

EasyLogic power metering

A complete range of meters for essential electrical system measurement

Catalogue



Life Is On

Schneider
Electric

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Panorama of the EasyLogic range

Digital panel meters



Family	DM1000			DM3000		DM6000
Parameters	DM1110	DM1210	DM1310	DM3110	DM3210	DM6000
Amps: 1-ph or per-phase	■			■		■ & 3-ph avg
Volts: 1-ph or per-phase		■			■	■ & 3-ph avg
Frequency			■			■
Power Factor						■ & 3-ph avg
Class of Accuracy*	0.5	0.5	0.2	0.5	0.5	1
RS-485 Modbus RTU						in DM6200
Form Factor in mm	96x96x44	96x96x44	96x96x44	96x96x44	96x96x44	96x96x80
Mounting	Flush/Panel	Flush/Panel	Flush/Panel	Flush/Panel	Flush/Panel	Flush/Panel

Simple energy cost management

Data aggregation						■
Load profile						■
Bill verification						
Cost allocation						

Basic network management

Panel instrumentation	■	■	■	■	■	■
Power metering						
Basic harmonic monitoring						
Status monitoring						
Threshold alarming						

Monitoring and verification

Test bench	■	■	■	■	■	■
Genset	■	■	■	■	■	■
PF Improvement panel						■
Labs	■	■	■	■	■	■
OEMs	■	■	■	■	■	■

Panorama of the EasyLogic range

Digital panel meters (contd.)



Family	PM2000 LED	PM2200 LCD
Parameters		
Amps: per phase & 3-ph avg	■	■
Volts: per phase & 3-ph avg	■	■
Frequency	■	■
Power Factor per phase & 3-ph avg	■	■
W, Wh	■	■
VAR, VARh	■	■
VA, VAh	■	■
DI/DO	2 (PM2130)	2 (PM2230)
Class of Accuracy*	1 (0.5s PM2X30)	1 (0.5S PM2x30)
Analog IO	2 (PM2130)	2 (PM2230)
RS-485 Modbus RTU	■	■
CT Secondary	5A or 1A	5A or 1A
Form Factor in mm	96x96x54	96X96X54
with IO module	96X96X72	96X96X72
Mounting	Flush/Panel	Flush/Panel

Simple energy cost management

Data aggregation	■	■
Load profile	■	■
Bill verification	■	■
Cost allocation	■	■

Basic network management

Panel instrumentation		
Power metering	■	■
Basic harmonic monitoring	■	■
Status monitoring	■	■
Threshold alarming	■	■

Monitoring and verification

Test bench	■	■
Genset	■	■
PF Improvement panel	■	■
Labs	■	■
OEMs	■	■

* Refer data sheet for operating range

DM1000 series : 1-Ph V A F panel meters

DM3000 series: 3-Ph V A panel meters

Functions and characteristics

PB113034



DM1000 series digital panel meter

PB113048



DM3000 series digital panel meter front display (above), and rear (below)

PB113044



Basic VAF panel meters – main features

- 4 digit, 15 mm height, 7 segment LED display
- 1-ph & 3-ph Volt or Amps panel meters
- Accuracy of 0.5 % on full scale for Volt & Ammeter, 0.2 % for Hz meter
- Inbuilt selector switch in 3-ph meter model
- Single key for programming, navigation or as selector switch

Basic VAF panel meters – technical specifications

- Input voltage (50 Hz/ 60 Hz +/-5 %)
 - 80 to 480 V AC L-L direct, up to 999 kV with PT
- Input current (50 Hz/ 60 Hz +/-5 %)
 - 50 mA to 6 A direct, CT secondary 1 A or 5 A field settable
 - Overload current: 10 A continuous
 - CT primary: 1 A to 99 kA field settable
- Control power
 - 90 to 277 V AC (50 Hz/ 60 Hz +/-5 %) or DC
- Form factor
 - Flush/panel mount, 96 x 96 x 44mm
- IP Degree of protection
 - IP51 front & IP40 rear side
- Auto scaling & direct readings
- Accuracy
 - 0.5 % of full scale for V & A
 - 0.2 % of full scale for Hz
- Safety/ EMI-EMC tests
 - CE: As per IEC 61010-1 Ed.3
 - Emission: CISPR11, Class A
 - Fast Transient: IEC 61000-4-4*
 - Surge withstand: IEC 61000-4-5*
 - ESD: IEC 61000-4-2*
 - Isolation: 4 kV for 1 minute
 - Safety: Self extinguishable V1 plastics, measurement category III, Pollution degree 2
- * as per IEC 61326-1
- Temperature
 - Operating: -10 °C to 60 °C
 - Storage: -25 °C to 70 °C
- Weight: 400 gms approx, Unpacked
500 gms approx, Shipping
- Panel cut out: 92 x 92 mm Flush mount
- LED indicators for phase identification in 3-ph meters
- As per IEC61326-1

Comparisons

Parameter	DM1110	DM1210	DM1310	DM3110	DM3210	Accuracy
1-ph A	■					0.5 %
1-ph V		■				0.5 %
1-ph Hz			■			0.2 %
3-ph A				■		0.5 %
3-ph V					■	0.5 %
Commercial reference	METSEDM1110	METSEDM1210	METSEDM1310	METSEDM3110	METSEDM3210	

DM6000 series

VAF PF Digital panel meters

Functions and characteristics

PB113052



EasyLogic™ DM6000 series power meter.

PB113051



EasyLogic™ DM6000 series power meter - front

PB113050



EasyLogic™ DM6000 series power meter - rear

VAF PF panel meters – main features

- Alpha numeric 8 segment bright LED display
- 3 rows of 4 digits each
- Load analyzer
- Tricolor analogue load bar
- Field settable VT ratio, CT ratio (both primary & secondary)
- Control power of AC & DC voltage
- Password protected
- RPM measurement
- 4 keys + 1 favourite key
- Auto-scale & auto-scroll

VAF PF panel meters – technical characteristics

- Accuracy
 - Volts & Amps: 0.5 % of reading
 - Power Factor: 1.0 % of reading
- Voltage inputs (50/60Hz +/-5 %)
 - 80 to 480 V AC L-L direct, up to 999 kV with PT
- Current inputs (50/60 Hz +/-5 %)
 - 50 mA to 6 A with CT input, 10 A max continuous, 5 mA starting current
- Control power (50/60 Hz +/-5 %)
 - 44 to 277 V AC or DC, burden of 5VA max
- System configurable for 1-ph, 2-ph & 3-ph network (5 types)
- Panel/ Flush mount, 96 x 96 x 80 mm depth
- Safety & Markings
 - UL as per UL 508 & CE as per IEC 61010-1 Ed-3
 - ANSI self certified
 - EAC, RCM
 - Measurement Category III, Pollution degree 2 & Double insulated
 - EMI/EMC
 - CISPR11 Class A
 - Electro Static Discharge: IEC 61000-4-2*
 - Radiated susceptibility: IEC 61000-4-3*
 - Fast Transient Burst: IEC 61000-4-4*
 - Surge withstand: IEC 61000-4-5*
 - Conducted susceptibility: IEC 61000-4-6*
 - Damped oscillatory: IEC 61000-4-12*
 - Voltage dips & Interruption: IEC 61000-4-11*
 - Impulse voltage test: IEC 60060-1
- Green Premium™ (ROHS, REACH, EOL)
- Multi linguistic literature
 - EN, FR, ES, PT, DE, TR, RU, ZH
- Modbus RS-485
 - Preconfigured
 - Native device for ION E, or SPM, or PME
 - ION set up
 - IP degree of protection
 - IP51 front & IP40 rear (meter body)
 - Environmental
 - Operating temp: -10 °C to 60 °C
 - Storage temp: -25 °C to 70 °C
 - Humidity 5 % to 95 % non-condensing
- Altitude: 2000m

Comparisons

Parameters / Model	DM6000	DM6200
V A F – per ph & Avg	■	■
PF– per ph & Avg	■	■
% Load, % V & I Unbal, Ph-angle, RPM	■	■
Modbus RS-485		■
Commercial reference as per IEC 61326-1	METS EDM6000	METS EDM6200

PM2000 multi-function meters

Functions and characteristics

PB114325



PM2000 series LED display meter

PB115531



PM2000 LCD display

Functions and characteristics

Introducing EasyLogic PM2000 series, next generation power meter which offers all the measurement capabilities required to monitor an electrical installation in a single 96 x 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, one on each side of the meter's front panel indicates the parameter name chosen for display

■ **PM2200 series:** LCD display type: Monochrome graphical LCD of 128 x 128 resolution with viewable area of 67 x 62.5 mm lets the users read all three phase measured values simultaneously. The bright anti-glare display features large characters and powerful backlighting for easy reading even in extreme lighting conditions and viewing angles. Intuitive menus, multi-language text, icons and graphics create a friendly environment to learn about your electrical network.

Applications

Cost management:

- Electrical installation remote monitoring
- Energy accounting and balancing
- Tenant and sub-billing
- Panel instrumentation
- Energy management

Network management:

- Power quality analysis: THD and individual harmonics up to 15th and 31st order
- Measurement of True PF and Displacement PF
- Recording Min/Max values of instantaneous parameters with date & timestamp
- Optional IO modules comprising either 2 Digital Inputs and 2 Outputs, or 2 Analogue Inputs and 2 Outputs for comprehensive WAGES monitoring
- Calculates % unbalance for voltage & current

Main characteristics:

- Easy to install: Mounts using two clips, no tools are required. Compact meter with 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 test LED at the front panel used for test and calibration of the meter on site or laboratory. Heart-beat 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).
- Power quality analysis: The PM2000 offers THD measurements and Individual harmonics up to 15th order in PM2x20 variants and up to 31st 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.
- 12am snap shot: The values from summary page will be stored as snap shot and refreshed by next day 12am.
- Rate counters: 2 configurable counters display values in custom specified units based on energy recorded (e.g., kgCO₂ carbon emission or energy cost).
- Energy preset feature: For retrofit application.

Commercial reference numbers

Ref. number	Model
METSEPM2110	PM2110
METSEPM2120	PM2120
METSEPM2130	PM2130
METSEPM2210	PM2210
METSEPM2220	PM2220
METSEPM2230	PM2230
METSEPM2KDGTLIO22	PM2K2DIDO
METSEPM2KANLGIO22	PM2K2AIAO
METSEPM2KANLGIO11	PM2K1AIAO

See your Schneider Electric representative for complete ordering information.

PM2000 multi-function meters

Functions and characteristics

PB114317



Rear of PM2000 closed



Rear of PM2000 open

PB114321



General

Use on LV and MV systems with onsite programmable PT/CT ratio
Basic metering with THD, Individual 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-volatile 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 the step 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 scope, monochrome graphical LCD of 128 x 128 resolution 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 - StruxureWare Power Monitoring Expert, StruxureWare PowerSCADA Expert along with 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
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Diagnostics

Diagnostic page	Indicates LED/LCD status, sl number, diag pages, OS & RS version
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Lock/ Un-Lock

Page Lock & Unlock (PM2100 series)	Unique feature to ensures that commonly referred page is restored in 4 minutes of inactive time
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Rate 1 counter⁺¹

kgCO ₂ emission (example)	Rate counter can be configured to display the CO ₂ emission in kgCO ₂ format based on the kWh measured either in delivered or received direction.
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Rate 2 counter⁺¹

Tariff counter (example)	Rate counter can also be configured to calculate the electricity cost based on the energy consumption in customized currency format.
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12am snap shot

12am snap shot ⁺¹	Snap shot of Avg Voltage, Avg Current, Total Active Power & Energy delivered as measured by the meter at 12am. Snap shot available until 12am next day
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⁺¹ In PM2200 (LCD) series meters

PM2000 multi-function meters

Functions and characteristics

PB 114320



Rear of PM2000 with I/O module

PB 114319



Rear of PM2000 with I/O module disconnected

Electrical characteristics	
Type of measurement	True RMS 64 samples per cycle
Measurement accuracy	
Current, average & per-phase	+/-0.5 %
Voltage average & per-phase	+/-0.5 %
Frequency	+/-0.05 %
Power Factor, average & per-phase	+/- 0.01
Power (W-Active, VA- Apparent)	+/- 0.5 %
Power (VAR- Reactive)	+/- 1.0 %
Real/ Active Energy (Wh)	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 ²
Reactive Energy	Class 1.0 as per IEC 62053-24
Apparent Energy	+/-0.5 %
THD% and Individual Harmonics- V & A	+/- 5 % FS for THD & Individual harmonics
Input-voltage	
VT primary	999 kV L-L max, secondary voltage depends on VT ratio
U nominal	277 V L-N/480V L-L
Measured V with full range	20-277 VLN/35 - 480 V L-L, cat III 20-347 VLN/35 - 600 V L-L, cat II
Permanent overload	750 V AC L-L
Impedance	=> 5 MΩ
Frequency nominal	50/60 Hz
VA burden	< 0.2 VA at 240 V AC L-N
Input-current	
CT ratings	Primary adjustable 1 A to 32768 A Secondary 1 A or 5 A I-nominal
Measured Amps with over range & Crest Factor	5 mA to 6 A
Over current withstand	Continuous 12 A, 10s/hr 50 A, 1s/hr 500 A
Impedance	< 0.3 m
Frequency nominal	50/60 Hz
VA Burden	< 0.1 VA at 6 A
AC control power	
Operating range	44- 277 V AC ±10 %
Burden	<8 VA/3.3 W at 240 V AC L-N
Frequency	45 to 65 Hz
Ride-through time	100 ms typical at 120 V AC and maximum burden 400 ms typical at 230 V AC and maximum burden
DC control power	
Operating range	44-277 V DC ±10 %
Burden	<2 W at 240 V DC
Ride-through time	50 ms typical at 125 V DC and maximum burden
Real time clock	
RTC with battery backup	3 years (when meter is in Power OFF condition)
Displays update	
Instantaneous	1s
Demand	15s
Harmonics	5s
Wiring configuration	
User programmable	1ph, 2w, LN 1ph, 2w, LL 1ph, 3w, LL with N (2phase) 3ph, 3w, Delta, Ungrounded 3ph, 3w, Delta, Corner Grounded ⁺³ 3ph, 3w, Wye, Ungrounded ⁺³ 3ph, 3w, Wye Grounded ⁺³ 3ph, 3w, Wye, Resistance Grounded ⁺³ 3ph, 4w, Open Delta, Center-Tapped ⁺³ 3ph, 4w, Delta, Center-Tapped ⁺³ 3ph, 4w, Wye, Ungrounded ⁺³ 3ph, 4w, Wye Grounded 3ph, 4w, Wye, Resistance Grounded ⁺³

⁺¹ In PM2200 (LCD) series meters

⁺² For 1 A CT nominal, additional error of ±1% from 50 mA to 150 mA, ±2 % for current > 10 mA to < 50 mA. Partial standard compliance for Class 0.5S meter type (energy test clause only)

⁺³ Through communication in PM2100 series meters

PM2000 multi-function meters

Functions and characteristics

Functions and characteristics	
Mechanical characteristics	
Weight	~ 300 gm
IP degree of protection	IP51 front side, IP30 meter body as per IEC 60529
Material	Polycarbonate meets UL 94V-0 flammability rating
Dimensions W x H x D	96 x 96 x 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
Storage temperature	Meter -25 to +70 °C
Humidity rating	5 to 95 % RH at 50 °C (non-condensing)
Pollution degree	2
Altitude	2000 m Category III
Product life	Minimum 7 years
Electromagnetic compatibility^{*4}	
Electrostatic discharge	IEC 61000-4-2
Immunity to radiated field	IEC 61000-4-3
Immunity to fast transients	IEC 61000-4-4
Immunity to impulse waves	IEC 61000-4-5
Conducted immunity	IEC 61000-4-6
Immunity to magnetic fields	IEC 61000-4-8
Immunity to voltage dips	IEC 61000-4-11
Emissions	Emissions FCC Part 15 Class A
Safety	
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)
Isolation	2.5 kV RMS, double insulated
Protection features	Password protected for set-up & clearing energy and Min/Max data
Display language	English, Spanish, French, Chinese, German, Portugese, Russian
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 9+3 digit format for energy and 4 digit for other parameters LCD display: Monochrome graphical LCD of 128x128mm resolution with viewable area of 67 x 62.5 mm
Keypad	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
CAL LED Indicator	Red colour, meter constant is configurable from 1 to 9999000 pulses/k_h (kWh, kVAh, or kVARh)
Comm. activity	Green LED (for indicating RS-485 interface or heart beat pulse)

^{*4}as per IEC 61326-1 standard (Emission)

PM2000 multi-function meters

Functions and characteristics

PB115529



Rear of PM2200 with I/O module

D100160



Digital I/O module

PB115540



Analogue I/O module

Electrical characteristics of IO modules	
Status Inputs (Digital Inputs)	
Voltage ratings	18.5 to 36 V DC, OFF 0 to 4 V DC
Input resistance	110 k Ω
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
Application	Breaker status inputs or pulse inputs from
Display support	Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only. Other measuring devices and display through totalizing counter.
Set up and configuration	Through set-up software
Digital Outputs	
Voltage ratings	40 V DC max, 20 mA max
On Resistance	50 Ω max
Meter constant	Configurable from 1 to 9999000 k_h (kWh, kVARh, kVAh)
Pulse width	20 ms
Pulse frequency	25 Hz
Leakage current	1 micro Amps
Isolation	2.5 kV RMS
Alarm conditions	14 set point driven alarms, 4 Unary alarms, 2 Digital inputs status
Application	Pulse output: configurable for energies upper / lower limit: configurable for 14 parameters
Display support	Available on PM2230 (LCD type). In PM2130 meter, data is available through communication only
Set up and Configuration	Through set-up software
Analogue inputs	
Measurement scale	4-20 mA
Input impedance	=<300 Ω
Max source impedance	>500 Ω
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 Watts
Isolation	2.5 kV RMS
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
Analogue outputs	
Scale	4-20 mA
Load impedance	=<600 Ω
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
Application	Analogue 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)
Weight	50 gms (1.76 oz)

* as per IEC 61326-1

PM2000 multi-function meters

Functions and characteristics

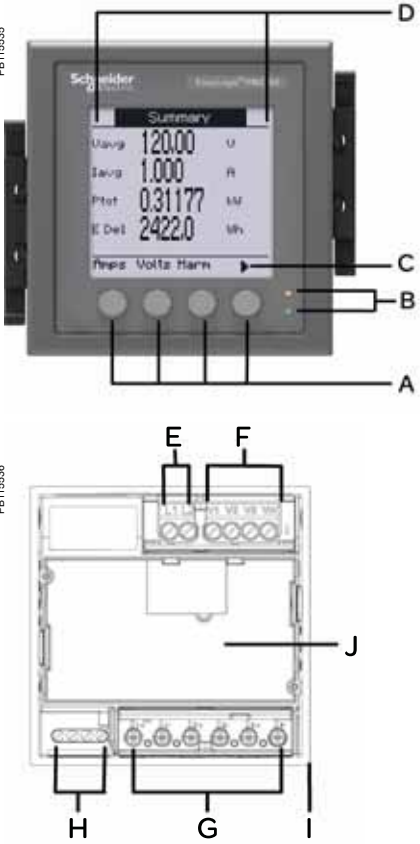
Feature set summary	PM2110	PM2120	PM2130	PM2210	PM2220	PM2230
Accuracy Class for Wh	1.0		0.5S	1.0		0.5S
Accuracy Class for VARh	1.0					
Accuracy for VAh	+/- 0.5%					
Amps, per-phase, average and calculated neutral current	■					
Voltage, V L-N, V L-L, per-phase and average	■					
Power Factor	True PF	True PF Displacement PF ⁺³		True PF	True PF Displacement PF	
Frequency, any available phase	■					
Power: W, VA, VAR: per-phase and total	■					
3-phase unbalance %	Current	Current Voltage ⁺³		Current	Current Voltage	
Demand parameters (Present, Last, Predicted and Peak for W, VA, VAR, Amps)	■	■		■	■	
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 ⁺³ , Net ⁺³ , Last cleared ⁺³		Delivered, Received, Total, Net	Delivered, Received Total, Net, Last cleared ⁺³	
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 ⁺³	Up to 31st ⁺³	Up to 15th	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 ⁺⁶	NA	■	■	NA	■	■
Communication	Pulse Output	RS-485		Pulse Output	RS-485	
Expandable Analogue IO modules (2 inputs & 2 outputs) ⁺⁵			■			■
Expandable Digital IO modules (2 inputs & 2 outputs) ⁺⁵			■			■
Customizable data logging up to 2 parameters. Option to select Power (W,VA,VAR) Bi-directional energy (+/-Wh, +/- VAh, +/- VARh), Demand (W, VA, VAR) with configurable interval and duration (e.g. 2 parameters for 60 days at 15 minutes interval)			■			■
12 am snap shot of Avg Voltage, Avg Current, Total active power & Energy delivered as measured at 12am					■	

⁺³Through communication only.

⁺⁵Any one IO module can be used at a time with PM2130 or PM2230 meter. The control power range with IO module shall be 72 to 304 V AC L-N or 90 to 304 V DC.

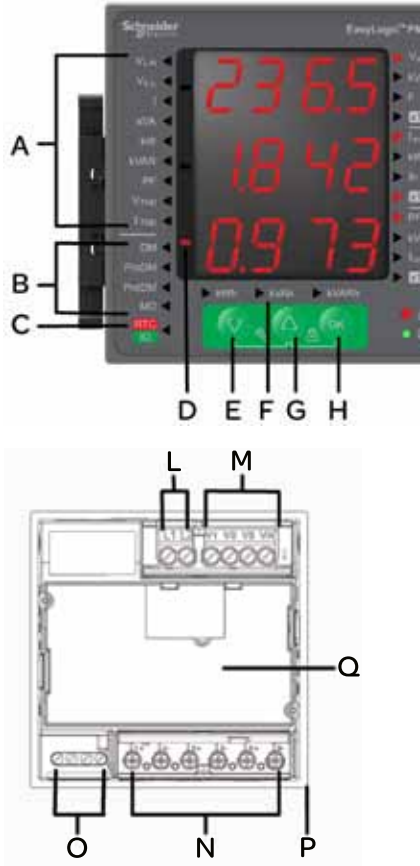
⁺⁶Battery backup duration 3 years when meter is in Power OFF condition.

PM2000 LCD display legend description



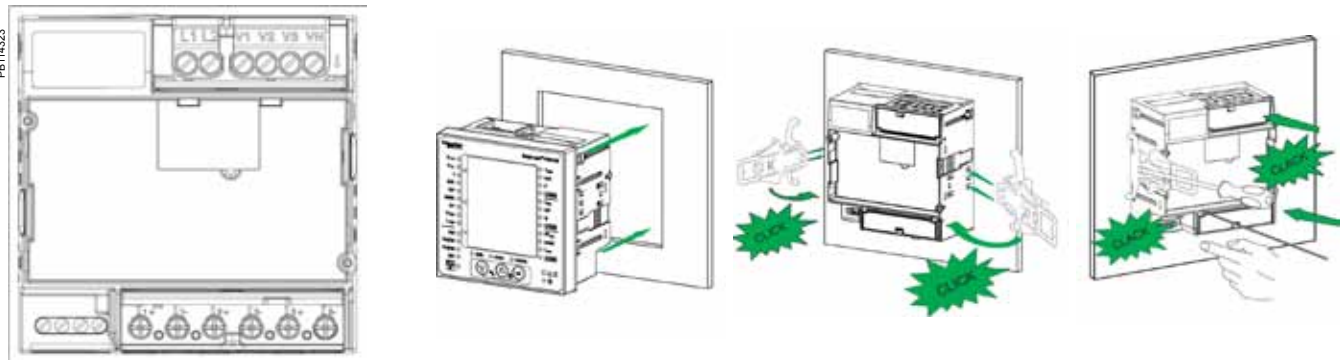
- A Menu selection buttons
- B LED indicators
- C Navigation or menu selections:
 - ▲ Exit screen and go up one level
 - ▲ Move cursor up list of options
 - ▼ Move cursor down, display more options
 - ◀ Move cursor one character to the left
 - ▶ Scroll right and display more menu items
 - + Show next 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
- J I/O slot (for PM2230 only)

PM2000 LED display legend description



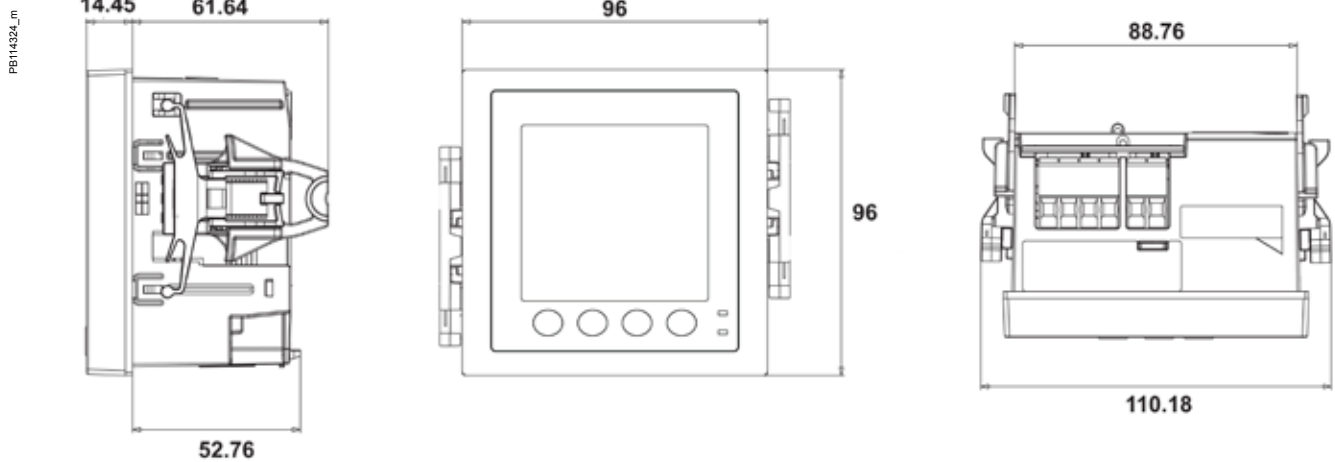
- A Phase measurements (VL-N, VL-L, I, kVA, kW, kVAR, PF, VTHD, ITHD)
- B Demand measurements (DM, PrsDM, Prd, DM, MD)
- C RTC Date & time
- D Negative indicator
- E Navigation key to navigate down
- F Energy readings Apparent energy, Active energy, Reactive energy
- G Navigation key to navigate up
- H OK Enter key
- I Energy pulsing LED (red) Heartbeat / communications LED (green)
- J x 1000 indicator
- K System measurements Vavg, kVA, F, Iavg, kW, In, PFavg, kVAR, Iunb
- 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 I/O card slot (for PM2130 only)

PM2000 meter rear view **LED meter installation**

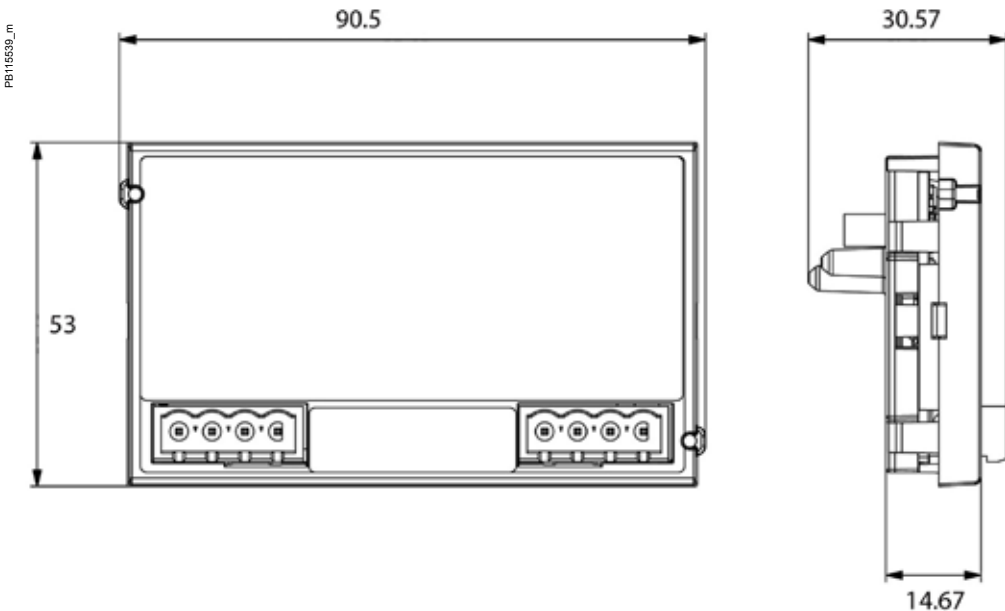


PM2000 multi-function meter mechanical dimensions

mm
(in)



PM2000 I/O module mechanical dimensions



Index of commercial reference numbers

Com. reference number	Description	Page
DM1000 series		5
METSEDM1110	EasyLogic Panel meter DM1110 1-ph Amps	5
METSEDM1210	EasyLogic Panel meter DM1210 1-ph Volt	5
METSEDM1310	EasyLogic Panel meter DM1310 1-ph Hz	5
DM3000 series		5
METSEDM3110	EasyLogic Panel meter DM3110 3-ph Amps	5
METSEDM3210	EasyLogic Panel meter DM3210 3-ph Volt	5
DM6000 series		6
METSEDM6000	EasyLogic V A F panel meter DM6000	6
METSEDM6200	EasyLogic V A F panel meter DM6200 RS-485	6
PM2000 series		7
METSEPM2110	PM2000 Meter LED Basic VAF P & E THD POP Class 1.0	7
METSEPM2120	PM2000 Meter LED Basic VAF P & E THD RS-485 RTC Min/Max 15th Har Class 1.0	7
METSEPM2130	METSEPM2130 - PM2000 Meter LED b+31st Har Data log	7
METSEPM2210	METSEPM2210 - PM2000 Meter LCD Basic POP	7
METSEPM2220	METSEPM2220 - PM2000 Meter LCD RS-485 Min/Max RTC 15th Harmonic	7
METSEPM2230	METSEPM2230 - PM2000 Meter LCD RS-485 Min/Max RTC 31st Harmonic Data Log	7
METSEPM2KDGTLIO22	Easylogic PM2x30 Digital IO Module 2-IO	7
METSEPM2KANLGIO22	Easylogic PM2x30 Analogue IO Module 2-IO	7
METSEPM2KANLGIO11	Easylogic PM2x30 Analogue IO Module 1-IO	7

See your Schneider Electric representative for complete ordering information.

Schneider Electric Industries SAS
35, Rue Joseph Monier,
CS 30323
F - 92506 Rueil Malmaison Cedex

RCS Nanterre 954 503 439
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www.schneider-electric.com

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PLSED310053EN

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