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 Option**
- **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 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 3rd 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

Fase 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

- 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

PQ 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

PMC-D726M

- 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

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 II	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)				
	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				
ı	Power Supply (L/+, N/-)				
Standard 95-250VAC/DC, ±10%, 47-440Hz					
Burden	<2W				
Digital Inputs (DI1, DI2, DIC)					
Туре	Dry contact, 24VDC internally wetted				
Sampling	1000Hz				
Hysteresis 1ms minimum					
Digital Out	tputs (DO11, DO12, DO21, DO22)				
Туре	l				
Loading	5A @ 250VAC or 30VDC				
Analog Output (AO+, AO-)					
Туре	0-20 / 4-20 mA				
Parameter	Selectable				
Loading	500 Ω maximum				
Overload	24 mA maximum				
Er	nvironmental 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					
M	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				

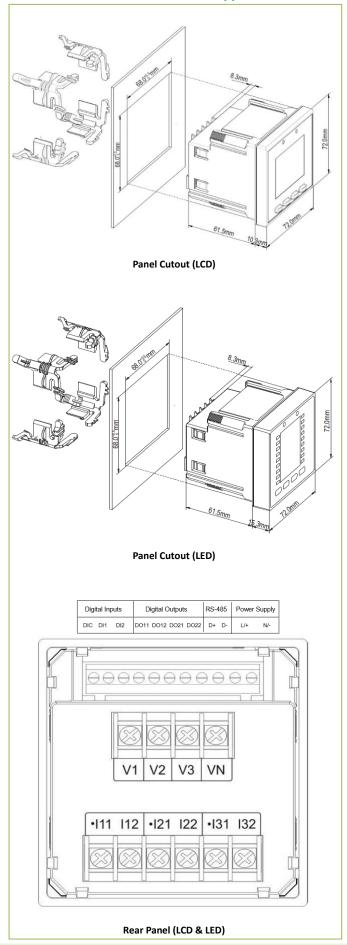


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SCCT Dimensions

5A/2mA (for SCCTA Current Input Option) 47±0.5 100A/40mA (for SCCT Current Input Option) Ø16,1±1.0 48.9±1.5 200A/40mA (for SCCT Current Input Option) 54 ± 1.5 -40mA-24-A Input:200A Output:40mA S/N:****** 400A/40mA (for SCCT Current Input Option) 25 ± 1.5 PMC - SCCT - 400 800A/40mA (for SCCT Current Input Option) 0 Label Bottom

Device Dimensions, Cutout and Appearance



PMC-D726M

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Accuracy

Parameters	Accuracy	Resolution		
Voltage	±0.2% reading	0.1V		
Current	±0.2% reading	0.001A 0.001kX 0.01kWh 0.01kvarh		
kW, kvar, kVA	±0.5% reading			
kWh	IEC 62053-21 Class 1			
kvarh	IEC 62053-23 Class 2			
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			
	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 Compatibility CE EMC Directive 2004 / 108 / EC (EN 61326: 2013)

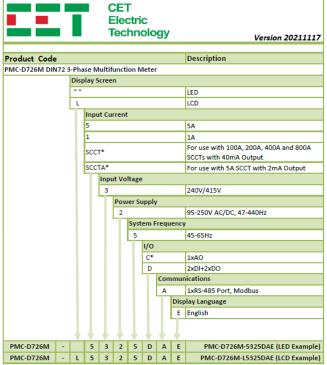
	Immunity Tests		
Electrostatic discharge		EN 61000-4-2: 2009	
	Radiated fields	EN 61000-4-3: 2006+A1:	
		2008+A2: 2010	
	Fast transients	EN 61000-4-4: 2012	
	Surges	EN 61000-4-5: 2014+A1: 2017	
	Conducted disturbances	EN 61000-4-6: 2014	
	Magnetic fields	EN 61000-4-8: 2010	
	Voltage Dips and Interruptions	EN 61000-4-11: 2004+A1: 2017	
	Ring Wave	EN 61000-4-12: 2017	

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	LIN 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	211 01000 3 3. 2013		
Current ≤16 A			
Emission Standard for Residential,			
Commercial and Light-Industrial	EN 61000-6-4: 2007+A1: 2011		
Environments			
Mechanical Tests			
Spring Hammer Test	IEC 62052-11: 2003		

Shock Test

Vibration Test

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	lmax	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

CET Electric Technology Inc.

E: sales@cet-global.com W: www.cet-global.com

Your Local Representative



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IEC 62052-11: 2003

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