## PMC-D726M DIN72 3-Ø Digital Multifunction Meter



- 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 Options**
- **Extensive I/O Options**
- IP52 Enclosure with no Opening
- Industrial Grade Components
- **Standard Tropicalization**
- **Extended Temperature Range**
- Extended Warranty



## DIN72 3-Ø Digital Multifunction Meter



The PMC-D726M Digital Multifunction Meter is CET's latest offer for the lowcost digital power/energy metering market. Housed in an industry standard 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 an 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 Outputs 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**

- 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

- ULN, ULL 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

#### PO Measurements

- THD, TOHD, TEHD and Individual Harmonics up to 31st
- 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
  - o 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

PMC-D726M

#### **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

- 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

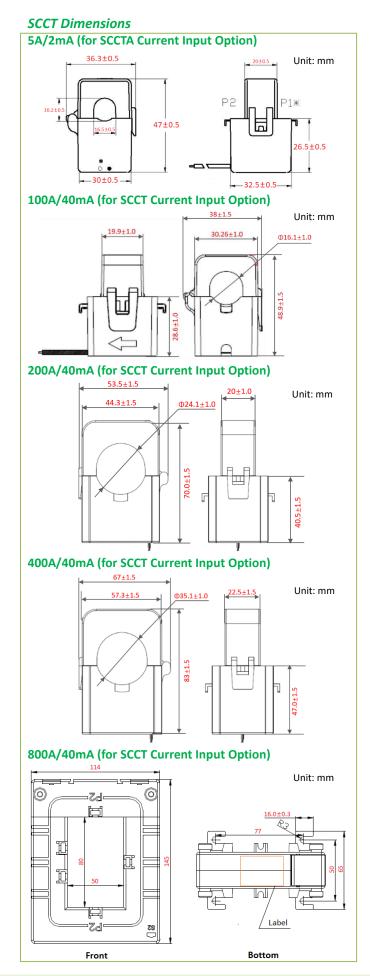
#### Technical Specifications

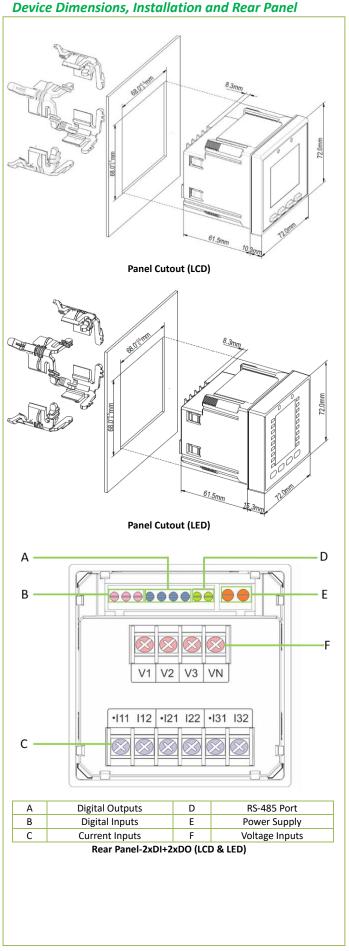
Technical Specifications						
Voltage Inputs (V1, V2, V3, VN)						
Standard	240VLN/415VLL					
Range	10V to 120% Un					
Starting Voltage	10V					
PT Ratio	1-1,000,000 (Primary), 1-690 (Secondary)					
Overload	1.2xUn continuous, 2xUn for 1s					
Burden	<0.02VA per phase					
Frequency	45-65Hz					
Current In	nputs (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)					
	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					
ſ	Power Supply (L/+, N/-)					
Standard	95-250VAC/DC, ±10%, 47-440Hz					
Burden	<2W					
Dig	gital Inputs (DI1, DI2, DIC)					
Туре	Dry contact, 24VDC internally wetted					
Sampling	1000Hz					
Hysteresis	1ms minimum					
Digital Out	tputs (DO11, DO12, DO21, DO22)					
Туре	Form A Mechanical Relay					
Loading	5A @ 250VAC or 30VDC					
Aı	nalog Output (AO+, AO-)					
Туре	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					
М	echanical 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					



# PMC-D726M

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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 II	0.1%	
K-Factor	IEC 61000-4-7 Class II	0.1	

#### **Standards of Compliance**

Safety Requ	irements					
CE LVD 2006 / 95 / EC	EN 61010-1: 2010					
	EN 61010-2-030: 2010					
Electrical Safety in Low Voltage	IEC 61557-12: 2018 (PMD)					
Distribution Systems up to 1000Vac						
and 1500 Vdc						
Insulation	IEC 62052-11: 2003					
	IEC 62053-22: 2003					
AC Voltage	2kV @ 1 minute					
Insulation Resistance	>100MΩ					
Impulse Voltage	6kV, 1.2/50μs					
Electromagnetic	•					
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	EN 55011: 2016					
Industrial, Scientific and Medical						
(ISM) Radio-Frequency Equipment						
Limits and Methods of						
Measurement of Radio Disturbance	EN 55032: 2015					
Characteristics of Information	LN 33032. 2013					
Technology Equipment						
Limits for Harmonic Current						
Emissions for Equipment with Rated	EN 61000-3-2: 2014					
Current ≤16 A						
Limitation of Voltage Fluctuations						
and Flicker in Low-Voltage Supply	EN 61000-3-3: 2013					
Systems for Equipment with Rated						
Current ≤16 A						
Emission Standard for Residential,						

## **CET Electric Technology Inc.**

Commercial and Light-Industrial

**Environments** 

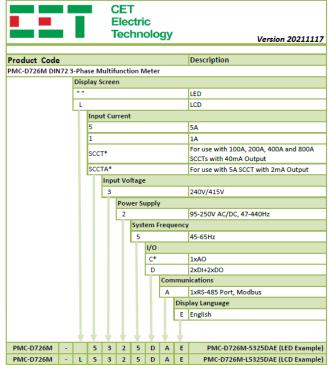
Shock Test

Vibration Test

**Spring Hammer Test** 

E: <u>sales@cet-global.com</u> W: www.cet-global.com

#### **Ordering Information**



#### 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	Imax	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	1.0	Ø16	2m	20A	226Ω			

### Your Local Representative



EN 61000-6-4: 2007+A1: 2011

IEC 62052-11: 2003

IEC 62052-11: 2003

IEC 62052-11: 2003