

EasyLogic™ Power metering

A complete range of meters for essential electrical system measurement



| | |
|--|----|
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Panorama of the EasyLogic range

Digital panel meters



| Family | DM1000 | | | DM3000 | | DM6000H | |
|--|-------------|-------------|-------------|---------------|---------------|-------------|-------------|
| Parameters | DM1110 | DM1210 | DM1310 | DM3110 | DM3210 | DM6000H | DM6200H |
| Amps: per phase & 3-ph avg | 1-ph | | | 3-ph (per ph) | | ■ | ■ |
| Volts: per phase & 3-ph avg | | 1-ph | | | 3-ph (per ph) | ■ | ■ |
| Frequency | | | ■ | | | ■ | ■ |
| Power Factor per phase & 3-ph avg | | | | | | ■ | ■ |
| CT Secondary I nominal | 5 A or 1 A | | | 5 A or 1 A | | 5 A or 1 A | 5 A or 1 A |
| Class of Accuracy | 0.5 | 0.5 | 0.2 | 0.5 | 0.5 | 1 | 1 |
| RS-485 Modbus RTU | | | | | | | ■ |
| Form Factor in mm (LengthxWidthxDepth) | 96x96x44 | 96x96x44 | 96x96x44 | 96x96x44 | 96x96x44 | 96x96x49 | 96x96x49 |
| Mounting | Flush/Panel | 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 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Comm. ref. no. (Link to product information) | METSEDM1110 | METSEDM1210 | METSEDM1310 | METSEDM3110 | METSEDM3210 | METSEDM6000 HCL10NC | METSEDM6000 HCL10RS |

Panorama of the EasyLogic range

Digital panel meters (contd.)



| Family | PM1120H | PM1130H | PM2100 LED | PM2200 LCD | PM2200R |
|-----------------------------------|-------------|-------------|--|--|-------------|
| 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 (optional) | | | 2 (PM2130) | 2 (PM2230) | |
| Class of Accuracy* | 1.0 active | 1.0 active | 1.0 active (0.5S PM2x30) 1.0 reactive | 1.0 active (0.5S PM2x30) 1.0 reactive | 1.0 active |
| Analogue IO A (optional) | | | 2 (PM2130) | 2 (PM2230) | |
| RS-485 Modbus RTU | ■ | ■ | ■ | ■ | ■ |
| CT Secondary I <i>nominal</i> | 5 A or 1 A | 5 A or 1 A | 5 A or 1 A | 5 A or 1 A | 5 A or 1 A |
| Form Factor in mm | 96x96x49 | 96x96x52 | 96x96x54 | 96X96X54 | 96X96X54 |
| With IO module | | | 96X96X72 | 96X96X72 | |
| Mounting | 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 | ■ | ■ | ■ | ■ | ■ |
| Comm. ref. no. (Link to product information) | METSEDM1120 HCL10RS METSEDM1120 HCL05RS | METSEDM1130 HCL05RS | METSEPM2110 METSEPM2120 METSEPM2130 | METSEPM2210 METSEPM2220 METSEPM2230 | METSEPM2210R METSEPM2220R |

* Refer data sheet for operating range □ One power vector at a time (W/Wh or VA/VAh or VAR/ VARh)

EasyLogic™

DM1000/3000 series

The EasyLogic™ DM1000 series : 1-Ph V A F panel meters, DM3000 series: 3-Ph V A panel meters

The universal, user-programmable DM1000 and DM3000 series panel meters for AC circuits are ideal replacements for analogue meters. These five compact, flexible and customizable models will meet all your panel metering requirements.

PB113034



METS EDM1110



METS EDM3110

DM1000/3000

PB113034



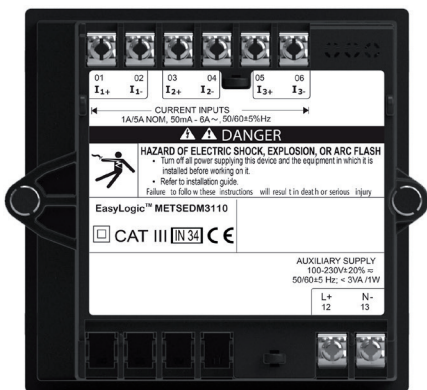
DM1000 series digital panel meter

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 %)
 - 50mA 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 277V AC (50 Hz/ 60 Hz ±5 %) or DC
 - Form factor
 - Flush/panel mount, 96 x 96 x 44 mm
 - 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
 - Temperature
 - Operating: -10 °C to 60 °C (14 °F to 140 °F)
 - Storage: -25 °C to 70 °C (-13 °F to 158 °F)
 - Weight: 400 g approx, unpacked
500 gms approx, shipping
 - Panel cut out: 92 x 92 mm Flush mount
 - LED indicators for phase identification in 3-ph meters

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 ref number | METSEDM 1110 | METSEDM 1210 | METSEDM 1310 | METSEDM 3110 | METSEDM 3210 | |

* As per IEC 61326-1

EasyLogic™ DM6x00H series

DM6000H & DM6200H VAF PF digital panel meters

Introducing EasyLogic™ DM6000H/ DM6200H meters that are ideal replacement for multiple analogue meters for stand-alone metering in custom panels, switch boards, switch-gear, genset panels, motor control centres, power factor improvement panels and OEM panel board.

DM6x00H series meters offer large 8-segment alpha-numeric LED display type, intuitive navigation with self-guided 4 buttons, bright LED's of 14.2 mm height with 12 LEDs for indicating percentage of load in the circuit.

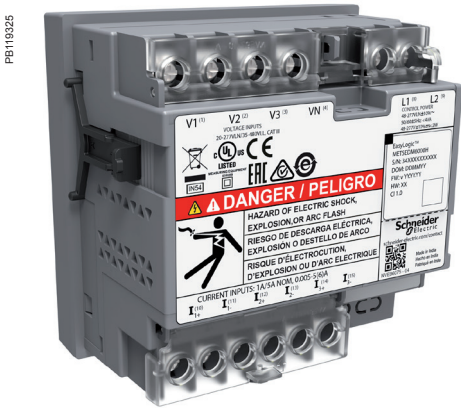


METSEDM6000
HCL10RS

DM6x00H



Front view DM6000H



Rear ISO DM6000H non comm

- Applications
 - Cost management
 - Electrical installation remote monitoring
 - Control panels
 - Motor control centres
 - Power distribution boards
 - Original equipment manufacturers (OEM's)
 - Building management system
 - Panel instrumentation
 - Energy management system

- Network management
 - Measurement of Power factor
 - % unbalance for voltage and current
 - Phase angle between the respective voltage and current phase
 - Modbus RTU protocol, RS-485 communication port for integration with energy management systems (DM6200H)

- Main characteristics
 - Easy to install: Mounts using two retainer clips, no tools required. Compact meter with 49 mm meter depth behind the panel, connectable up to 480 V +10 % AC volts L-L without voltage transformers for installation compliant with measurement category III, and double insulated
 - Easy to operate: Intuitive navigation with self-guided menus and Heartbeat LED indicates normal functioning of meters while it conveys the communication status when connected to RS-485 network
 - LED display: Intuitive navigation with self-guided, four buttons, 8-segment alpha-numeric LEDs of height ~14.2 mm (0.55 in), and three lines of concurrent values with Kilo & Mega value indicator.
 - Standard compliance:
 - EMI/ EMC tests as per IEC 61326-1
 - CE certification as per IEC 61010-1 Edition 3
 - cULus as per UL61010-1 and CAN/CSA-C22.2 IEC 61010-1 edition 3, for 480 V AC L-L
 - Accuracy class 1.0 for V AF PF metering
 - CT nominal: 5 A, I-nominal or 1 A, I-nominal (field settable)
 - Password: Field configurable password for securing set up information
 - Cyber security: Option for disabling RS-485 port through front panel keys against unauthorized access. This feature can also be used for maintenance and troubleshooting of complex communication network
 - Analogue load bar: The colour-coded analogue load bar at the front side indicates the percentage of load through 12 LED's with the option to select full scale based on connected load
 - Display: 4 digits for VAF PF parameters with auto scale and auto range features
 - Suppression current: To disregard the measurement of induced and panel auxiliary load current in the circuit (settable from 5 to 99 mA)
 - Protection cover to ensure that terminals screws does not detach from the housing and touch proof against fingers

Comparisons

| Parameters / Model | DM6000H Class 1.0 | DM6200H Class 1.0 |
|--------------------------------------|----------------------------|----------------------------|
| V A F – per ph & Avg | ■ | ■ |
| PF – per ph & Avg | ■ | ■ |
| % Load, % V & I Unbal, Ph-angle, RPM | ■ | ■ |
| Modbus RS-485 | | ■ |
| Commercial reference no. | METSEDM 6000HCL10NC | METSEDM 6200HCL10RS |

DM6x00H

| DM6x00H technical specifications | |
|--|--|
| General | |
| Use on LV & MV systems with Potential transformer (PT or VT)/ Current transformer (CT) ratio programmable at site | |
| Digital panel meters for measurement of basic electrical parameters | |
| 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 |
| True power factor | Average and per-phase signed |
| Unbalance | Maximum % unbalance among phases for Volts & Amps |
| Revolution per minute (RPM) | RPM of alternator or generator when number of poles set for 2, 4, 6, 8, 12, 14 or 16 (any one pole) |
| Life timer stored in non-volatile memory | |
| Time counters for measuring meter ON Hrs and power interruptions | |
| Display | |
| Bright red colour LED display, 8 segment alpha-numeric LED, ~ 14.2 mm (0.55 in) height, 3 rows with 4 digits per row, auto range, auto scale | |
| Communication | |
| RS-485 serial (DM6200H) | Channel connection Industry standard Modbus RTU protocol |
| Integration with software | Any Modbus compatible SCADA/ DCS/ PMS/ EMS/ BAS/ BMS software |
| Native Plug and Play support | Schneider Electric energy management system software - EcoStruxure™ Power Monitoring Expert, EcoStruxure™ Power SCADA Operation ION Setup utility software for set-up/programming of meters |
| Diagnostics | |
| Diagnostic page | Indicates the health of communication system, all LED test, device serial number, device model number OS & RS version, communication status, error code display |
| Lock/ Un-Lock | |
| Page lock and unlock features | Once the commonly referred page is enabled for lock feature, the display returns to locked page in 4 minutes of inactive time |
| Electrical characteristics | |
| Type of measurement | True RMS, 32 samples/cycle |
| Measurement accuracy (Class 1.0 meters) | |
| Current, per-phase & average | ± 0.5 % of reading |
| Voltage, L-N, L-L, per-phase & average | ± 0.5 % of reading |
| Power factor, per-phase & average | ± 0.01 of reading |
| Frequency | ± 0.05 % for F-nominal 50/60 Hz ± 2 ± 0.2 % for Frequency range from 30 to 48 Hz, 52 to 58 Hz and 62 to 70 Hz |
| Input-voltage | |
| VT (PT) connection | Selectable from No VT (direct), 1 VT, 2 VT to 3 VT |
| VT (PT) primary | 100 V L-L to 999 kV L-L max |
| U (V) nominal | Up to 277 V L-N/ 480 V L-L (selectable VT secondary from 100, 110, 115, 120 to 415 V L-L) |
| Operating voltage range with accuracy | 80-480 V L-L ± 10 % Category III |
| Measured Voltage with full range | 35 to 600 V L-L |
| Permanent overload (withstand) | 750 V L-L, continuous |
| Impedance | ≥ 5 MΩ |
| Frequency | 50/60 Hz ± 2 |
| VA burden | ≤ 0.2 VA at 240 V L-N at 50 Hz |
| Frequency – measurement | |
| Nominal operating range | 50/60 Hz ± 2 |
| Extended operating range | 30 to 48 Hz, 52 to 58 Hz and 62 to 70 Hz |
| Voltage input | 80 to 480 V L-L ± 10 % |

DM6x00H

| Input-current | |
|--|--|
| CT connect | Solo or multi-phase current measurement by installing CT (s) in either of A1, A2, A3, A12, A23, A13, A123 phase(s) |
| CT primary | 1 A to 32767 A, programmable |
| CT secondary | 1 A or 5 A I-nominal (field settable) |
| Operating current range with accuracy | 10 mA to 6 A ⁺¹ |
| Measured Amps with over range & Crest Factor | 5 mA to 10 A |
| Suppression current | 5 to 99 mA (to disregard negligible load) |
| Impedance | < 0.3 mΩ |
| Permanent overload (withstand) | Continuous 10 A, 10 s/hr 50 A, 1 s/hr 500 A |
| Frequency | 50/60 Hz ± 2 |
| VA Burden | ≤0.1 V A at 5 A at 50 Hz |
| AC control power | |
| Operating range | 48 to 277 V L-N AC ± 10 % |
| Burden | ≤4 VA at 240 V L-N 50 Hz |
| Frequency | 50/60 Hz nominal (45 to 65 Hz operating range) |
| Ride-through time | 200 milliseconds at 240 V L-N, 50 Hz |
| DC control power | |
| Operating range | 48 to 277 V DC ± 10 % |
| Burden | ≤2 W at 240 V DC |
| Ride-through time | 120 milliseconds at 240 V |
| Displays update | |
| Instantaneous/ RMS parameters | 1 s |
| Power system | |
| Phase labelling | Configurable to 123, ABC, rst, pqr or ryb |
| Wiring configuration | 13 wiring schemes (5 on front screen) 1ph, 2w, L-N 1ph, 2w, L-L 1ph, 3w, L-L with N (2-phase) 3ph, 3w, Delta, Ungrounded 3ph, 3w, Delta, Corner Grounded ⁺² 3ph, 3w, Wye, Ungrounded ⁺² 3ph, 3w, Wye Grounded ⁺² 3ph, 3w, Wye, Resistance Grounded ⁺² 3ph, 4w, Open Delta, Centre-Tapped ⁺² 3ph, 4w, Delta, Centre-Tapped ⁺² 3ph, 4w, Wye, Ungrounded ⁺² 3ph, 4w, Wye Grounded 3ph, 4w, Wye, Resistance Grounded ⁺² |

⁺¹ Additional error of ± 2 % between 10 mA to 50 mA, ± 1 % between 50 mA to 100 mA

⁺² Through communication

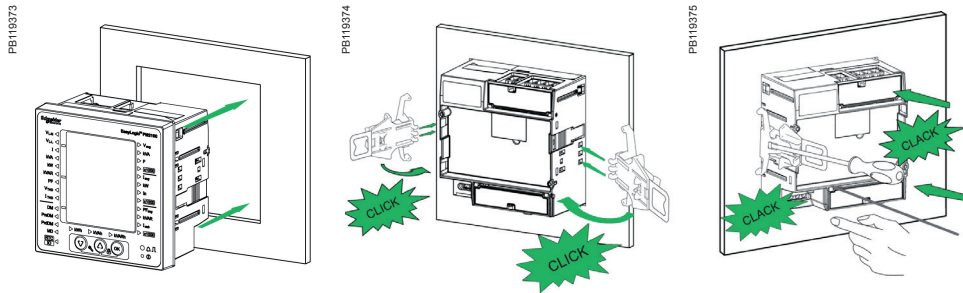
| Feature set summary | | |
|--|---------------------------|---------------------------|
| Parameter | DM6000H Class 1.0 | DM6200H Class 1.0 |
| Sampling rate per cycle | 32 | 32 |
| Amps: average and per-phase, calculated neutral current | ■ | ■ |
| Voltage: V L-N, V L-L, average, per-phase | ■ | ■ |
| Power factor: average and per-phase | ■ | ■ |
| Frequency: any available phase | ■ | ■ |
| Revolutions per minute (RPM) | ■ | ■ |
| Phase angle : Amp Deg (V to Amps, per-phase) | ■ | ■ |
| % Unbalance: Maximum of 3-ph V and Amps | ■ | ■ |
| Life time counter - meter ON Hrs and number of power interruptions | ■ | ■ |
| Communication: RS-485, Modbus RTU protocol | | ■ |
| Commercial reference number | METSEDM6000HCL10NC | METSEDM6200HCL10RS |

DM6x00H

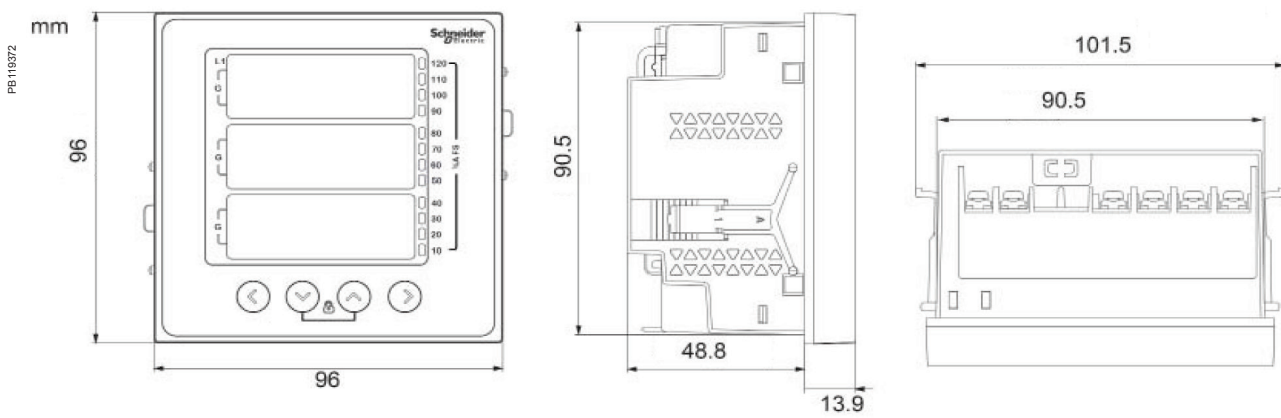
| DM6x00H series | |
|--|--|
| Mechanical characteristics | |
| Weight | ~ 300 g (10.6 oz) |
| IP degree of protection | IP 51 front side, IP 54 with gasket (optional accessory), IP 30-meter body, tested as per IEC 60529 |
| Material | Polycarbonate meets UL 94V-0 flammability rating |
| Dimensions W x H x D | 96 x 96 x 49 mm (3.78 x 3.78x1.93 in) maximum depth of the meter from housing mounting flange and 13 mm (0.51 in) protrusion of meter from housing flange |
| Mounting position | Vertical |
| Panel thickness | 5 mm (0.196 in) maximum |
| Environmental characteristics | |
| Operating temperature | -10 to 60 °C (+14 to 140 °F) |
| Storage temperature | - 20 to 70 °C (-4 to 158 °F) |
| Humidity rating | 5 to 95 % RH non-condensing |
| Pollution degree | 2 |
| Altitude | ≤2000 m (6562 ft) Category III |
| Product life | >7 years |
| Insulation category | Double insulation for user accessible parts |
| Electromagnetic compatibility (tested as per IEC 61326-1) | |
| 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/CE |
| Safety | |
| Europe | CE, as per IEC 61010-1 edition 3 |
| US and Canada | cULus as per UL61010-1 and CAN/CSA-C22.2 IEC 61010-1 edition 3, for 480 V AC L-L |
| Measurement Category (Voltage inputs) | CAT III up to 480 V L-L |
| Overvoltage Category (Control power) | CAT III up to 300 V L-N |
| Dielectric | As per IEC/UL 61010-1 edition 3 |
| Protective Class | II, Double insulated for user accessible parts |
| Green premium | EOL, REACH , PEP, RoHS complied |
| Other certification | RCM & EAC for 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 |
| Isolation | 2.5 kV RMS, double insulated |
| Protection features | User configurable password (selectable from 0000 to 9999) protected for set-up |
| Display language | English |
| Technical publication | Printed installation guide (QSG) supplied with meter in multi-language (EN, ES, FR, DE, PT, RU, TR, ZH) and user guide in soft format |
| Human machine interface | |
| Display type | 8 segment Alpha-numeric LED, ~ 14.2 mm (0.55 in) height, 3 rows with 4 digits per row, 1 column of 12 LEDs to indicate percentage of load connected in system. 4 digits for VAF PF parameters with auto scrolling and auto range |
| Keypad | 4 buttons for navigation at the front, combination of 2 buttons for lock/unlocking of commonly viewed page |
| Communications activity | Green LED (for indicating RS-485 interface or heartbeat pulse) |

DM6x00H

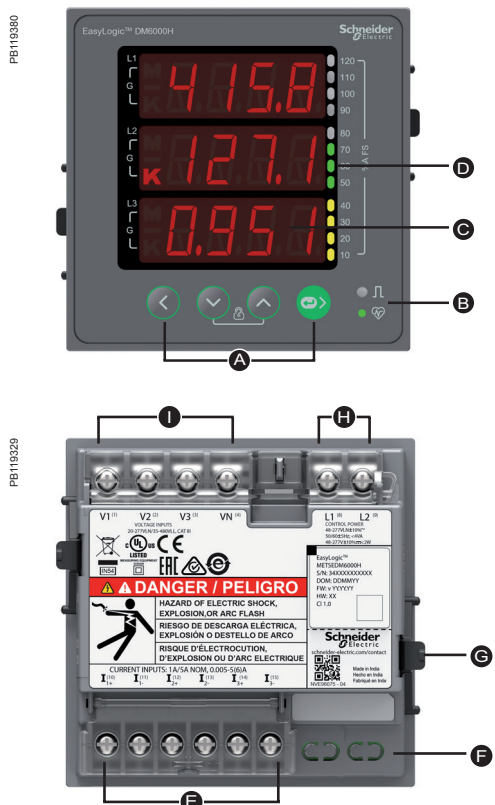
DM6x00H VAF PF meter installation



DM6x00H VAF PF meter mechanical dimensions



DM6x00H series VAF PF meter display overview



- A Menu selection buttons
 - ◀ Left key: To navigate left
 - ▼ Down key: To navigate down
 - ▲ Up key: To navigate up
 - ▶ Right/OK key: To navigate right/Enter key
- B LED indicators
- C Alphanumeric LED display
- D Analogue load bar
- E Current inputs
- G Retainer clip
- H Control power
- I Control power

See the appropriate **Installation Guide** for correct installation instructions.

EasyLogic™

PM1120H series

The EasyLogic™ PM1120H basic power and energy meters

Offering all the measurement capabilities required to monitor the electrical installation in a single 96 x 96 mm unit, with 8 segment alpha-numeric bright, large 14.2 mm high LED display.

PE119319



METSEDM1120
HCL10RS

PM1120H



EasyLogic™ PM1120H power meter front ISO view



EasyLogic™ PM1120H front view



EasyLogic™ PM1120H power meter rear view

EasyLogic™ PM1120H meters are ideal replacements for multiple analogue meters for stand-alone metering in custom panels, switch boards, switch-gear, genset panels, motor control centres, power factor improvement panels and OEM panel board.

- Application

- Cost management applications
 - Measurement of basic electrical parameters in control panels, motor control panels, power distribution boards, OEM's, Building management systems, panel instrumentation
 - Aggregation of energy consumption and cost allocation per area, per usage, per shift and per time within the same facility
- Network management applications
 - Power quality analysis (THD %)
 - Demand measurement
 - Measurement of Power factor
 - Phase angle between the voltage and current
 - % unbalance among voltage and current
 - Modbus RTU protocol RS-485 communication port for integration with energy management system

- Main characteristics

- Easy to install: Mounts using two retainer clips, no tools required. Compact meter with 49 mm meter depth behind the panel, connectable up to 480 V +10% AC volts L-L without voltage transformers for installation compliant with measurement category III, and double insulated
- Easy to operate: Intuitive navigation with self-guided menus and Heart beat LED indicates normal functioning of meters while it conveys the communication status when connected to RS-485 network
- LED display: Intuitive navigation with self-guided, four buttons, 8 segment alphanumeric LEDs of height ~14.2 mm (0.55 in), and three lines of concurrent values with Kilo & Mega value indicator.
- Power and energy: measurement, display and recording of any one power and corresponding energy parameter at a time (W/ Wh or VA/ VAh or VAR/ VARh – selectable through panel button or configuration software)
- Demand: measurement of Peak, present and last demand values of either W, VA or VAR parameters with selectable demand parameter, demand interval and demand technique
- Accuracy:
 - Class 1.0 for active energy as per the test limits given in IEC 62053-21
 - Class 0.5 for active energy as per the test limits given in IEC 62053-22
 - Class 2.0 for reactive energy as per the test limits given in IEC 62053-23
 - Tested in accordance with IEC 62052-11 for energy test requirements
 - EMI/ EMC tests: As per IEC 61326-1
- CT nominal: 5 A or 1 A I-nominal (field settable). CT reversal auto correction for energy consumption.
- Password: Field configurable password for securing set up information and prevents tampering of integrated values.
- Cyber security: Option for disabling RS-485 port through front panel keys against unauthorized access. This feature can also be used for maintenance and troubleshooting of complex communication network.
- Display: Auto scaling, 4 digits for Instantaneous parameters and 5+3 digits for energy parameter with auto scale and auto range capability.
- Analogue load bar: The colour-coded analogue load bar at the front side indicates the percentage of load through 12 LED's with the option to select full scale based on connected load.
- Suppression current: To disregard the measurement of induced and panel auxiliary load current in the circuit (settable from 5 to 99 mA)
- Protective cover: Tamper-proof terminal screws do not detach from housing

PM1120H

PM1120H technical specifications

| General | |
|---|---|
| Use on LV & MV systems with Potential transformer (PT or VT)/ Current transformer (CT) ratio programmable at site | |
| Digital panel meters for measurement of basic electrical parameters | |
| 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, per-phase |
| Frequency | Any available line |
| Real (active), reactive, and apparent power | Total and per-phase |
| True power factor | Average and per-phase signed |
| % Unbalance | Maximum % unbalance among phases for Volts & Amps |
| Revolution per minute (RPM) | RPM of alternator or generator when number of poles set for 2, 4, 6, 8, 12, 14 or 16 (any one pole) |
| Energy values stored in non-volatile memory | |
| Delivered or forward or import energy from the grid - Accumulated or integrated active (Real - Wh), reactive (VARh) and apparent (VAh) energy | |
| Time counters such as meter ON Hrs, load RUN Hrs and power outage counters | |
| Old registers facilitate retrieval of last cleared energy values and load Run Hrs | |
| Display | |
| Bright red colour LED display, 8 segment alphanumeric LED, ~ 14.2 mm (0.55 in) height, 3 rows with 4 digits per row, auto range, auto scale | |
| Communication | |
| RS-485 serial channel connection Industry standard Modbus RTU protocol | |
| Native Plug and Play support for Schneider Electric energy management system software - EcoStruxure Power Monitoring Expert, EcoStruxure Power SCADA Operation along with ION Setup programming support | |
| Diagnostics | |
| Diagnostic page indicates the healthiness of communication system, all LED test, device serial number, device model number OS & RS version, communication status, error code display | |
| Page lock | |
| Page lock and unlock features. Once the commonly referred page is enabled for lock feature, then the display returns to locked page in 4 minutes of inactive time | |
| Favourite page | |
| Number and type of parameters can be chosen and arranged in Favourite page according to the user's requirement | |
| Electrical characteristics | |
| Type of measurement | True RMS, 4 quadrant power and 2 quadrant energy, 32 samples/ cycle |
| Measurement accuracy | |
| Current, per-phase & average | ± 0.5 % of reading |
| Voltage, L-N, L-L, per-phase & average | ± 0.5 % of reading |
| Power (active and apparent) | ± 1.0 % for Class 1.0, ± 0.5% for Class 0.5 |
| Power (reactive) | ± 2.0 % for Class 1.0 & Class 0.5 |
| Power factor, per-phase & average | ± 0.01 of reading |
| Frequency | ± 0.05 % for F-nominal 50/ 60 Hz ± 2 ± 0.2 % for Frequency range from 30 to 48 Hz, 52 to 58 Hz and 62 to 70 Hz |
| Active or real energy | Class 1.0 (± 1.0 %) Class 0.5 (± 0.5%) |
| Apparent energy | ± 1.0 % & ± 0.5 % |
| Reactive energy | Class 2.0 (± 2.0 %) |
| THD % | ± 5 % of reading |
| Input-voltage | |
| VT (PT) connection | Selectable from No VT (direct), 1 VT, 2 VT to 3 VT |
| VT (PT) primary | 100 V L-L to 999 kV L-L max |
| U (V) nominal (secondary) | Up to 277 V L-N/ 480 V L-L (selectable VT secondary from 100, 110, 115, 120 to 415 V L-L) |
| Operating voltage range with accuracy | 80-480 V L-L ± 10 % Category III |
| Measured Voltage with full range | 35 to 600 V L-L |
| Permanent overload (withstand) | 750 V L-L, continuous |
| Impedance | ≥ 5 MΩ |
| Frequency range | 50/ 60 Hz ± 2 |
| VA burden | ≤ 0.2 VA at 240 V L-N at 50 Hz |
| Frequency – measurement | |
| Nominal operating range | 50/60 Hz ± 2 (± 0.05 % accuracy) |
| Extended operating range | 30 to 48 Hz, 52 to 58 Hz and 62 to 70 Hz (± 0.2 % accuracy) |
| Voltage input | 80 to 480 V L-L ± 10 % |

PM1120H

PM1120H technical specifications (continued)

| Input-current | |
|---------------------------------------|--|
| CT connect | Solo or multi-phase current measurement by installing CT (s) in either of A1, A2, A3, A12, A23, A13, A123 phase(s) |
| CT primary | 1 A to 32767 Amps, programmable |
| CT secondary | 1 A or 5 Amps I-nominal (field settable) |
| Operating current range with accuracy | 10 mA to 6 A ⁺¹ |
| Measured Amps with full range | 5 mA to 10 A |
| Suppression current | 5 to 99 mA (to disregard negligible load) |
| Permanent overload (withstand) | Continuous 10 A, 10 s/hr 50 A, 1s/hr 500 A |
| Impedance | 0.3 mΩ |
| Frequency range | 50/60 Hz ± 2 |
| VA burden | ≤0.1 VA at 5 A, 50 Hz |
| AC - control power | |
| Operating range | 48 to 277 V L-N AC ± 10 % |
| Burden | ≤4 VA at 240 V L-N, 50 Hz |
| Frequency | 50/60 Hz nominal (45 to 65 Hz operating range) |
| Ride-through time | 200 ms at 240 V L-N, 50Hz |
| DC - control power | |
| Operating range | 48 to 277 V DC ± 10 % |
| Burden | ≤2 W at 240 V DC |
| Ride-through time | 120 ms at 240 V DC |
| Display update | |
| Instantaneous/ RMS parameters | 1 s |
| Demand parameters | 5 s |
| THD % (voltage and current) | 5 s |
| Power system | |
| Phase labelling | Configurable to 123, ABC, rst, pqr or ryb |
| Wiring configuration | 13 wiring schemes (5 on front screen) 1ph, 2 w, L-N 1ph, 2 w, L-L 1ph, 3 w, L-L with N (2phase) 3ph, 3 w, Delta, Ungrounded 3ph, 3 w, Delta, Corner Grounded ⁺² 3ph, 3 w, Wye, Ungrounded ⁺² 3ph, 3 w, Wye Grounded ⁺² 3ph, 3 w, Wye, Resistance Grounded ⁺² 3ph, 4 w, Open Delta, Center-Tapped ⁺² 3ph, 4 w, Delta, Center-Tapped ⁺² 3ph, 4 w, Wye, Ungrounded ⁺² 3ph, 4 w, Wye Grounded 3ph, 4 w, Wye, Resistance Grounded ⁺² |
| Mechanical characteristics | |
| Weight | ~ 300 g (10.6 oz) |
| IP degree of protection | IP 51 front side, IP 54 with gasket (optional accessory), IP 30-meter body, tested as per IEC 60529 |
| Material | Polycarbonate meets UL 94V-0 flammability rating |
| Dimensions W x H x D | 96 x 96 x 49 mm (3.78 x 3.78 x 1.93 in) (D = depth of the meter from housing mounting flange) 13 mm (0.51 in) protrusion of meter from housing flange |
| Mounting position | vertical |
| Panel thickness | 5 mm (0.196 in) maximum |
| Environmental characteristics | |
| Operating temperature | - 10 to +60° C (14 to 140° F) |
| Storage temperature | - 20 to +70° C (-4 to 158° F) |
| Humidity rating | 5 % to 95 % RH non-condensing |
| Pollution degree | 2 |
| Attitude | ≤2000 metres (6562 ft), Category III |
| Product life | >7 years |
| Insulation category | Double insulation for user accessible parts |

⁺¹ Additional error of ± 2 % between 10 mA to 50 mA, ± 1% between 50 mA to 100 mA)

⁺² Through communication

PM1120H

PM1120H technical specifications (continued)

| Electromagnetic compatibility (tested as per IEC 61326-1) | |
|---|---|
| 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/CE |
| Safety | |
| Europe | CE, as per IEC 61010-1 edition-3 |
| US and Canada | cULus as per UL61010-1 and CAN/CSA-C22.2 IEC 61010-1 edition-3, for 480 V AC L-L |
| Measurement Category (Voltage inputs) | CAT III up to 480 V L-L |
| Overvoltage Category (Control power) | CAT III up to 300 V L-N |
| Dielectric | As per IEC/UL 61010-1 edition-3 |
| Protective Class | II, Double insulated for user accessible parts |
| Green premium | EOL, REACH , PEP, RoHS complied |
| Other certification | RCM & EAC for Russia |
| Communication | |
| RS-485 port | Modbus RTU: 2-Wires, 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 |
| Isolation | 2.5 kV RMS, double insulated |
| Protection features | User configurable password (selectable from 0000 to 9999) protected for set-up and clearing of energy, and other integrated data |
| Display language | English |
| Technical publication | Printed installation guide (QSG) supplied with meter in multi-language (EN, ES, FR, DE, PT, RU, TR, ZH) and user guide in soft format |
| Human machine interface | |
| Display type | 8 segment Alpha-numeric LED, ~ 14.2 mm (0.55 in) height, 3 rows with 4 digits per row, 1 column of 12 LEDs to indicate percentage of load connected in system. 4 digits for V AF PF parameters with auto scaling and auto range |
| Keypad | 4 buttons for navigation at the front, combination of 2 buttons for performing set-up, lock/unlock pages and viewing diagnostic pages |
| CAL LED (pulse LED) | 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) |

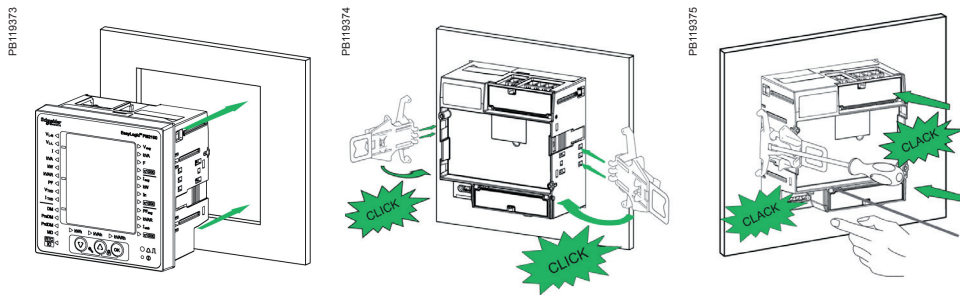
Feature set summary

| Parameter/ Meter reference | PM1120H, CL 1.0, RS-485 | PM1120H CL 0.5, RS-485 |
|--|---------------------------|---------------------------|
| Class of accuracy (Wh) | 1.0 | 0.5 |
| Sampling rate per cycle | 32 | 32 |
| Amps: average and per-phase, calculated neutral current | ■ | ■ |
| Voltage: V L-N, V L-L, average, per-phase | ■ | ■ |
| Power factor: average and per-phase | ■ | ■ |
| Frequency: any available phase | ■ | ■ |
| Power (W or VA or VAR – any one) Measurement and display of any one power parameter at a time, configurable through set-up/ communication | ■ | ■ |
| Energy ⁺³ - delivered or forward or import energy: Wh, VAh, VARh, one energy measurement at a time | ■ | ■ |
| Demand parameters – selectable for W, VA, VAR (one at a time) | ■ | ■ |
| Old registers - retrieval of last cleared values of energy and Run Hrs | ■ | ■ |
| Revolutions per minute (RPM) | ■ | ■ |
| Phase angle : Amp Deg (V to Amps, per-phase) | ■ | ■ |
| % Unbalance: Max unbalance Volts & Amps among 3 phase (s) | ■ | ■ |
| Life time counter - meter ON Hrs, Load Run Hrs and number of power interruptions | ■ | ■ |
| Communication: 2 wire, RS-485, Modbus RTU protocol | ■ | ■ |
| Commercial reference number | METSEPM1120HCL10RS | METSEPM1120HCL05RS |

+3 Energy measurement depends on power parameter selected during set up (W/Wh or VA/VAh or VAR/VARh). For reactive energy (VARh), total or net VARh on display, + VARh and - VARh through communication

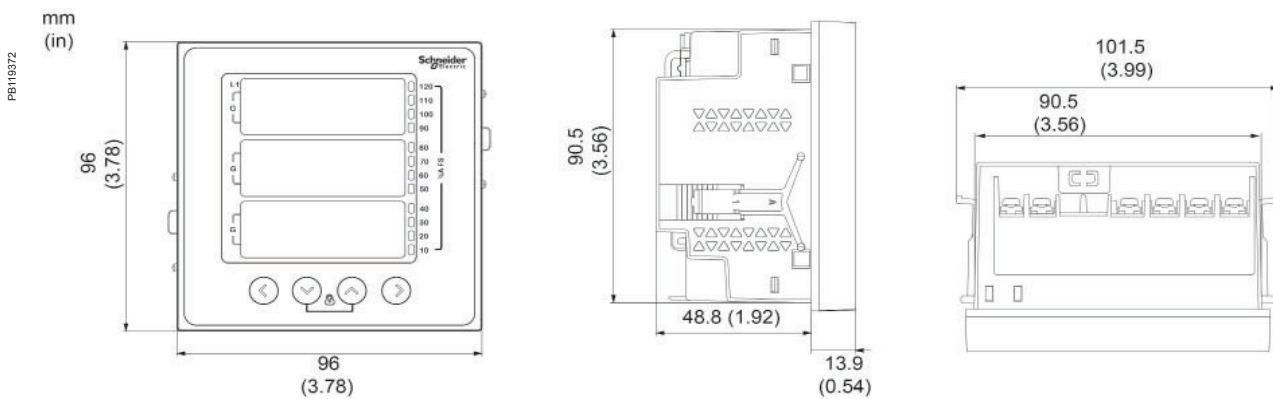
PM1120H

PM1120H meter mounting

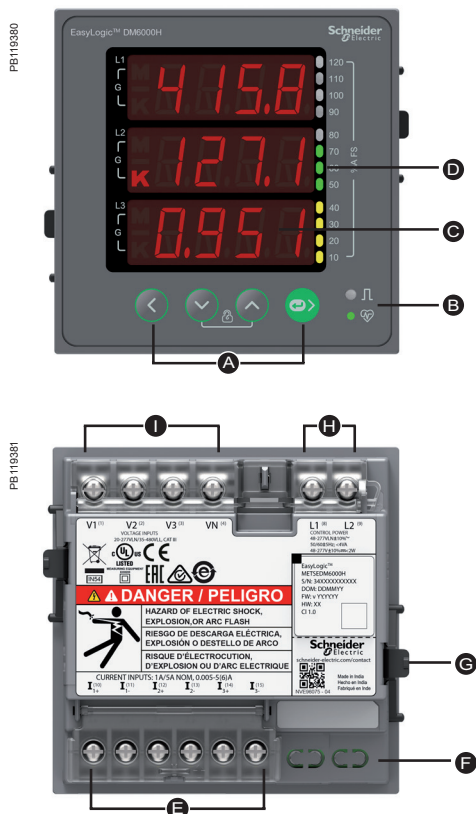


See the appropriate **Installation Guide** for correct installation instructions.

PM1120H meter mechanical dimensions



PM1120H meter display overview



- A Menu selection buttons
 - ◀ Left key: To navigate left
 - ▼ Down key: To navigate down
 - ▲ Up key: To navigate up
 - ➡ Right/OK key: To navigate right/Enter key
- B LED indicators
- C Alpha numeric LED display
- D Analogue load bar
- E Current inputs
- F RS-485
- G Retainer clip
- H Control power
- I Voltage inputs

See the appropriate **Installation Guide** for correct installation instructions.

The EasyLogic™ PM1130H dual/alternate source power and energy meters

Two energy registers (Utility vs Genset, Utility vs Solar, Utility vs Wind, or a combination of any two power sources) separately records consumption for dual source energy accounting. Ideal for any installation which requires split energy monitoring for two conditions, e.g., running and Idle. Form A relay to control the load in the event of abnormality in the electrical circuit including excess consumption of power. The meters can be used for secondary billing application in large commercial complexes or buildings as tenant meters in custom panels, switch boards, switchgear, genset panels, non-renewable energy panel and OEM panel board.

Offering all the measurement capabilities required to monitor the electrical installation in a single 96 x 96 mm unit, with 8 segment alpha-numeric bright, large 14.2 mm high LED display.



PB110318



METSEDM1130
HCL05RS

PM1130H

PB110318



EasyLogic™ PM1130H dual source meter front view

PB110328



EasyLogic™ PM1130H dual source meter rear view

Applications

- Cost management applications
 - Measure basic electrical parameters in control panels, power distribution boards, OEM's, and Building management systems
 - Aggregate energy consumption and cost allocation based on consumption from Utility vs Genset, or between any two power sources, per area, per shift and per time within the same facility
- Network management applications
 - Power quality analysis (THD %)
 - Demand measurement
 - Measurement of Power factor
 - Phase angle between the voltage and current
 - % unbalance among voltage and current
 - Modbus RTU protocol RS-485 port for integration with energy management system

Main characteristics

- Easy to install: two retainer clips, no tools required. Compact meter with 49 mm meter depth behind the panel, connectable up to 480 V +10 % AC V L-L without voltage transformers for installation compliant with measurement category III, and double insulated
- Easy to operate: Intuitive navigation with self-guided menus and heartbeat LED indicates normal functioning of meters while it conveys the communication status when connected to RS-485 network
- LED display: Intuitive navigation, four buttons, 8 segment alpha-numeric LEDs and three lines of concurrent values with Kilo & Mega value indicator
- Power and energy: measurement, display and recording of any one power and energy from source 1 and source 2 at a time (W/ Wh or VA/ VAh or VAR/ VARh – selectable through panel button or configuration software)
- Demand: measure Peak demand with occurrence time in counter, time remaining to complete demand cycle, present cycle and last cycle demand values. One demand parameter selectable - either W, VA or VAR, with the option of changing demand interval and demand technique
- Standard compliance:
 - Class 0.5 for active energy as per IEC 62053-22
 - Class 2.0 for reactive energy as per IEC 62053-23
 - Tested in accordance with IEC 62052-11 for energy test requirements
 - EMI/ EMC tests: As per IEC 61326-1
- CT nominal: 5 A or 1 A I-nominal (field settable). CT reversal auto correction for energy consumption.
- Password: Field configurable password prevents tampering
- Cyber security: disable RS-485 port through front panel keys against unauthorized access, also useful for maintenance and troubleshooting
- Auto scaling, 4 digits for Instantaneous parameters and 5+3 digits for energy parameter with auto scale and auto range capability
- Analogue load bar: colour-coded bar indicates percentage of load via 12 LED's with the option to select full scale based on connected load
- Suppression current: Meter can be set to disregard the measurement of induced/ auxiliary load current in the circuit (settable from 5 mA to 99 mA)
- Favourite page: User selectable parameters in favourite page
- Relay: Form A, 2 terminals mechanical relay for alarm, control or annunciation if parameters exceeds or recedes set limit. Also activated on decremental energy from the preset energy value.
- Alternate/dual source power sensor: supports multiple generator paralleling and bus coupler islanding schemes
- Tamper cover protects against tampering with voltage and current terminals
- Non-resettable energy counter to ensure integrity of energy readings

PM1130H

PM1130H technical specifications

| General | |
|---|--|
| Use on LV & MV systems with Potential transformer (PT or VT) / Current transformer (CT) ratio programmable at site | |
| Digital panel meters for measurement of basic electrical parameters | |
| 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, per-phase |
| Frequency | Any available line |
| Real (active), reactive, and apparent power | Total and per-phase |
| True power factor | Average and per-phase signed |
| % Unbalance | Maximum % unbalance among phases for Volts & Amps |
| Revolution per minute (RPM) | RPM of alternator or generator when number of poles set for 2, 4, 6, 8, 12, 14 or 16 (any one pole) |
| Energy values stored in non-volatile memory | |
| Energy delivered from power source no.1: Accumulated active (Real - Wh) or reactive (VARh) or apparent (VAh) energy with user programmable alpha-numeric name | |
| Energy delivered from power source no.2: Accumulated active (Real - Wh) or reactive (VARh) or apparent (VAh) energy with user programmable alpha-numeric name | |
| Time counters such as meter ON Hrs, load RUN Hrs for both source of power and power outage counters Old registers facilitate retrieval of last cleared energy values and load Run Hrs | |
| Display | |
| Bright red colour LED display, 8 segment alpha-numeric LED, ~ 14.2 mm (0.55 in) height, 3 rows with 4 digits per row, auto range, auto scale | |
| Communication | |
| RS-485 serial | Channel connection Industry standard Modbus RTU protocol, Integration with any Modbus compatible SCADA / DCS / PMS / EMS / BAS / BMS software |
| Native Plug and Play support | Schneider Electric energy management system software - EcoStruxure™ Power Monitoring Expert, EcoStruxure™ Power SCADA Operation along with ION Setup programming support |
| Alternate or dual source sensor | For sensing the presence of alternate power source to measure and record energy in separate registers |
| Diagnostics | |
| Diagnostic page indicates the healthiness of communication system, all LED test, device serial number, device model number OS & RS version, communication status, error code display | |
| Page lock | |
| Page lock and unlock features. Once the commonly referred page is enabled for lock feature, then the display returns to locked page in 4 minutes of inactive time | |
| Favourite page | |
| Number and type of parameters can be chosen and arranged in Favourite page according to the user's requirement | |
| Relay | |
| Relay can be operated based on the set limits assigned for V L-L, V L-N, A, Hz, PF, Instantaneous power (W, VA, VAR), demand parameter (W, VA, VAR) Relay can also be programmed to activate based on decremental energy consumed in the system from the preset energy value | |
| Electrical characteristics | |
| Type of measurement | True RMS, 4 quadrant power and 2 quadrant energy, 32 samples/ cycle |
| Measurement accuracy | |
| Current, per-phase & average | ± 0.5 % of reading |
| Voltage, L-N, L-L, per-phase & average | ± 0.5 % of reading |
| Power (active and apparent) | ± 0.5 % for Class 0.5 |
| Power (reactive) | ± 2.0 % for Class 0.5 |
| Power factor, per-phase & average | ± 0.01 of reading |
| Frequency | ± 0.05 % for F-nominal 50/ 60 Hz ± 2 ± 0.2 % for Frequency range from 30 to 48 Hz, 52 to 58 Hz and 62 to 70 Hz |
| Active or real energy | Class 0.5 (± 0.5 %) |
| Apparent energy | ± 0.5 % |
| Reactive energy | Class 2.0 (± 2.0 %) |
| THD % | ± 5 % of reading |
| Input-voltage | |
| VT (PT) connection | Selectable from No VT (direct), 1 VT, 2 VT to 3 VT |
| VT (PT) primary | 100 V L-L to 999 kV L-L max |
| U (V) nominal (secondary) | Up to 277 V L-N/ 480 V L-L (selectable VT secondary from 100, 110, 115, 120 to 415 V L-L) |
| Operating voltage range with accuracy | 80-480 V L-L ± 10 % Category III |
| Measured Voltage with full range | 35 to 600 V L-L |
| Permanent overload (withstand) | 750 V L-L, continuous |
| Impedance | ≥ 5 MΩ |
| Frequency range | 50/60 Hz ± 2 |
| VA burden | ≤ 0.2 VA at 240 V L-N at 50 Hz |

PM1130H

| Frequency – measurement | |
|---|--|
| Nominal operating range | 50/60 Hz \pm 2 (\pm 0.05 % accuracy) |
| Extended operating range | 30 to 48 Hz, 52 to 58 Hz and 62 to 70 Hz |
| Voltage input | 80 to 480 V L-L \pm 10 % |
| Input-current | |
| CT connect | Solo or multi-phase current measurement by installing CT (s) in either of A1, A2, A3, A12, A23, A13, A123 phase(s) |
| CT primary | 1 A to 32767 A programmable |
| CT secondary | 1 A or 5 A I-nominal (field settable) |
| Operating current range with accuracy | 10 mA to 6 A ⁺¹ |
| Measured Amps with full range | 5 mA to 10 A |
| Suppression current | 5 to 99 mA (to disregard negligible load) |
| Permanent overload (withstand) | Continuous 10 A, 10s/hr 50 A, 1s/hr 500 A |
| Impedance | 0.3 m Ω |
| Frequency range | 50/ 60 Hz \pm 2 |
| VA burden | \leq 0.1 VA at 5A, 50 Hz |
| AC - control power | |
| Operating range | 60 to 277 V L-N AC \pm 10 % |
| Burden | \leq 6 V A at 240 V L-N, 50 Hz |
| Frequency | 50/ 60 Hz nominal (45 to 65 Hz operating range) |
| Ride-through time | 120 ms at 240 V L-N, 50Hz |
| DC - control power | |
| Operating range | 60 to 277 V L-N DC \pm 10 % |
| Burden | \leq 3 W at 240 V DC |
| Ride-through time | 120 ms at 240 V DC |
| Display update | |
| Instantaneous/ RMS parameters | 1 s |
| Demand parameters | 5 s |
| THD % (voltage and current) | 5 s |
| Power system | |
| Phase labelling | Configurable to 123, ABC, rst, pqr or ryb |
| Energy source labelling – one letter programmable | alpha-numeric, A to Y (except X), or 0 to 9 |
| Wiring configuration | 13 wiring schemes (5 on front screen) 1ph, 2 w, LN 1ph, 2 w, LL 1ph, 3 w, LL with N (2-phase) 3ph, 3 w, Delta, Ungrounded 3ph, 3 w, Delta, Corner Grounded ⁺² 3ph, 3 w, Wye, Ungrounded ⁺² 3ph, 3 w, Wye Grounded ⁺² 3ph, 3 w, Wye, Resistance Grounded ⁺² 3ph, 4 w, Open Delta, Center-Tapped ⁺² 3ph, 4 w, Delta, Center-Tapped ⁺² 3ph, 4 w, Wye, Ungrounded ⁺² 3ph, 4 w, Wye Grounded 3ph, 4 w, Wye, Resistance Grounded ⁺² |
| Mechanical characteristics | |
| Weight | \sim 300 g (10.6 oz) |
| IP degree of protection | IP 51 front side, IP 54 with gasket (optional accessory), IP 30-meter body, tested as per IEC 60529 |
| Material | Polycarbonate meets UL 94V-0 flammability rating |
| Dimensions W x H x D | 96 x 96 x 52 mm (3.78 x 3.78 x 2.05 in) (D = depth of the meter from housing mounting flange) 13 mm (0.51 in) protrusion of meter from housing flange |
| Mounting position | vertical |
| Panel thickness | 5 mm (0.196 in) maximum |
| Environmental characteristics | |
| Operating temperature | - 10 to +60° C (+14 to +140° F) |
| Storage temperature | - 20 to +70° C (-4 to +158° F) |
| Humidity rating | 5 to 95 % RH non-condensing |
| Pollution degree | 2 |
| Attitude | \leq 2000 metres (6561 ft), Category III |
| Product life | >7 years |
| Insulation category | Double insulation for user accessible parts |
| Insulation category | Double insulation for user accessible parts |

⁺¹ Additional error of \pm 2 % between 10 mA to 50 mA, \pm 1 % between 50 mA to 100 mA

⁺² Through Communication

PM1130H

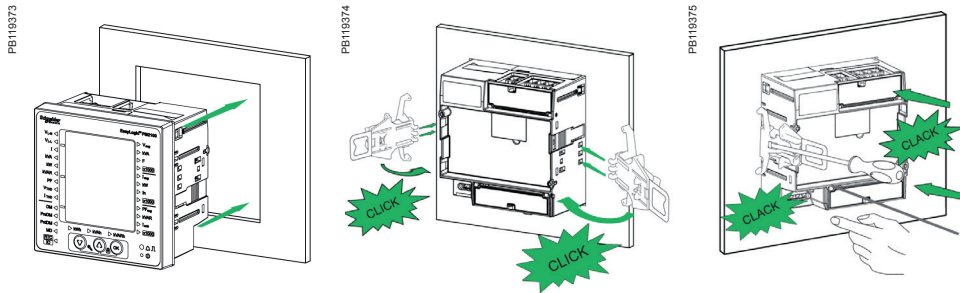
| Electromagnetic compatibility (tested as per IEC 61326-1) | |
|---|---|
| Electrostatic discharge | IEC 61000-4-2 |
| Immunity to radiated field | IEC 61000-4-3 |
| Immunity to fast transients | IEC 61000-4-4 |
| Immunity to impulse waves | IEC 61000-4-5 |
| Conducted immunity | IEC 61000-4-6 |
| Immunity to magnetic fields | IEC 61000-4-8 |
| Immunity to voltage dips | IEC 61000-4-11 |
| Emissions | Emissions FCC Part 15 Class A/CE |
| Safety | |
| Europe | CE, as per IEC 61010-1 edition-3 |
| US and Canada | cULus as per UL61010-1 and CAN/CSA-C22.2 IEC 61010-1 edition-3, for 480 V AC L-L |
| Measurement Category (Voltage inputs) | CAT III up to 480 V L-L |
| Overvoltage Category (Control power) | CAT III up to 300 V L-N |
| Dielectric | As per IEC/UL 61010-1 edition-3 |
| Protective Class | II, Double insulated for user accessible parts |
| Green premium | EOL, REACH, PEP, RoHS complied |
| Other certification | RCM & EAC for Russia |
| Communication | |
| RS-485 port | Modbus RTU: 2-Wires, 4800, 9600, 19200 or 38400 baud, Parity - Even, Odd, None, 1 stop bit if parity is Odd or Even, 2 stop bits if none. |
| Alternate or dual source sensor | 2 pin connector, suitable for pair of 1.5 sq mm multi-strand or single strand cable AC: 80 – 277 V \pm 10 % ON status, 0 to 30 V OFF status DC: 18 – 60 V \pm 10 % ON status, 0 to 4 V OFF status |
| Relay output | Form A relay, 2 pin terminals, 300 V L-N AC max. / 2 A; 24 V DC / 2 A |
| Isolation | 2.5 kV RMS, double insulated |
| Protection features | User configurable password (selectable from 0000 to 9999) protected for set-up and clearing of energy, and other integrated data |
| Display language | English |
| Technical publication | Printed installation guide (QSG) supplied with meter in multi-language (EN, ES, FR, DE, PT, RU, TR, ZH) and user guide in soft format |
| Human machine interface | |
| Display type | 8 segment alphanumeric LED, ~ 14.2 mm (0.55 in) height, 3 rows with 4 digits per row, 1 column of 12 LEDs to indicate percentage of load connected in system. 4 digits for instantaneous parameters and 5+3 digits for energy parameters with auto scrolling and auto range |
| Keypad | 4 buttons for navigation at the front, combination of 2 buttons for lock/unlock pages |
| CAL LED (pulse LED) | 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) |
| Alternate or dual source LED | Red colour LED glows continuously during the presence of AC or DC voltage across the dual source sensor |

Feature set summary

| Parameter/ Meter reference | PM1130H CL 0.5, RS-485 |
|--|---------------------------|
| Accuracy Class of Wh (active energy) | 0.5 (\pm 0.5 %) |
| Accuracy Class of VARh (reactive energy) | 2.0 (\pm 2.0 %) |
| Accuracy Class of VAh (apparent energy) | \pm 0.5 % |
| Sampling rate per cycle | 32 |
| Amps: average and per-phase, calculated neutral current | ■ |
| Voltage: V L-N, V L-L, average, per-phase | ■ |
| Power factor: average and per-phase | ■ |
| Frequency: any available phase | ■ |
| Power (W or VA or VAR – any one) Measurement and display of any one power parameter at a time, configurable through set-up/ communication | ■ |
| Energy - delivered or forward or import energy: Wh, VAh, VARh One energy measurement at a time | ■ |
| Demand parameters – selectable for W, VA, VAR (one at a time) | ■ |
| Old registers - retrieval of last cleared values of source 1 & source 2 energy, source 1 and source 2 Load Run Hrs Run Hrs | ■ |
| Revolutions per minute (RPM) | ■ |
| Phase angle : Amp Deg (V to Amps, per-phase) | ■ |
| % Unbalance: Maximum of 3-ph V and Amps | ■ |
| Life time counter - meter ON Hrs, source 1 Load Run Hrs, source 2 Load Run Hrs and number of power interruptions | ■ |
| Communication: 2 wire, RS-485, Modbus RTU protocol | ■ |
| Commercial reference number | METSEPM1130HCL05RS |

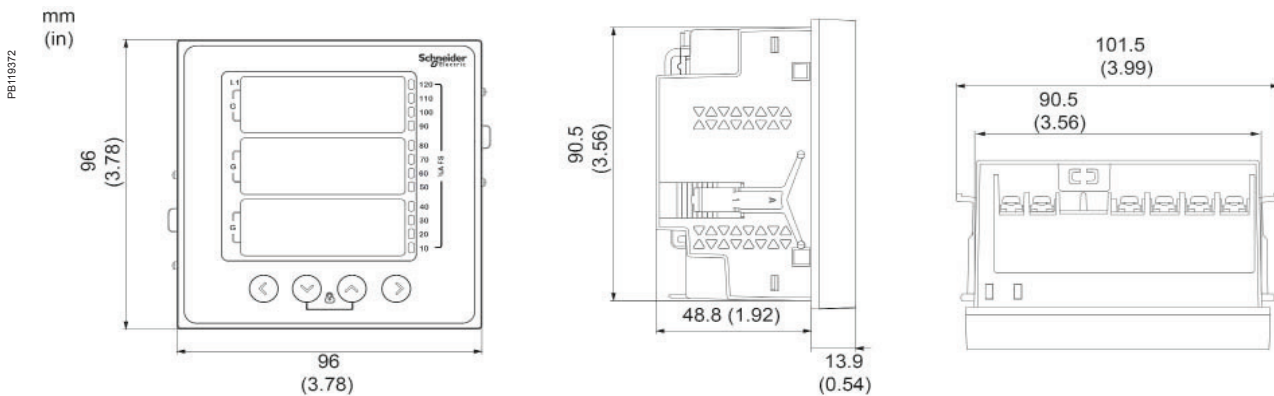
PM1130H

PM1130H dual source meter mounting

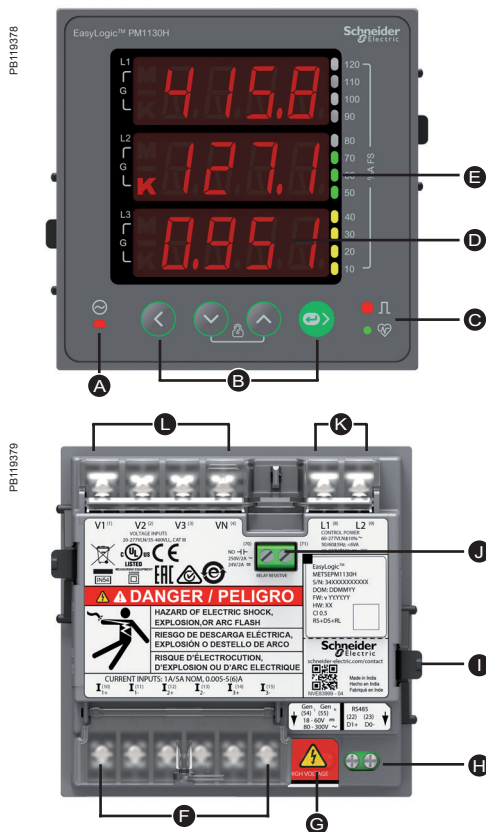


See the appropriate **Installation Guide** for correct installation instructions.

PM1130H dual source meter mechanical dimensions



PM1130H series dual source meter display overview



- A Dual source LED indicator
- B Menu selection buttons
 - ◀ Left key: To navigate left
 - ▼ Down key: To navigate down
 - ▲ Up key: To navigate up
 - ▶ Right/OK key: To navigate right/Enter key
- C LED indicators
 - Red: Pulse
 - Green: Heartbeat
- D Alpha numeric LED display
- E Analogue load bar
- F Current inputs
- G Alternate source (e.g. Genset)
- H RS-485
- I Retainer clip
- J Relay (PM1130H only)
- K Control power
- L Voltage inputs

See the appropriate **Installation Guide** for correct installation instructions.

EasyLogic

PM2000 series

The EasyLogic™ 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



METSEPM2110

PM2000

PB114325



PM2000 series LED display meter

PB119531



PM2000 LCD display

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 indicate the parameter name chosen for display
- PM2200 series:
 - LCD display type: Monochrome graphical LCD of 128 x 128 resolution 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 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
 - Embedded 2 D/I and 2 D/O in PM2125 and PM2225 meters
- Main characteristics:
 - Easy to install: Mounts using two clips, no tools are 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. 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).

Feature selection

| Commercial ref. number | Model |
|--------------------------|----------------------|
| METSEPM2110 | PM2110 |
| METSEPM2120 | PM2120 |
| METSEPM2125CL05 | PM2125 ⁺¹ |
| METSEPM2130 | PM2130 |
| METSEPM2210 | PM2210 |
| METSEPM2220 | PM2220 |
| METSEPM2225CL05 | PM2225 ⁺¹ |
| METSEPM2230 | PM2230 |
| METSEPM2KDGTLIO22 | PM2K2DIDO |
| METSEPM2KANLGIO22 | PM2K2AIAO |
| METSEPM2KANLGIO11 | PM2K1AIAO |

See your Schneider Electric representative for complete ordering information.

⁺¹ Available in China only

PM2000

- Main characteristics: (cont'd)
 - 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.
 - Daily time snap shot: Snap shot 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., kgCO₂ carbon emission or energy cost).
 - Energy preset feature: For retrofit application.

PM2000

PB114317



Rear of PM2000 closed

PB114318



Rear of PM2000 open

PB114321



Rear of PM2000 without I/O module

PM2000 technical specifications

| 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 scape, 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 - EcoStruxure™ Power Monitoring Expert, EcoStruxure PowerSCADA 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, OS & RS version |
| Lock/ Un-Lock | |
| Page Lock & Unlock (PM2100 series) | Unique feature to ensures that commonly referred page is restored in 4 minutes of inactive time |
| Rate 1 counter ^{*2} | |
| 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. |
| Rate 2 counter ^{*2} | |
| Tariff counter (example) | Rate counter can also be configured to calculate the electricity cost based on the energy consumption in customized currency format. |
| 12am snap shot | |
| 12am snap shot ^{*2} | Snap shot of Avg Voltage, Avg Current, Total Active Power & Energy delivered as measured by the meter at 12am. Static page is refreshed with new values by 12am next day. |

^{*2} Available in PM2220/PM2230 (LCD) meters

PM2000

PM2000 electrical characteristics

PB114320



Rear of PM2000 with I/O module

PB114319



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 ⁺³ |
| 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 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/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 mΩ |
| Frequency nominal | 50/60 Hz |
| VA Burden | <0.024 VA at 6 A |
| AC control power | |
| Operating range | 44- 277 V AC ±10% (80-277 V AC ±10% with I/O card) |
| Burden | <6 VA at 277 V AC L-N (<8 VA for PM2x30 and PM2x25C) |
| Frequency | 45 to 65 Hz |
| Ride-through time | 100 ms typical at 120 V AC and maximum burden (50 ms with Analogue IO card for PM2x30) 400 ms typical at 230 V AC and maximum burden (50 ms with Analogue IO card for PM2x30) |
| DC control power | |
| Operating range | 48-277 V DC ±10% (100-277 V AC ±10% with I/O card) |
| Burden | < 2 W at 277 V DC (< 3.3 W for PM2x30 and PM2x25C) |
| 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 | 1 s |
| Demand | 15 s |
| Harmonics | 5 s |
| Wiring configuration | |
| User programmable | 1ph, 2w, L-N 1ph, 2w, L-L 1ph, 3w, L-L with N (2phase) 3ph, 3w, Delta, Ungrounded 3ph, 3w, Delta, Corner Grounded ⁺⁴ 3ph, 3w, Wye, Ungrounded ⁺⁴ 3ph, 3w, Wye Grounded ⁺⁴ 3ph, 3w, Wye, Resistance Grounded ⁺⁴ 3ph, 4w, Open Delta, Center-Tapped ⁺⁴ 3ph, 4w, Delta, Center-Tapped ⁺⁴ 3ph, 4w, Wye, Ungrounded ⁺⁴ 3ph, 4w, Wye Grounded 3ph, 4w, Wye, Resistance Grounded ⁺⁴ |

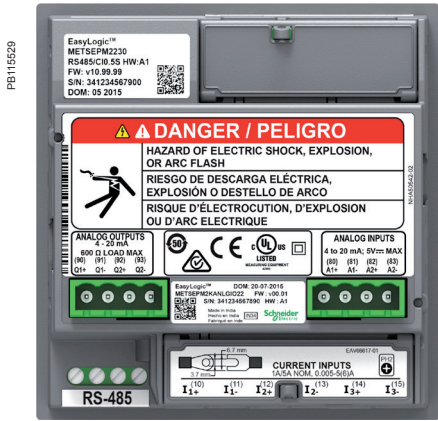
⁺³ For 1 A CT nominal, additional error of ±1 % from 50 mA to 150 mA, ±2 % for current > 10 mA to < 50 mA. Partial standard compliance for Class 0.5S meter type (energy test clause only)

⁺⁴ Through communication in PM2100 series meters

PM2000

| PM2000 series mechanical characteristics | |
|--|---|
| Mechanical characteristics | |
| Weight | ~ 300 gm |
| IP degree of protection | IP54 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 (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 |
| 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/CE |
| 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, 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 128x128 mm 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) |

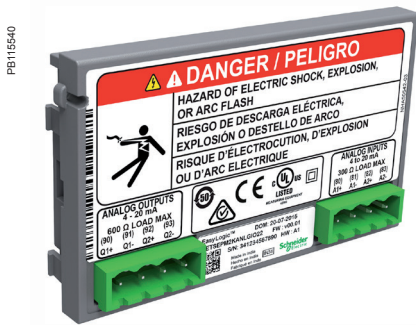
PM2000



Rear of PM2200 with I/O module



Digital I/O module



Analogue I/O module

PM2000 series 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 kΩ |
| 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 PM2125/ PM2225 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 |
| 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 |
| Digital Outputs | |
| Voltage ratings | 40 V DC max, 20mA 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 |
| Supported models | Available as default feature in PM2125/ PM2225 and Expandable option in PM2130/ PM2230 meter model |
| 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 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 |
| 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 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 |
| Analogue 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 | 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 g |

PM2000

| Feature set summary | PM2110 | PM2120 | PM2125C | PM2130 | PM2210 | PM2220 | PM2225C | 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 ¹ | | | 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, 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 ⁺⁴ , Net ⁺⁴ , Last cleared ⁺⁴ | | | 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 ⁺⁷ | Up to 15th ⁺⁴ | | Up to 31st ⁺⁴ | | 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 ² | ■ | | ■ | | ■ | | ■ | |
| Communication | Pulse Output | RS-485 | | | Pulse Output | RS-485 | | |
| Expandable Analogue IO module ⁺⁵ PM2K2AIAO: 2 input & 2 output channels PM2K1AIAO: 1 input & 1 output channel | | | | | ■ | | | |
| Expandable Digital IO module ³ PM2K2DIDO: 2 input & 2 output channels | EMbedded | | | | EMbedded | | | |
| 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) | ■ | | | | | | | |
| 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) | ■ | | ■ | | ■ | | ■ | |

⁺⁴ Through communication only

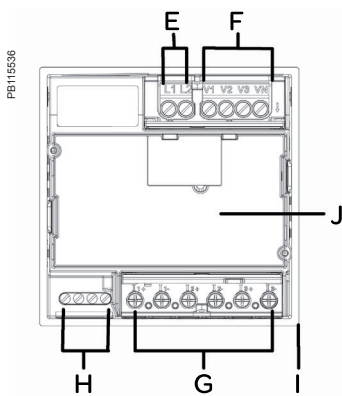
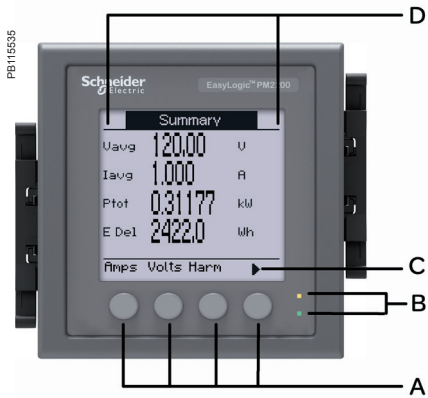
⁺⁵ Any one IO module can be used at a time with PM2130 or PM2230 meter. The control power range with IO module (including PM2125/ PM2225 references) shall be 72 to 304 V AC L-N or 90 to 304 V DC.

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

⁺⁷ Individual harmonics, 12am snap shot and rate counter features not available in PM2125/ PM2225 meters

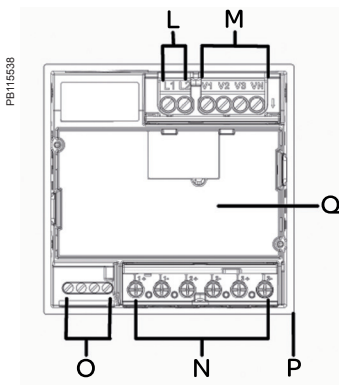
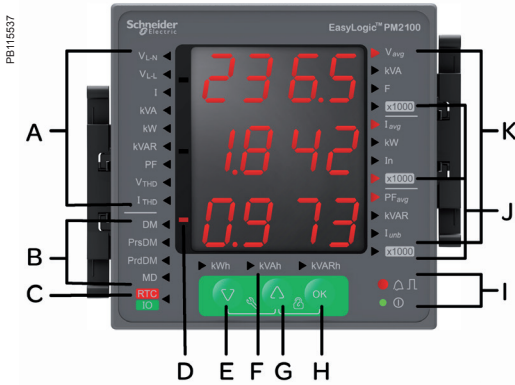
PM2000

PM2000 LCD display legend description



- A Menu selection buttons
- B 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
- J I/O channel slot - optional accessory for PM2230, embedded in PM2225 meter

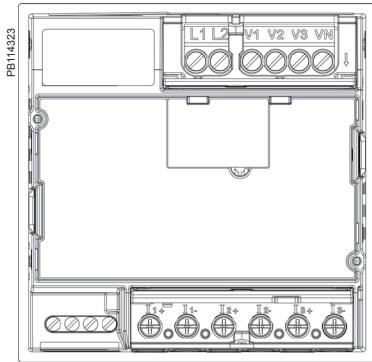
PM2000 LED display legend description



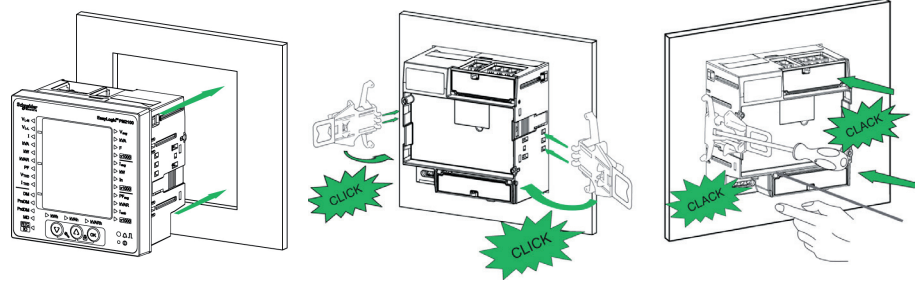
- A Phase measurements (VL-N, VL-L, I, kVA, kW, kVAR, PF, V-THD %, I-THD %)
- B Demand measurements (DM=Demand, PrsDM=Present demand, PrdDM=Predictor demand, MD=Maximum demand)
- C RTC Date & time
- D Negative indicator
- E Navigation key to navigate down
- F Energy readings Apparent energy, Active energy, 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 channel slot - optional accessory for PM2130, embedded feature in PM2125 meter

PM2000

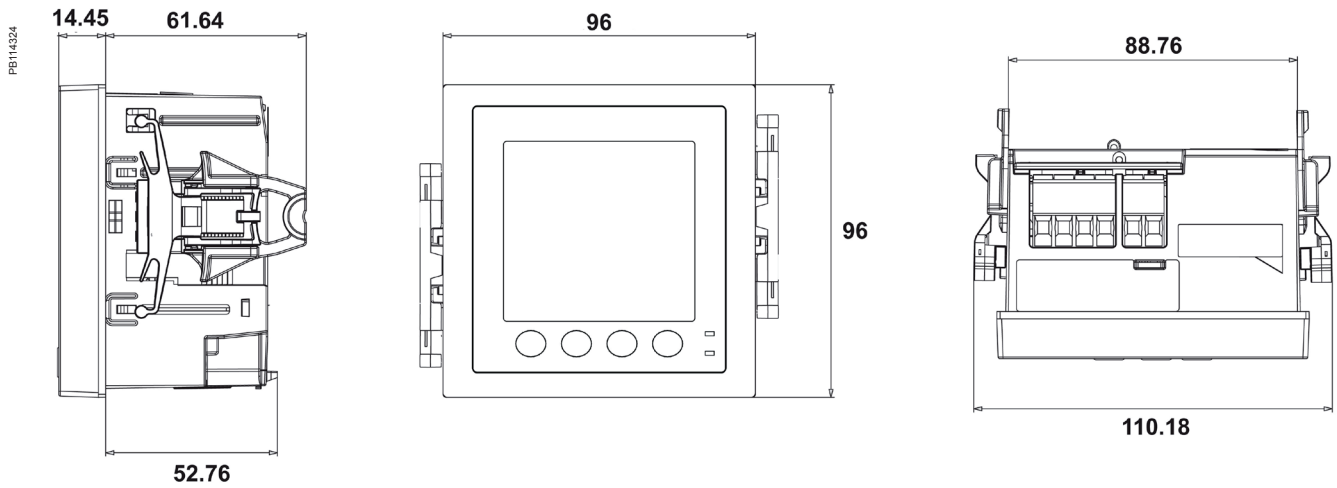
PM2000 meter rear view



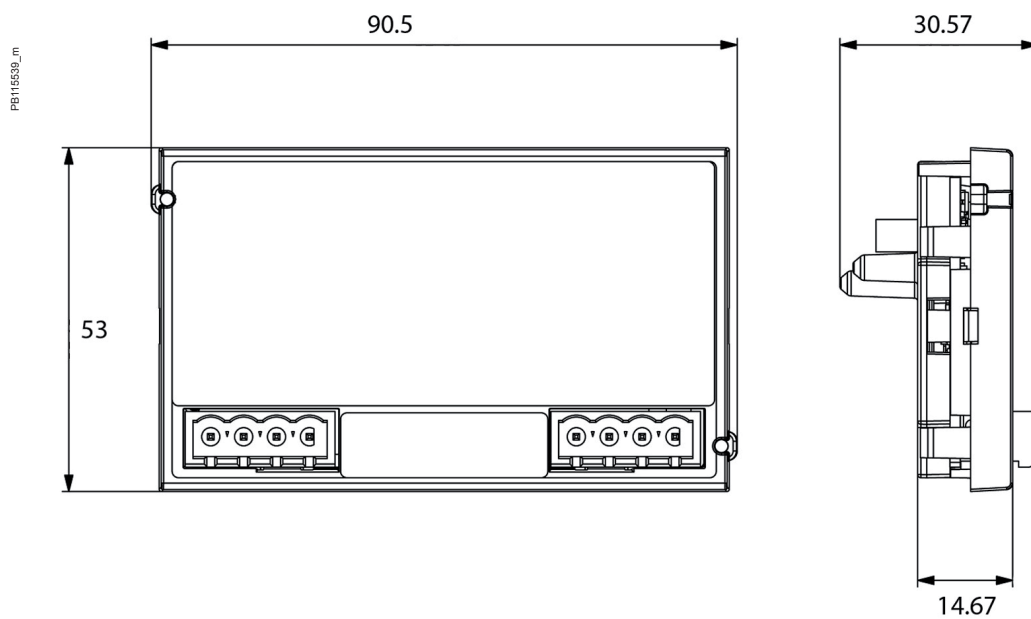
Meter installation



PM2000 multi-function meter mechanical dimensions



PM2000 Digital and Analogue IO module mechanical dimensions



See the appropriate **Installation Guide** for correct installation instructions.

EasyLogic

PM2200R Quick Click series

The EasyLogic™ PM2200R multi-function power and energy meter with Quick Click CTs

Offering the same extensive measurement capabilities of the PM2200 meters - now with the option to significantly reduce installation time, cost, and complexity with new plug & play, 3-in-1 Quick Click CTs.

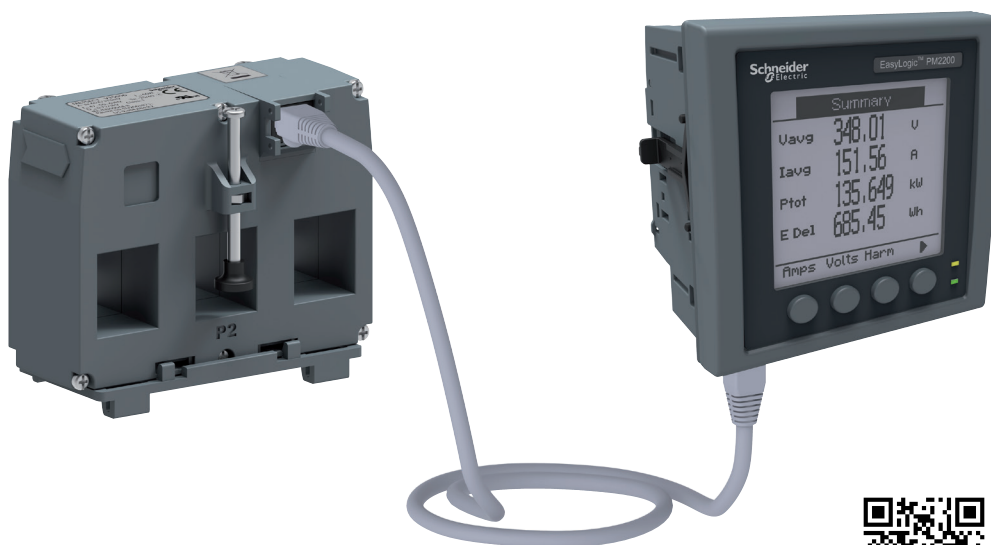
Applications

Cost management applications

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

Network management applications

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



METSEPM2210R

PM2200R



PM2200R meter

Introducing the new Quick Click enabled Easylogic PM2200R series, next generation power meter which offers all of the measurement capabilities of the PM2200 series with the added benefit of plug & play CT installation. For installers - time, labour, and rework savings of over 75 % compared to traditionally wired meters and CTs.

- 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 the 15th order (PM2200R)
 - Measurement of True PF and Displacement PF
 - Recording Min/Max values of instantaneous parameters with date & timestamp
 - Calculates % unbalance for voltage & current
- Main characteristics:
 - Simple CT connection and installation with Quick Click-enabled meters and CTs: A single RJ-45 port on the meter allows for direct connection to the RJ-45 port on Schneider Electric Quick Click CTs. As Quick Click CTs have a low voltage output, the shorting block required for traditional 5 A output CTs is no longer needed. CT input screw terminals on the meter, screw terminals on the CTs, and screw terminals on the shorting block are all eliminated with the Quick Click solution.
 - Easy to install: Mounts using two clips, no tools are required. Compact meter with 54 mm depth, connectable up to $480 \pm 10\%$ V 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⁺¹
 - Reactive energy Class 1.0 as per IEC 62053-24 (partial compliance for reactive energy test clause only)
 - Power quality analysis: The PM2220R offers THD % measurements and Individual harmonics up to the 15th order.
 - 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.
 - 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 user-friendly environment to learn about your electrical network.

⁺¹ Meters have been tested to ANSI C12.20 and IEC 62053-21 assuming an ideal CT

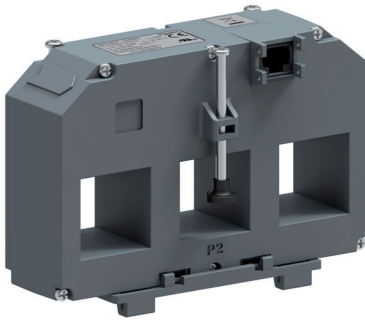
PM2200R

PB119510



METSECTV35xxx series CT

PB119511



METSECTV45xxx series CT

- 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.
- LCD display: 5 digits for energy, 5 or 6 digits for other parameters, with auto scaling.
- Daily time snap shot (PM2220R): The values from summary page will be stored as snap shot and refreshed by a configurable time next day.
- Rate counters (PM2220R): 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.
- Suppression current: To disregard measurement of induced current or negligible current flowing in the circuit, settable from 5 mA to 99 mA.

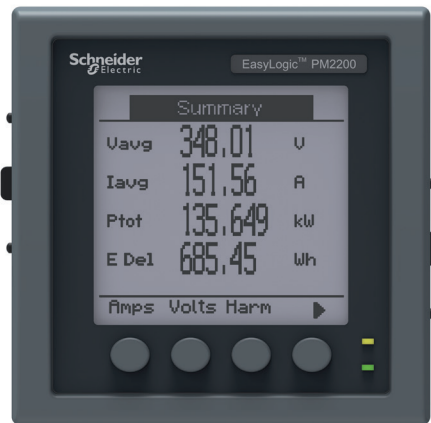
Feature selection

| Commercial ref. number | Model |
|------------------------|--|
| Meter model | Description |
| METSEPM2210R | PM2210R power meter THD POP CL1.0 Quick Click LVCT |
| METSEPM2220R | PM2220 Power Meter RJ45 LVCT |
| LVCTs | LVCT Solid 3 in 1 RJ45 |
| METSECTV35006 | 35 mm Ctr 60 A:1/3 V |
| METSECTV35010 | 35 mm Ctr 100 A:1/3 V |
| METSECTV35013 | 35 mm Ctr 125 A:1/3 V |
| METSECTV35016 | 35 mm Ctr 160 A:1/3 V |
| METSECTV35025 | 35 mm Ctr 250 A:1/3 V |
| METSECTV45025 | 45 mm Ctr 250 A:1/3 V |
| METSECTV45040 | 45 mm Ctr 400 A:1/3 V |
| METSECTV45060 | 45 mm Ctr 600 A:1/3 V |
| METSECTV45063 | 45 mm Ctr 630 A:1/3 V |
| METSECTV70080 | 70 mm Ctr 800 A:1/3 V |
| METSECTV70100 | 70 mm Ctr 1000 A:1/3 V |
| METSECTV70125 | 70 mm Ctr 1250 A:1/3 V |
| METSECTV70160 | 70 mm Ctr 1600 A:1/3 V |

See your Schneider Electric representative for complete ordering information.

PM2200R

PB119504



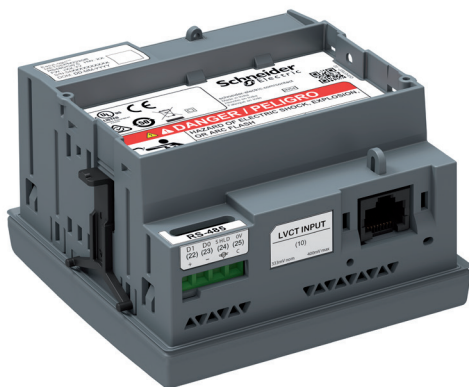
PM2200R series meter - front display

PB119502



PM2200R series meter - rear view

PB119503



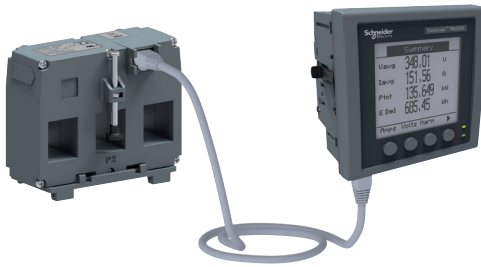
PM2200R series meter - underside view

| PM2200R technical specifications | |
|---|--|
| General | |
| Use on LV and MV systems with onsite programmable PT 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 | |
| PM2200 series | Full scape, 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 | Native plug-and-play support for: EcoStruxure Power Monitoring Expert, EcoStruxure Power SCADA Operation, ION Setup. |
| 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 |
| Diagnostics | |
| Diagnostic page | Indicates LCD status, serial number, diag pages, OS & RS version |
| Rate 1 counter⁺² | |
| 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. |
| Rate 2 counter⁺² | |
| Tariff counter (example) | Rate counter can also be configured to calculate the electricity cost based on the energy consumption in customized currency format. |
| Daily time snap shot⁺² | |
| Daily time snap shot | Snap shot 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 |

⁺² Available in PM2220R

PM2200R

PB119508



PM2200R with 35 mm CT attached

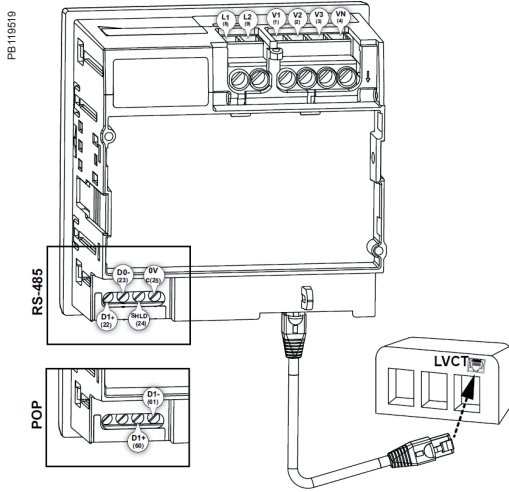
| Electrical characteristics | |
|---------------------------------------|--|
| Type of measurement | True RMS 64 samples per cycle |
| Measurement accuracy | |
| Current, average & per-phase | ±0.5 % |
| Voltage average & per-phase | ±0.5 % |
| Frequency | ±0.05 % |
| Power Factor, average & per-phase | ±0.01 |
| Power (W-Active, VA- Apparent) | ±0.5 % |
| Power (VAR- Reactive) | ±1.0 % |
| Real / Active Energy (Wh) | Class 1.0 as per IEC 62053-21 |
| 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/480 V L-L |
| Measured V with full range | 20-277 V L-N/35 - 480 V L-L, cat III 20-347 V L-N/35 - 600 V L-L, cat II |
| Permanent overload | 750 V AC L-L |
| Measured range | 0.00333 V to 0.4 V |
| Frequency nominal | 50/60 Hz |
| Input-current | |
| CT ratings | Compatible with Schneider Electric Quick Click CTs with available primary current ratings of 60 A-1600 A Secondary 0.333 V |
| Impedance | < 0.3 mΩ |
| Frequency nominal | 50/60 Hz |
| VA Burden | <0.024 VA at 6 A |
| AC control power | |
| Operating range | 44 - 277 V AC |
| Burden | <6 VA at 277 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 | 48-277 V DC ±10 % |
| Burden | < 2 W at 277 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 | 1 s |
| Demand | 15 s |
| Harmonics | 5 s |
| Wiring configuration | |
| User programmable | 1ph, 2w, L-N 1ph, 2w, L-L 1ph, 3w, L-L with N (2phase) 3ph, 3w, Delta, Ungrounded 3ph, 3w, Delta, Corner Grounded 3ph, 3w, Wye, Ungrounded 3ph, 3w, Wye Grounded 3ph, 3w, Wye, Resistance Grounded 3ph, 4w, Open Delta, Center-Tapped 3ph, 4w, Delta, Center-Tapped 3ph, 4w, Wye, Ungrounded 3ph, 4w, Wye Grounded 3ph, 4w, Wye, Resistance Grounded |

PM2200R

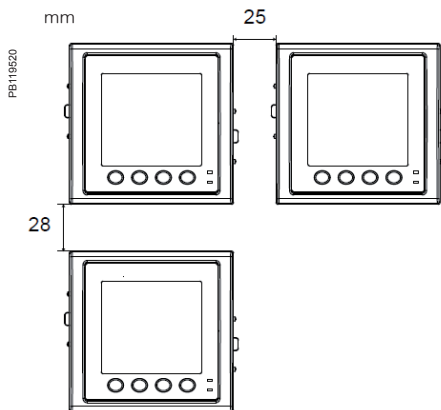
| PM2200R series | |
|--|---|
| Mechanical characteristics | |
| Weight | ~ 300 g |
| IP degree of protection | IP54 front side, IP30 meter body as per IEC 60529 |
| Material | Polycarbonate meets UL 94V-0 flammability rating |
| Dimensions W x H x D | 96 x 96 x 54 mm maximum (depth of the meter from housing mounting flange) and 13 mm (protrusion of meter from housing flange). |
| 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 |
| 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/CE |
| 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 480 V 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 (PM2220R) | 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 (PM2210R) | 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, 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 | LCD display: Monochrome graphical LCD of 128 x128 mm resolution with viewable area of 67 x 62.5 mm |
| Keypad | 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 heartbeat pulse) |

PM2200R

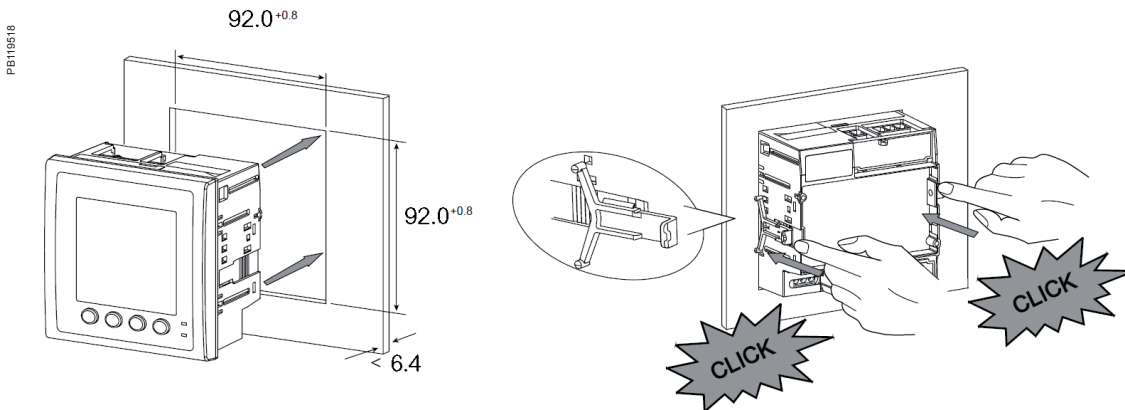
PM2200R meter rear



PM22xx panel grouping



PM22xx Meter installation

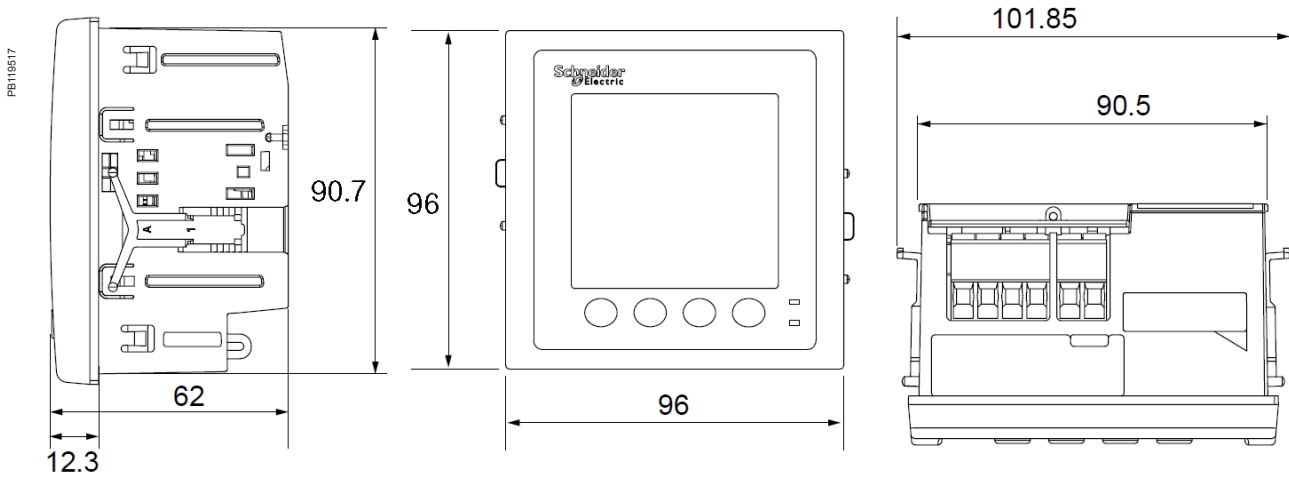


| Feature set summary | PM2210R | PM2220R |
|--|---------------------------------------|---|
| Accuracy Class for Wh | | 1.0 |
| Accuracy Class for VARh | | 1.0 |
| Accuracy for VAh | | ±0.5 % |
| Amps, per-phase, average and calculated neutral current | | ■ |
| Voltage, V L-N, V L-L, per-phase and average | | ■ |
| Power Factor | True PF | True PF Displacement PF |
| Frequency, any available phase | | ■ |
| Power: W, VA, VAR: per phase and total | | ■ |
| 3-phase unbalance % | Current | Current Voltage |
| Demand parameters (Present, Last, Predicted and Peak for W, VA, VAR, Amps) | ■ | ■ |
| Date and Time stamp for peak demand | (no timestamp) | |
| Energy: Wh, VAh, VARh (4 quadrant) Delivered (Import or Forward), Received (Export or Reverse) | Delivered, Received, Total, Net | Delivered, Received Total, Net, Last cleared |
| Active load timer, meter operating timer, run hours and power outage counter | | ■ |
| THD %: Voltage L-N or L-L, Amps per phase | | ■ |
| Individual harmonics for Voltage, Current, per-phase 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 | | Up to 15th ■ |
| RTC/battery | | ■ |
| Communication | Pulse Output | RS-485 |
| Daily time snap shot of Avg Voltage, Avg Current, Total active power & Energy delivered as measured every day at a configurable time | | ■ |

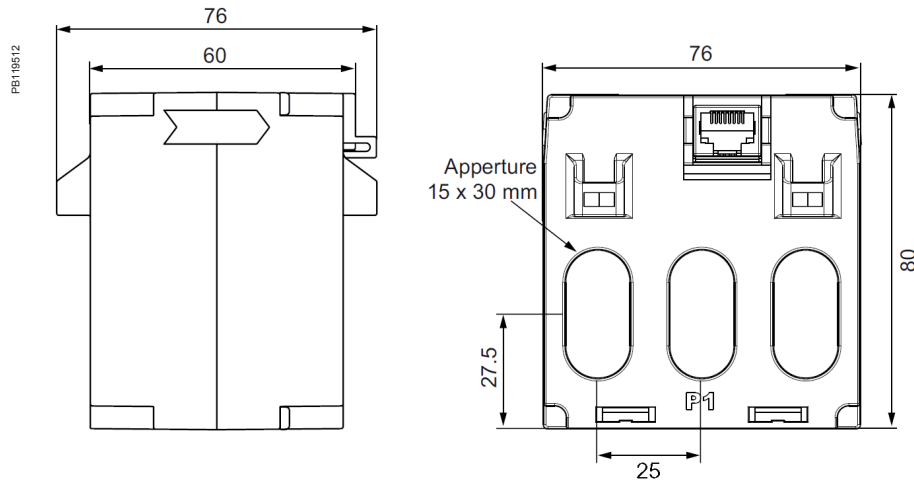
See the appropriate **Installation Guide** for correct installation instructions.

PM2200R

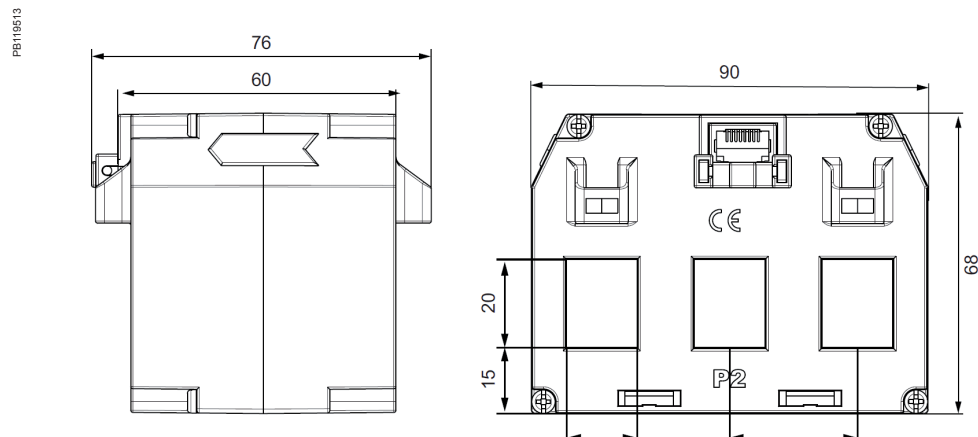
PM2200R multi-function meter mechanical dimensions



SECTV25xxx 3-in-1 LVCT mechanical dimensions



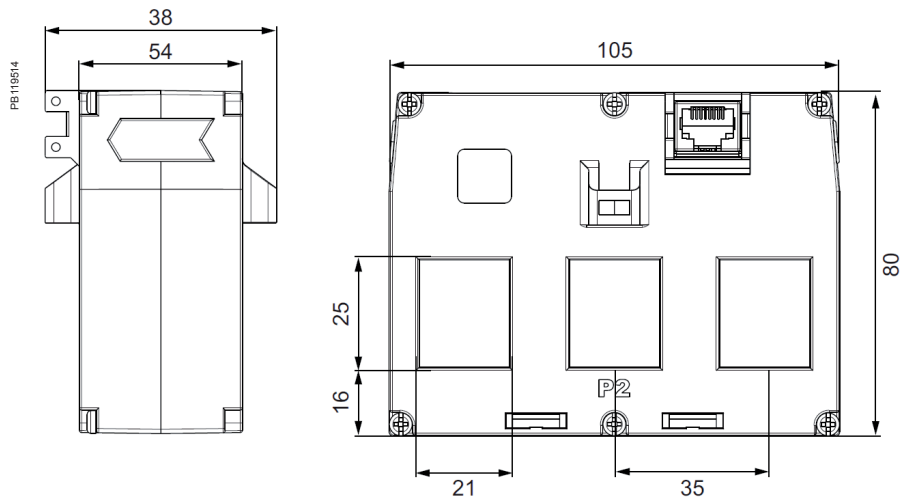
SECTV29xxx 3-in-1 LVCT mechanical dimensions



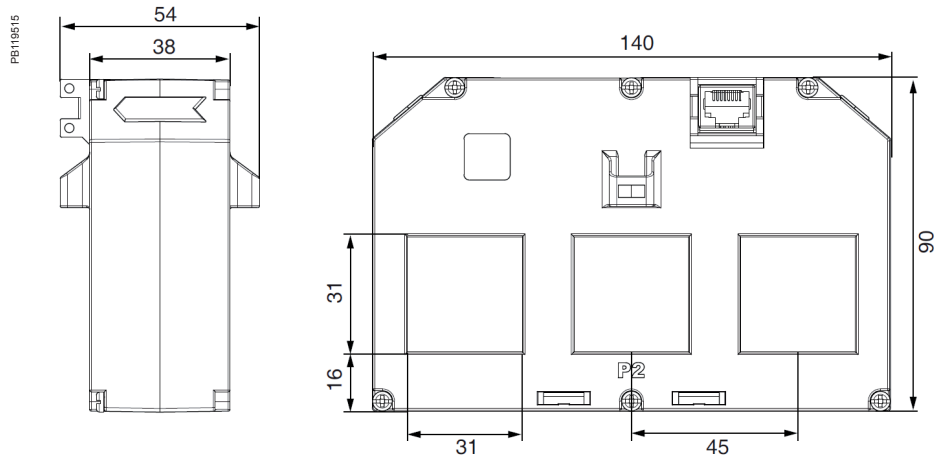
See the appropriate **Installation Guide** for correct installation instructions.

PM2200R

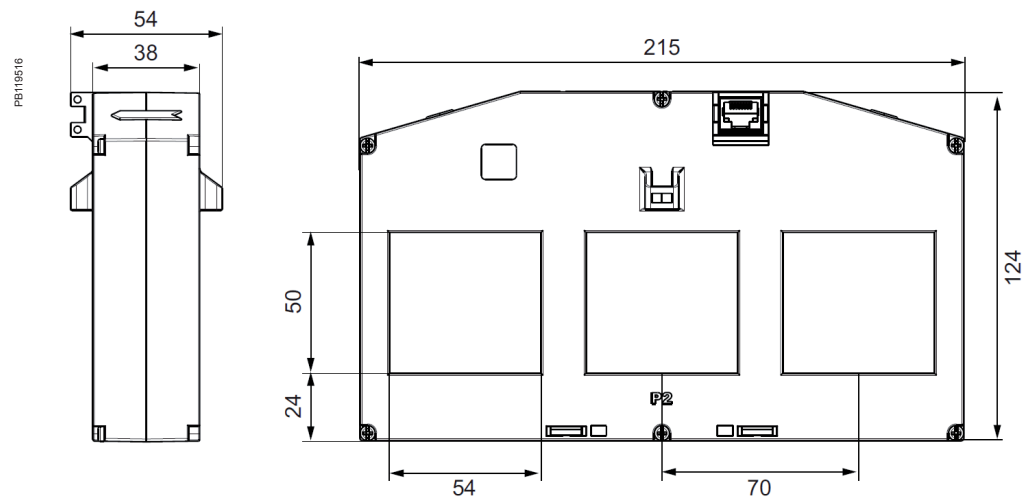
SECTV35xxx 3-in-1 LVCT mechanical dimensions



SECTV45xxx 3-in-1 LVCT mechanical dimensions



SECTV70xxx 3-in-1 LVCT mechanical dimensions



See the appropriate **Installation Guide** for correct installation instructions.

EasyLogic commercial reference numbers

| Comm. reference number | Description |
|--|--|
| DM1000 series | |
| METSEDM1110 | DM1110 1-ph Amps digital panel meter |
| METSEDM1210 | DM1210 1-ph Volts digital panel meter |
| METSEDM1310 | DM1310 1-ph Frequency digital panel meter |
| DM3000 series | |
| METSEDM3110 | DM3110 3-ph Amps digital panel meter |
| METSEDM3210 | DM3210 3-ph Volts digital panel meter |
| DM6000H series | |
| METSEDM6000HCL10NC | DM6000H VAF PF CI 1.0 digital panel meter |
| DM6200 series | |
| METSEDM6000HCL10RS | DM6200H VAF PF CI 1.0 RS-485 digital panel meter |
| PM1120H series | |
| METSEPM1120HCL10RS | PM1120H CI 1.0 RS-485 power & energy meter |
| METSEPM1120HCL05RS | PM1120H CI 0.5 RS-485 power & energy meter |
| PM1130H series | |
| METSEPM1130HCL05RS | PM1130H CI 0.5 RS-485 dual source power & energy meter |
| PM2000 series | |
| METSEPM2110 | PM2110 LED VAF P&E THD Pulse CI 1.0 power & energy meter |
| METSEPM2120 | PM2120 LED VAF P&E THD RTC RS-485 CI 1.0 power & energy meter |
| METSEPM2130 | PM2130 LED VAF P&E THD 31st Mar RS-485 CI 0.5 power & energy meter |
| METSEPM2210 | PM2210 LCD VAF P&E THD Pulse CI 1.0 power & energy meter |
| METSEPM2220 | PM2220 LCD VAF P&E THD RTC RS-485 CI 1.0 power & energy meter |
| METSEPM2230 | PM2230 LCD VAF P&E THD 31st Har RS-485 CI 0.5 power & energy meter |
| METSEPM2210R | PM2210 LCD Pulse RSJ45 LVCT CI 1.0 power & energy meter |
| METSEPM2220R | PM2220 LCD RS-485 RSJ45 LVCT CI 1.0 power & energy meter |
| METSEPM2KDGTLIO22 | PM2x30 Digital IO Module with 2 channels each |
| METSEPM2KANLGIO22 | PM2x30 Analogue IO module with 2 channels each |
| METSEPM2KANLGIO11 | PM2x30 Analogue IO module with 1 channel each |
| PM2200R series LVCT Solid 3 in 1 RJ45 | |
| METSECTV35006 | 35 mm Ctr 60 A:1/3 V |
| METSECTV35010 | 35 mm Ctr 100 A:1/3 V |
| METSECTV35013 | 35 mm Ctr 125 A:1/3 V |
| METSECTV35016 | 35 mm Ctr 160 A:1/3 V |
| METSECTV35025 | 35 mm Ctr 250 A:1/3 V |
| METSECTV45025 | 45 mm Ctr 250 A:1/3 V |
| METSECTV45040 | 45 mm Ctr 400 A:1/3 V |
| METSECTV45060 | 45 mm Ctr 600 A:1/3 V |
| METSECTV45063 | 45 mm Ctr 630 A:1/3 V |
| METSECTV70080 | 70 mm Ctr 800 A:1/3 V |
| METSECTV70100 | 70 mm Ctr 1000 A:1/3 V |
| METSECTV70125 | 70 mm Ctr 1250 A:1/3 V |
| METSECTV70160 | 70 mm Ctr 1600 A:1/3 V |
| Cables | |
| DCEPCURJX5GYM | Category 5e, Patch Cord, UTP, 0.5 M, Grey |
| DCEPCURJ01GYM | Category 5e, Patch Cord, UTP, 1 M, Grey |
| DCEPCURJ02GYM | Category 5e, Patch Cord, UTP, 2 M, Grey |
| DCEPCURJ03GYM | Category 5e, Patch Cord, UTP, 3 M, Grey |
| DCEPCURJ05GYM | Category 5e, Patch Cord, UTP, 5 M, Grey |
| DCEPCURJ10GYM | Category 5e, Patch Cord, UTP, 10 M, Grey |

See your Schneider Electric representative for complete ordering information.

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EasyLogic Catalogue
PLSED310053EN

As standards, specifications and designs develop from time to time, please ask for confirmation of the information given in this document.

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Photos: Schneider Electric

Over 75 % of Schneider Electric products
have been awarded the Green Premium ecolabel.



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02-2018

Life Is On

Schneider
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