accuracy Voltage ratings	≤300 W  >500 W  1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/PM2230 meter models  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Through set up software  4-20 mA  ≤600 W  1 s  1 % of Full scale at ambient temp  Typical 12 V (max 30 V)
Application  Analog outputs can be associated to 40 different instantaneous parameters  Display  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration  Through set-up software  Mechanical characteristics  Mechanical dimension  90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application  Display Set up and configuration  Analog outputs Scale Load impedance Update rate Accuracy Voltage ratings Power Consumption	≤300 W  >500 W  1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/PM2230 meter models  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Through set up software  4-20 mA  ≤600 W  1 s  1 % of Full scale at ambient temp  Typical 12 V (max 30 V)  <1.5 W
instantaneous parameters  Display Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Set-up & configuration Through set-up software  Mechanical characteristics  Mechanical dimension 90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application  Display Set up and configuration  Analog outputs Scale Load impedance Update rate Accuracy Voltage ratings Power Consumption Isolation	≤300 W  >500 W  1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/PM2230 meter models  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Through set up software  4-20 mA  ≤600 W  1 s  1 % of Full scale at ambient temp  Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS
available through communication only  Set-up & configuration Through set-up software  Mechanical characteristics  Mechanical dimension 90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application  Display Set up and configuration  Analog outputs Scale Load impedance Update rate Accuracy Voltage ratings Power Consumption Isolation  Supported models	≤300 W  >500 W  1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/PM2230 meter models  Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only  Through set up software  4-20 mA  ≤600 W  1 s  1 % of Full scale at ambient temp  Typical 12 V (max 30 V)  <1.5 W  2.5 kV RMS  Expandable option in PM2130/ PM2230 meter models
Mechanical characteristics       Mechanical dimension     90.5 mm W x 53 mm H x 14.67 mm D (without connector)	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application  Display Set up and configuration  Analog outputs Scale Load impedance Update rate Accuracy Voltage ratings Power Consumption Isolation  Supported models	≤300 W >500 W 1 s 1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V) <1.5 W 2.5 kV RMS Expandable option in PM2130/PM2230 meter models Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only Through set up software 4-20 mA ≤600 W 1 s 1 % of Full scale at ambient temp Typical 12 V (max 30 V) <1.5 W 2.5 kV RMS Expandable option in PM2130/ PM2230 meter models Analog outputs can be associated to 40 different
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	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application  Display Set up and configuration Analog outputs Scale Load impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application	≤300 W >500 W 1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V) <1.5 W 2.5 kV RMS Expandable option in PM2130/PM2230 meter models Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only Through set up software  4-20 mA ≤600 W 1 s 1 % of Full scale at ambient temp Typical 12 V (max 30 V) <1.5 W 2.5 kV RMS Expandable option in PM2130/ PM2230 meter models Analog outputs can be associated to 40 different instantaneous parameters Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only
Weight 50 gm	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application  Display Set up and configuration  Analog outputs Scale Load impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application  Display Set-up & configuration	≤300 W >500 W 1 s  1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V) <1.5 W 2.5 kV RMS Expandable option in PM2130/PM2230 meter models Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only Through set up software  4-20 mA ≤600 W 1 s 1 % of Full scale at ambient temp Typical 12 V (max 30 V) <1.5 W 2.5 kV RMS Expandable option in PM2130/ PM2230 meter models Analog outputs can be associated to 40 different instantaneous parameters Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only
	Measurement scale Input impedance Max source impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application  Display Set up and configuration Analog outputs Scale Load impedance Update rate Accuracy Voltage ratings Power Consumption Isolation Supported models Application  Display Set-up & configuration Mechanical characteristics Mechanical dimension	≤300 W >500 W 1 s 1 % of Full scale at ambient temp 0.1 %/K for de-rating Typical 12 V (max 30 V) <1.5 W 2.5 kV RMS Expandable option in PM2130/PM2230 meter models Configurable for inputs from flow rates, RPM, fluid level, oil pressure, temperature measurement devices or transducers with option of 81 different Uni code selection. Configuration via set up software  Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only Through set up software  4-20 mA ≤600 W 1 s 1 % of Full scale at ambient temp Typical 12 V (max 30 V) <1.5 W 2.5 kV RMS Expandable option in PM2130/ PM2230 meter models Analog outputs can be associated to 40 different instantaneous parameters Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only Through set-up software



Digital Input Relay Output module

# PM2000 series electrical characteristics of IO modules

Mechanical characteristics	
Mechanical dimension	90.5 mm W x 53 mm H x 14.67 mm D (without connector)
Weight	50 gm
Relay Outputs	
Voltage rating	30 V DC 5A load 250 V AC 8A, PF=1.0 250 V AC 6A, PF=0.4
Output Frequency	0.5 Hz maximum (1 second ON / 1 second OFF)
Relay type	Mechanical, Form A, Potential free
Isolation	2.5 kV RMS
Supported models	Available as default feature in selected references in PM2125/PM2225 model. Expandable options in PM2130/PM2230 model.
Alarm conditions	23 set point driven standard alarms, 4 Unary alarms, 2 Digital inputs status
Application	Upper / lower limit: configurable for 10 parameters with 23 set points: V L-L, V L-N, Amps, F, V-THD %, W-tot, VAR-tot, PF-avg, last, present & predicted parameters for 3 power demands
Display and communication	Available on PM2230/PM2225 (LCD type). In PM2130/PM2125 meter, data is available through communication only
Set up and Configuration	Through ION set up software utility tool

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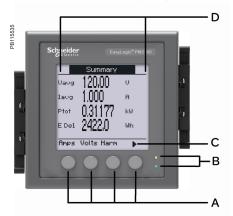
# PM2000

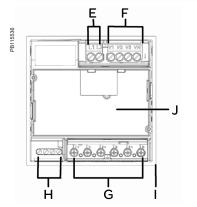
Feature set summary	PM2110	PM2120	PM2125C	PM2130	PM2210	PM2220	PM2225C	PM2230
Accuracy Class for Wh	1.0 0		0.	5S	1.	.0 0.5		5S
Accuracy Class for VARh		1.0						
Accuracy for VAh		±0.5 %						
Amps, per-phase, average and calculated neutral current		10.5 %						
Voltage, V L-N, V L-L, per-phase and average		•						
Power Factor	True PF	D	True PF isplacement Pl	<del>-</del> +4	True PF	True PF Displacement PF		
Frequency, any available phase								
Power: W, VA, VAR: per phase and total								
					•			
3-phase unbalance %	Current		Current Voltage+4		Current	Current Voltage		
Demand parameters (Present, Last, Predicted and Peak for W, VA, VAR, A) Date and Time stamp for peak demand	(no timestamp)	•			(no timestamp)	•		
Energy: Wh, VAh, VARh (4 quadrant) Delivered (Import or Forward), Received (Export or Reverse)	Delivered, Received	Delivered, Received Total+4, Net <sup>+4</sup> , Last cleared <sup>+4</sup>			Delivered, Received, Total, Net	Delivered, Received Total, Net, Last cleared		
Active load timer, meter operating timer, run hours and power outage counter		Through com				•		
THD %: Voltage L-N or L-L, Amps per phase					•			
Individual harmonics for Voltage, Current, per-phase		Up to 15th+4	Up to 15th+4	Up to 31st+4		Up to 15th	Up to 15th+4	Up to 31st
Min/ Max with real time clock For avg or total of V L-L, V L-N, Amps, PF, Hz, W, VA, VAR parameters with date and time stamp of occurrence		Through com				•		
RTC/battery <sup>+6</sup>			•					
Communication	Pulse Output		RS-485		Pulse Output		RS-485	
Expandable Analog IO module <sup>15</sup> PM2K2AIAO: 2 input & 2 output channels PM2K1AIAO: 1 input & 1 output channel Expandable Digital IO module <sup>15</sup>			Embedded	•			Embedded	•
PM2K2DIDO: 2 input & 2 output channels								
Expandable DI RO module*5 PM2K2DI2RO: 2 Digital input, 2 Mech Relay output channels Whetting output voltage: 24V DC, 8 mA max load			Embedded with 2DI/RO	•			Embedded with 2DI/RO	•
Customizable data logging up to 2 parameters. Option to select Power (W, VA, VAR) Bi-directional energy (±Wh, ±VAh, ±VARh), Demand (W, VA, VAR, A) with configurable interval and duration (e.g. 2 parameters for 60 days at 15 minutes interval)				•				•
Alarms: 14 set point driven alarms from 9 parameters (V L-L, V L-N, Amps, F, V-THD %, W-tot, VA-tot, VAR-tot, PF-avg), 4 Unary alarms (meter power up, meter reset, meter diagnostic, phase reversal) and 2 digital inputs status (with DI/DO card only)			•	•			•	_
Daily time snapshot of Avg Voltage, Avg Current, Total active power & Energy delivered as measured at configurable time of day <sup>17</sup> Rate counters: 2 configurable counters to display values in customer specified units base on energy measured (e.g., kgCO <sub>2</sub> )						•		•
emission or energy cost)+7								

Version: 1.0 - 16/06/2021 Life Is On Schneider PLSED310091EN

<sup>&</sup>lt;sup>+4</sup> Through communication only
<sup>+5</sup> Any one IO module can be used at a time with PM2130 or PM2230 meter. The control power range with IO module (including PM2125/ PM2225 references) shall be 72 to 304 V AC L-N or 90 to 304 V DC.
<sup>+6</sup> Battery backup duration 3 years when meter is in Power OFF condition.
<sup>+7</sup> Configurable snapshot and rate counter features (not available in PM2125/ PM2225 meters)

### PM2000 LCD display legend description

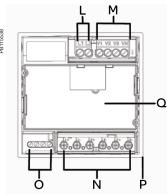




- A Menu selection buttons
- $B \ \, \text{Energy pulsing LED (red) Heartbeat / communications LED (green)}$
- C Navigation or menu selections:
- ▲ Exit screen and go up one level
- ▲ Move cursor up list of options
- ▼ Move cursor down, display more options
- Move cursor one character to the left
- ► Scroll right and display more menu items
- + Show next item in list or increase the highlighted value
- Show previous item in list
- D Maintenance & alarm notification area
- E Control power
- F Voltage inputs
- G Current inputs
- H RS-485 / POP
- I Gasket
- ${f J}\,$  IO channel slot optional accessory for PM2230, embedded in PM2225 meter

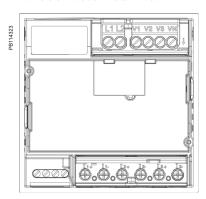
### PM2000 LED display legend description



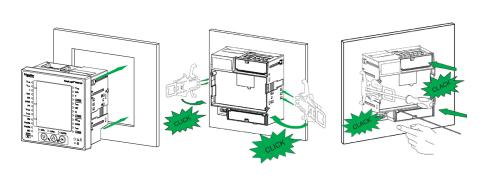


- A Phase measurements (VL-N, VL-L, I, kVA, kW, kVAR, PF, V-THD %, I-THD %)
- B Demand measurements (DM=Demand, PrsDM=Present demand, PrdDM=Predictor demand, MD=Maximum demand))
- C RTC Date & time
- D Negative indicator
- E Navigation key to navigate down
- F Energy readings Apparent enegry, Active energy, Reactive energy
- G Navigation key to navigate up
- H OK Enter key
- l Energy pulsing LED (red) Heartbeat / communications LED (green)
- J x 1000 indicator
- ${\sf K}$  System measurements Vavg, kVA, F, lavg, kW, In, PFavg, kVAR, lunb
- L Control power L1, L2
- M Input voltage terminals V1, V2, V3, VN
- N Input current terminals I1+, I1-, I2+, I2-, I3+, I3-
- O RS-485 communications / POP terminals
- P Gasket
- Q IO channel slot optional accessory for PM2130, embedded feature in PM2125 meter

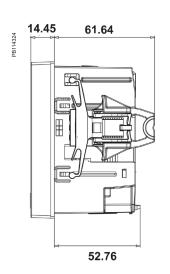
### PM2000 meter rear view

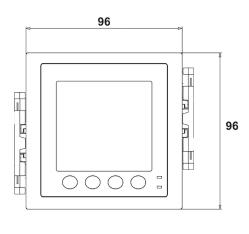


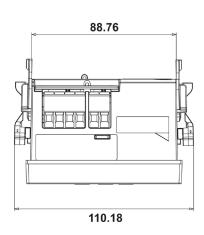
### Meter installation



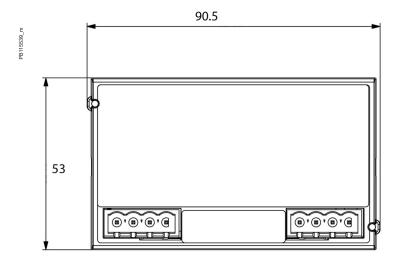
### PM2000 multi-function meter mechanical dimensions

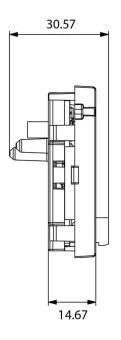






# PM2000 Digital and Analog IO module mechanical dimensions





See the appropriate Installation Guide for correct installation instructions.



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