



- DIN 72x72, perfect for MCC Panel
- Multifunction Measurements
- THD & 31 Individual Harmonics
- Voltage & Current Phase Angles
- K-Factor, Crest Factor & Unbalance
- TOU, Demands & Max. Demands
- Setpoint Alarms and SOE Log
- RS-485 with Modbus
- Optional Split-Core CT Support
- IEC 62053-21 Class 1 Accuracy
- True RMS Measurements
- Support LED & LCD Option
- Extensive I/O Options
- IP52 Enclosure with no Opening
- Industrial Grade Components
- Standard Tropicalization
- Extended Temperature Range
- Extended Warranty

***Designed For Reliability***

***Manufactured To Last***



The PMC-D726M Digital Multifunction Meter is CET's latest offer for the low-cost digital power/energy metering market. Housed in an industry standard DIN form factor measuring 72mmx72mmx71.8mm (LCD) or 72mmx72mmx76.8mm (LED), it is perfectly suited for industrial, commercial and utility metering applications. The PMC-D726M features quality construction, true RMS multifunction measurements and a LED or LCD display. Compliance with the IEC 62053-21 Class 1 kWh Accuracy Standard, it provides optimum Price to Value ratio and is a cost effective replacement for traditional analog instrumentation, capable of displaying 3-phase measurements at once. The PMC-D726M optionally provides Split-Core CT (SCCT) support for retrofit applications, two Digital Inputs for status monitoring, two Digital Output for control, or one 0/4-20mA Analog Output for interfacing with 3<sup>rd</sup> party SCADA system. The standard SOE Log records meter events such as power-off, setup and DI status changes in 1ms resolution. With a standard RS-485 port and Modbus RTU protocol support, the PMC-D726M becomes a vital component of an intelligent, multifunction monitoring solution for any Power and Energy Management systems.

### Typical Applications

- Analog meter replacement
- Industrial, Commercial and Utility panel metering
- Substation, Factory and Building Automation
- Sub-metering and Cost Allocation
- Ideal for retrofitting with the SCCT option

### Features Summary

#### Ease of use

- Large, bright, backlit LCD or high-contrast LED display
- Front panel kWh and kvarh LED energy pulse outputs
- Password-protected setup via front panel or free PMC Setup software
- Easy installation with mounting clips, no tools required

#### Measurements

- U<sub>ln</sub>, U<sub>ll</sub> per phase and Average
- Current per phase and Average with calculated Neutral
- kW, kvar, kVA, P.F. per phase and Total
- Bi-directional energy measurements
- Frequency

#### PQ Measurements

- THD, TOHD, TEHD and Individual Harmonics up to 31<sup>st</sup>
- TDD, K-Factor and Crest-Factor
- U and I Unbalance and Phase Angles

#### Setpoints

- 6 user programmable setpoints with extensive list of monitoring parameters including Voltage, Current, Power, and Demand
- Configurable Threshold and Time Delay
- SOE Logging and DO trigger

#### SOE Log

- 16 events time-stamped to ±1ms resolution
- Record all setup, Setpoint and Digital Input status changes

#### TOU and Demand

- One TOU schedule, providing
  - 6 Seasons
  - 6 Daily Profiles, each with 6 Periods in 15-minute interval
  - 10 Holidays or Alternate Days
  - 4 Tariffs, each providing kWh and kvarh Imp/Exp and kVAh
- Demands and Max. Demands with Timestamp for per phase Current, kW Total, kvar Total and kVA total

#### Inputs and Outputs

- kWh and kvarh LED Energy Pulse Outputs on the Front Panel
- Two Digital Inputs for Status Monitoring
- Two Digital Outputs for Control applications
- Optional one Analog Output at 0/4-20mA

#### Communications

- Optically isolated RS-485 port at 1200 to 19,200 bps
- Modbus RTU support

#### System Integration

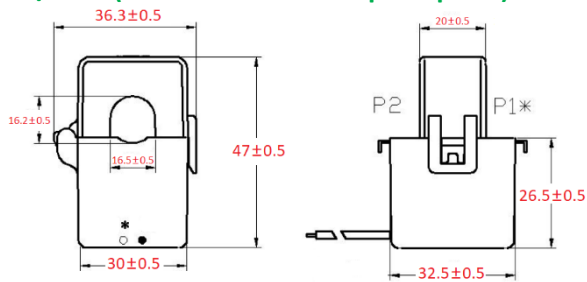
- Supported by CET's PecStar® iEMS and PMC Setup
- Easy integration into other Automation, SCADA or BMS systems via Modbus RTU

### Technical Specifications

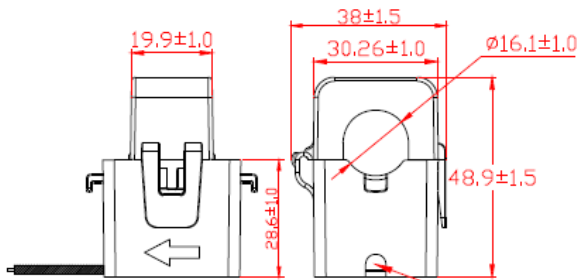
| Voltage Inputs (V1, V2, V3, VN)               |                                                                        |
|-----------------------------------------------|------------------------------------------------------------------------|
| Standard                                      | 240VLN/415VLL                                                          |
| Range                                         | 10V to 120% Un                                                         |
| Starting Voltage                              | 10V                                                                    |
| PT Ratio                                      | 1-1,000,000 (Primary), 1-690 (Secondary)                               |
| Overload                                      | 1.2xUn continuous, 2xUn for 1s                                         |
| Burden                                        | <0.02VA per phase                                                      |
| Frequency                                     | 45-65Hz                                                                |
| Current Inputs (I11, I12, I21, I22, I31, I32) |                                                                        |
| Standard Input                                | 5A                                                                     |
| Optional Input                                | 1A                                                                     |
| CT Ratio                                      | 1-30,000 (Primary), 1-5 (Secondary)                                    |
| Optional SCCT Input                           | 2mA (SCCTA Option for 5A SCCT)<br>40mA (SCCT Option for 100-800A SCCT) |
| Range                                         | 0.1% to 120% In                                                        |
| Starting Current                              | 0.1% In                                                                |
| Overload                                      | 1.2xIn continuous, 10xIn for 10s, 20xIn for 1s                         |
| Burden                                        | <0.25VA per phase                                                      |
| Power Supply (L/+, N/-)                       |                                                                        |
| Standard                                      | 95-250VAC/DC, ±10%, 47-440Hz                                           |
| Burden                                        | <2W                                                                    |
| Digital Inputs (DI1, DI2, DIC)                |                                                                        |
| Type                                          | Dry contact, 24VDC internally wetted                                   |
| Sampling                                      | 1000Hz                                                                 |
| Hysteresis                                    | 1ms minimum                                                            |
| Digital Outputs (DO11, DO12, DO21, DO22)      |                                                                        |
| Type                                          | Form A Mechanical Relay                                                |
| Loading                                       | 5A @ 250VAC or 30VDC                                                   |
| Analog Output (AO+, AO-)                      |                                                                        |
| Type                                          | 0-20 / 4-20 mA                                                         |
| Parameter                                     | Selectable                                                             |
| Loading                                       | 500 Ω maximum                                                          |
| Overload                                      | 24 mA maximum                                                          |
| Environmental Conditions                      |                                                                        |
| Operating Temp.                               | -25°C to 70°C                                                          |
| Storage Temp.                                 | -40°C to 85°C                                                          |
| Humidity                                      | 5% to 95% non-condensing                                               |
| Atmospheric Pressure                          | 70 kPa to 106 kPa                                                      |
| Mechanical Characteristics                    |                                                                        |
| Panel Cutout                                  | 68x68 mm                                                               |
| Unit Dimensions                               | 72x72x71.8 mm (LCD), 72x72x76.8 mm (LED)                               |
| IP Rating                                     | 52                                                                     |
| Shipping Weight                               | 0.802 kg                                                               |
| Shipping Dimensions                           | 125x110x80 mm                                                          |

### SCCT Dimensions

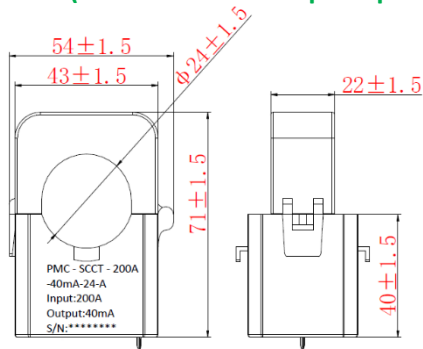
#### 5A/2mA (for SCCTA Current Input Option)



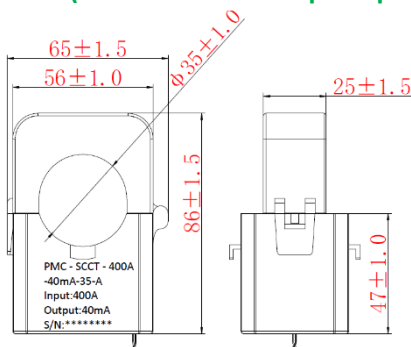
#### 100A/40mA (for SCCT Current Input Option)



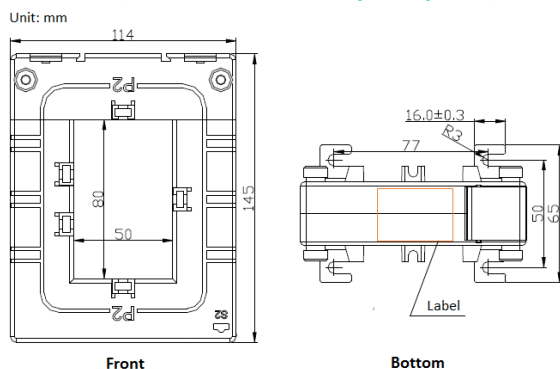
#### 200A/40mA (for SCCT Current Input Option)



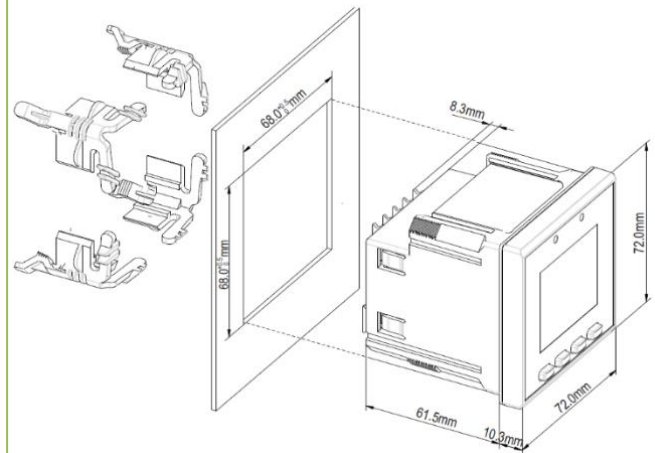
#### 400A/40mA (for SCCT Current Input Option)



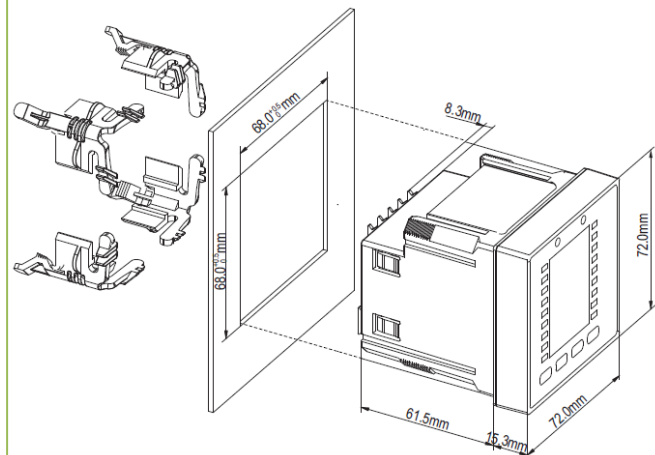
#### 800A/40mA (for SCCT Current Input Option)



### Device Dimensions, Cutout and Appearance

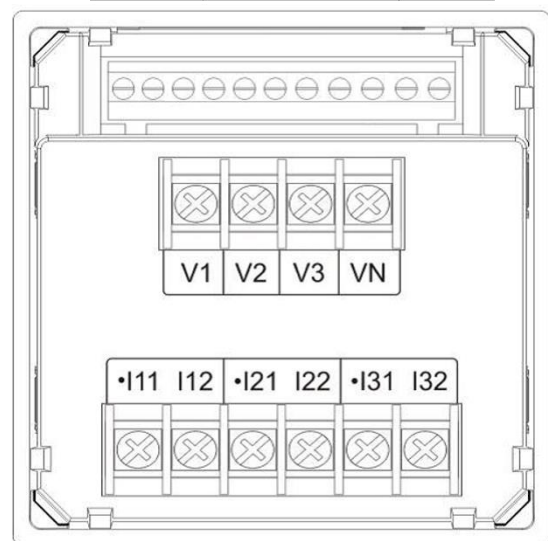


Panel Cutout (LCD)



Panel Cutout (LED)

| Digital Inputs |     |     | Digital Outputs |      |      |      | RS-485 | Power Supply |     |
|----------------|-----|-----|-----------------|------|------|------|--------|--------------|-----|
| DIC            | D11 | D12 | DO11            | DO12 | DO21 | DO22 | D+ D-  | L/+          | N/- |



Rear Panel (LCD & LED)

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### Accuracy

| Parameters    | Accuracy              | Resolution |
|---------------|-----------------------|------------|
| Voltage       | ±0.2% reading         | 0.1V       |
| Current       | ±0.2% reading         | 0.001A     |
| kW, kvar, kVA | ±0.5% reading         | 0.001kX    |
| kWh           | IEC 62053-21 Class 1  | 0.01kWh    |
| kvarh         | IEC 62053-23 Class 2  | 0.01kvarh  |
| P.F.          | ±1.0% reading         | 0.001      |
| Frequency     | ±0.02 Hz              | 0.01Hz     |
| AO            | ±0.5% F.S.            | -          |
| Harmonics     | IEC 61000-4-7 Class B | 0.1%       |
| K-Factor      | IEC 61000-4-7 Class B | 0.1        |

### Standards of Compliance

| Safety Requirements                                                                                                                                    |                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| CE LVD 2006 / 95 / EC                                                                                                                                  | EN 61010-1: 2010<br>EN 61010-2-030: 2010 |
| Electrical Safety in Low Voltage Distribution Systems up to 1000Vac and 1500 Vdc                                                                       | IEC 61557-12: 2018 (PMD)                 |
| Insulation                                                                                                                                             | IEC 62052-11: 2003<br>IEC 62053-22: 2003 |
| AC Voltage                                                                                                                                             | 2kV @ 1 minute                           |
| Insulation Resistance                                                                                                                                  | >100MΩ                                   |
| Impulse Voltage                                                                                                                                        | 6kV, 1.2/50μs                            |
| Electromagnetic Compatibility                                                                                                                          |                                          |
| CE EMC Directive 2004 / 108 / EC (EN 61326: 2013)                                                                                                      |                                          |
| Immunity Tests                                                                                                                                         |                                          |
| Electrostatic discharge                                                                                                                                | EN 61000-4-2: 2009                       |
| Radiated fields                                                                                                                                        | EN 61000-4-3: 2006+A1: 2008+A2: 2010     |
| Fast transients                                                                                                                                        | EN 61000-4-4: 2012                       |
| Surges                                                                                                                                                 | EN 61000-4-5: 2014+A1: 2017              |
| Conducted disturbances                                                                                                                                 | EN 61000-4-6: 2014                       |
| Magnetic fields                                                                                                                                        | EN 61000-4-8: 2010                       |
| Voltage Dips and Interruptions                                                                                                                         | EN 61000-4-11: 2004+A1: 2017             |
| Ring Wave                                                                                                                                              | EN 61000-4-12: 2017                      |
| Emission Tests                                                                                                                                         |                                          |
| Limits and Methods of Measurement of Electromagnetic Disturbance Characteristics of Industrial, Scientific and Medical (ISM) Radio-Frequency Equipment | EN 55011: 2016                           |
| Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment                                             | EN 55032: 2015                           |
| Limits for Harmonic Current Emissions for Equipment with Rated Current ≤16 A                                                                           | EN 61000-3-2: 2014                       |
| Limitation of Voltage Fluctuations and Flicker in Low-Voltage Supply Systems for Equipment with Rated Current ≤16 A                                    | EN 61000-3-3: 2013                       |
| Emission Standard for Residential, Commercial and Light-Industrial Environments                                                                        | EN 61000-6-4: 2007+A1: 2011              |
| Mechanical Tests                                                                                                                                       |                                          |
| Spring Hammer Test                                                                                                                                     | IEC 62052-11: 2003                       |
| Shock Test                                                                                                                                             | IEC 62052-11: 2003                       |
| Vibration Test                                                                                                                                         | IEC 62052-11: 2003                       |

### Ordering Information

| Product Code                     |   | Description                                                   |
|----------------------------------|---|---------------------------------------------------------------|
| PMC-D726M                        |   | 3-Phase Multifunction Meter                                   |
| Display Screen                   |   |                                                               |
| LED                              |   | LED                                                           |
| LCD                              |   | LCD                                                           |
| Input Current                    |   |                                                               |
| 5                                |   | 5A                                                            |
| 1                                |   | 1A                                                            |
| SCCT*                            |   | For use with 100A, 200A, 400A and 800A SCCTs with 40mA Output |
| SCCTA*                           |   | For use with 5A SCCT with 2mA Output                          |
| Input Voltage                    |   |                                                               |
| 3                                |   | 240V/415V                                                     |
| Power Supply                     |   |                                                               |
| 2                                |   | 95-250V AC/DC, 47-440Hz                                       |
| System Frequency                 |   |                                                               |
| 5                                |   | 45-65Hz                                                       |
| I/O                              |   |                                                               |
| C*                               |   | 1xAO                                                          |
| D                                |   | 2xDI+2xDO                                                     |
| Communications                   |   |                                                               |
| A                                |   | 1xRS-485 Port, Modbus                                         |
| Display Language                 |   |                                                               |
| E                                |   | English                                                       |
| PMC-D726M                        | - | 5 3 2 5 D A E                                                 |
| PMC-D726M                        | - | L 5 3 2 5 D A E                                               |
| PMC-D726M-5325DAE (LED Example)  |   |                                                               |
| PMC-D726M-L5325DAE (LCD Example) |   |                                                               |

\* Additional charges apply

### Accessories – Split-Core CT Options

| PMC-D726M Split-Core CT Spec - Insulation=100MΩ/500VDC, UL94-V0 rated, OC Protection @ 6-8V, 22AWG Output Wire (S1=White, S2=Black) |           |          |               |             |                  |             |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|---------------|-------------|------------------|-------------|
| Split-Core CT Model No.                                                                                                             | Rating    | Accuracy | Aperture (mm) | Output Wire | I <sub>max</sub> | Max. Burden |
| PMC-SCCT-100A-40mA-16-A                                                                                                             | 100A/40mA | 0.5      | Ø16           | 2m          | 200A             | 10Ω         |
| PMC-SCCT-200A-40mA-24-A                                                                                                             | 200A/40mA | 0.5      | Ø24           | 2m          | 240A             | 10Ω         |
| PMC-SCCT-400A-40mA-35-A                                                                                                             | 400A/40mA | 0.5      | Ø35           | 2m          | 480A             | 10Ω         |
| PMC-SCCT-800A-40mA-A                                                                                                                | 800A/40mA | 0.5      | 80x50         | 2m          | 960A             | 10Ω         |
| PMC-SCCT-5A-2mA-16-A                                                                                                                | 5A/2mA    | 2.0      | Ø16           | 2m          | 20A              | 226Ω        |

### Contact us



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