



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

#### Optional Inputs and Outputs

- Two Digital Inputs for Status Monitoring
- Two Digital Outputs for Control applications
- One Analog Output at 0/4-20mA
- Two Solid State Relay Output for Energy Pulsing applications

#### 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

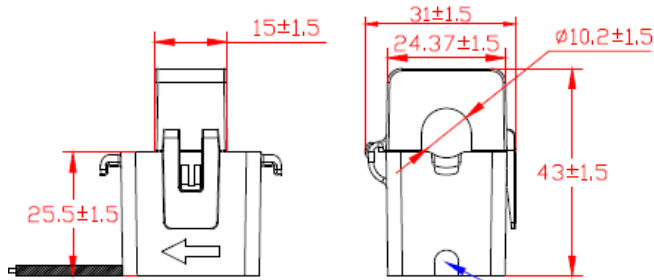
### Technical Specifications

| Voltage Inputs (V1, V2, V3, VN)               |  |
|---|--|
| Standard Range                                | 240VLN/415VLL  |
| Starting Voltage                              | 10V to 120% Un   |
| PT Ratio                                      | 10V  |
| Overload Burden                               | 1-1,000,000 (Primary), 1-690 (Secondary)                                 |
| Frequency                                     | 1.2xUn continuous, 2xUn for 1s<br><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                           | 2.5mA (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 Burden                               | 1.2xIn continuous, 10xIn for 10s, 20xIn for 1s<br><0.25VA per phase      |
| Power Supply (L/+, N/-, GND)                  |  |
| Standard Burden                               | 95-250VAC/DC, ±10%, 47-440Hz<br><2W                                      |
| Digital Inputs (DI1, DI2, DIC)                |  |
| Type  | Dry contact, 24VDC internally wetted                                     |
| Sampling Hysteresis                           | 1000Hz<br>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  |

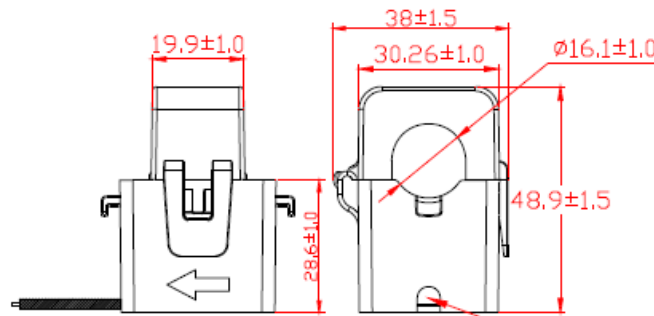


SCCT Dimensions

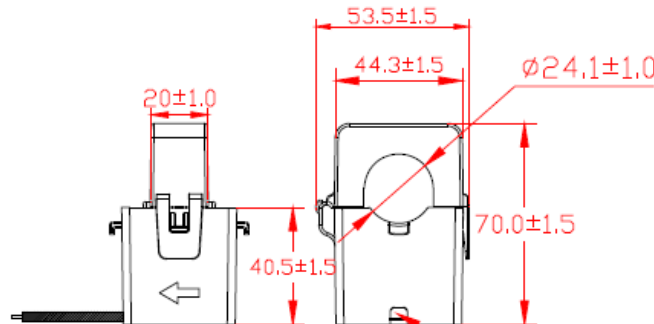
5A/2.5mA (for SCCTA Current Input Option)



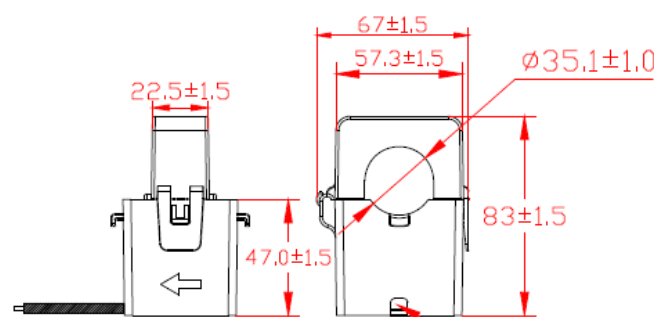
100A/40mA (for SCCT Current Input Option)



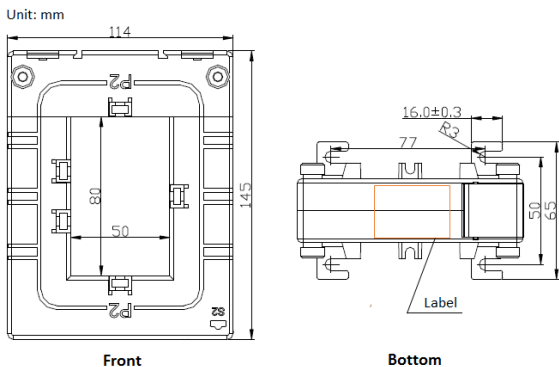
200A/40mA (for SCCT Current Input Option)



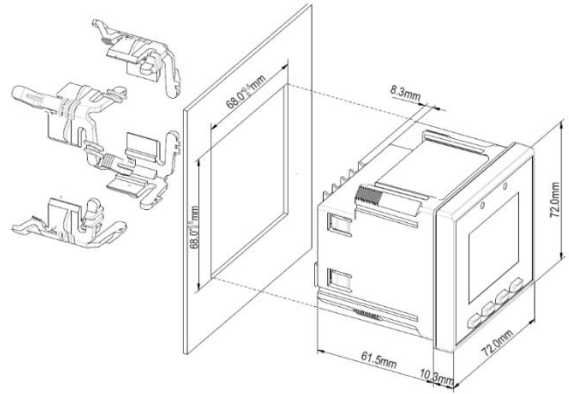
400A/40mA (for SCCT Current Input Option)



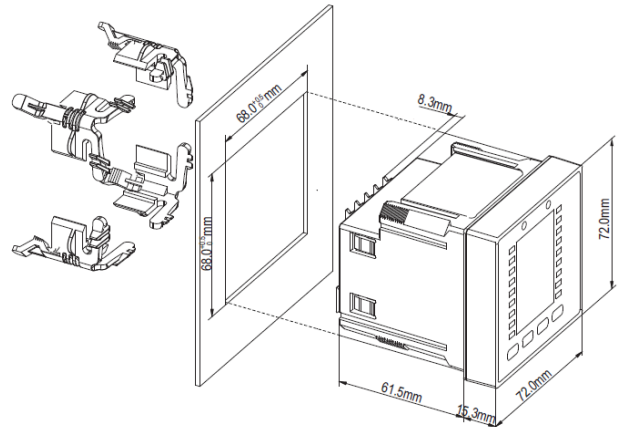
800A/40mA (for SCCT Current Input Option)



Device Dimensions, Cutout and Appearance

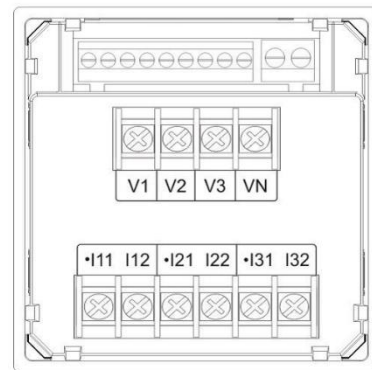


Panel Cutout (LCD)

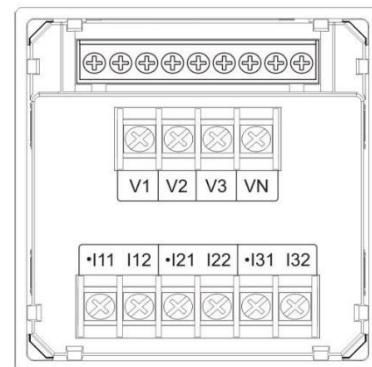


Panel Cutout (LED)

| DIx |     | DOx |     | RS-485 |    | Power Supply |    |
|-----|-----|-----|-----|--------|----|--------------|----|
| D1C | D1E | D2C | D2E | D+     | D- | L+           | L- |
| □   | □   | □   | □   | □      | □  | □            | □  |



| DIx |     | RS-485 |    | Power Supply |    |    |    |
|-----|-----|--------|----|--------------|----|----|----|
| D1C | D1E | D+     | D- | SH           | NC | L+ | L- |
| □   | □   | □      | □  | □            | □  | □  | □  |





## 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            | ±1% 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 |
| Insulation   | IEC 62052-11: 2003<br>IEC 62053-22: 2003 |
| AC Voltage test:   | 4kV @ 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: 2006                       |
| Conducted disturbances   | EN 61000-4-6: 2009                       |
| Magnetic fields  | EN 61000-4-8: 2010                       |
| Voltage Dips and Interruptions   | EN 61000-4-11: 2004                      |
| Oscillatory waves  | EN 61000-4-12: 2006                      |
| Emission Tests   |  |
| Limits and methods of measurement of electromagnetic disturbance characteristics of industrial, scientific and medical (ISM) radio-frequency equipment | EN 55011: 2009+ A1: 2010 (CISPR 11)      |
| Limits and methods of measurement of radio disturbance characteristics of information technology equipment   | EN 55022: 2010+ AC: 2011 (CISPR 22)      |
| Limits for harmonic current emissions for equipment with rated current ≤16 A   | EN 61000-3-2: 2006+A1: 2009 +A2: 2009    |
| 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 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        |   | DIN72 3-Phase Multifunction Meter                             |                                  |
| Display Screen   |   |   |                                  |
| " "              |   | LED   |                                  |
| L                |   | 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 2.5mA Output                        |                                  |
| Input Voltage    |   |   |                                  |
| 3                |   | 240V/415V   |                                  |
| Power Supply     |   |   |                                  |
| 2                |   | 95-250V AC/DC, 47-440Hz                                       |                                  |
| System Frequency |   |   |                                  |
| 5                |   | 45-65Hz   |                                  |
| I/O              |   |   |                                  |
| X                |   | None  |                                  |
| A*               |   | 2xDI  |                                  |
| C*               |   | 1xAO  |                                  |
| D*               |   | 2xDI+2xDO   |                                  |
| E*               |   | 2xDI+2xSSR Pulse Output                                       |                                  |
| Communications   |   |   |                                  |
| X                |   | None  |                                  |
| A                |   | 1xRS-485 Port, Modbus   |                                  |
| Display Language |   |   |                                  |
| E                |   | English   |                                  |
| PMC-D726M        | - | 5 3 2 5 X A E   | PMC-D726M-5325XAE (LED Example)  |
| PMC-D726M        | - | L 5 3 2 5 X A E   | PMC-D726M-L5325XAE (LCD Example) |

\* Additional charges apply

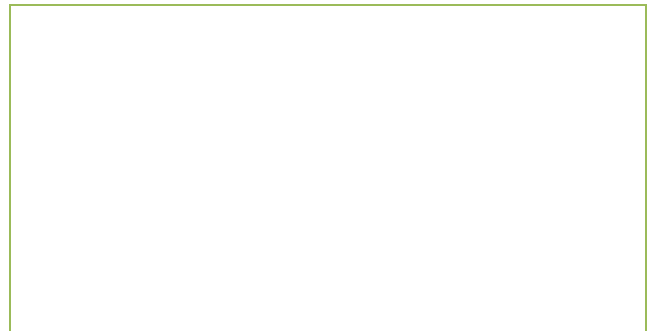
## Accessories – Split-Core CT Options

| PMC-D726M Split-Core CT Spec - Insulation=100MΩ/500VDC, U194-V0 rated, Open-Circuit Protection @ 6.8V, 22AWG Output Wire (S1=White, S2=Black) |           |               |             |                  |          |            |             |
|---|-----------|---------------|-------------|------------------|----------|------------|-------------|
| Split-Core CT Model #   | Rating    | Aperture (mm) | Output Wire | I <sub>max</sub> | Accuracy | Rated Load | Max. Burden |
| PMCS-CCT-100A-40mA-16-A   | 100A/40mA | Ø16.1±1       | 2m          | 120A             | 1.0      | 20Ω        | 0.046VA     |
| PMCS-CCT-200A-40mA-24-A   | 200A/40mA | Ø24.1±1       | 2m          | 240A             | 0.5      | 10Ω        | 0.023VA     |
| PMCS-CCT-400A-40mA-35-A   | 400A/40mA | Ø35.1±1       | 2m          | 480A             | 0.5      | 10Ω        | 0.023VA     |
| PMCS-CCT-800A-40mA-A  | 800A/40mA | 80x50         | 2m          | 960A             | 0.5      | 10Ω        | 0.023VA     |
| PMCS-CCT-5A-2.5mA-10-A  | 5A/2.5mA  | Ø10.2±1.5     | 2m          | 20A              | 1.0      | 200Ω       | 0.02VA      |

## CET Electric Technology Inc.

E: [sales@cet-global.com](mailto:sales@cet-global.com)  
W: [www.cet-global.com](http://www.cet-global.com)

## Your Local Representative



Revision Date: August 2, 2018