



Automation for a Changing World

## Delta Power Meter DPM Series



# Delta Power Meter

## DPM Series

The DPM Series precisely measures various electrical energy and power quality parameters, including power factors, harmonics, and current/voltage unbalance. This series also features a variety of communication protocols for easy integration with critical power systems and monitoring functions to provide power data, off-limit alarms, and history logs.

### Panel Mount Type DPM-C Series



- Real-time data display and easy integration with remote monitoring systems, suitable for general applications in machine rooms

#### Applications

Distribution board | Electrical room |  
Factory/Building energy management system

### DIN Rail Mount Type DPM-D Series



- Easy installation and integration for equipment energy management

#### Applications

High power consuming equipment |  
Electrical equipment cabinet | Enclosure

### Multi-Loop Type DPM-M Series



- Multiple and selective large-scale circuit monitoring with lots of power circuits to save cost

#### Applications

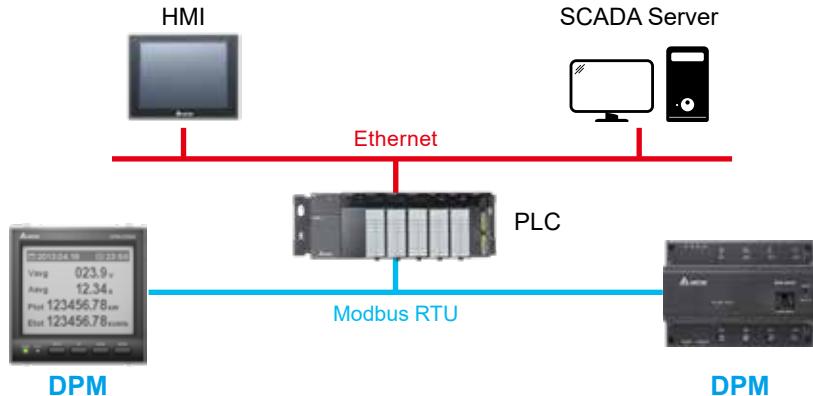
Shopping mall | Dormitory | Telecommunication System

## High Precision Power Measurement

- Precise measurement of bidirectional electrical energy and power parameters, meeting IEC 62053-22 standards

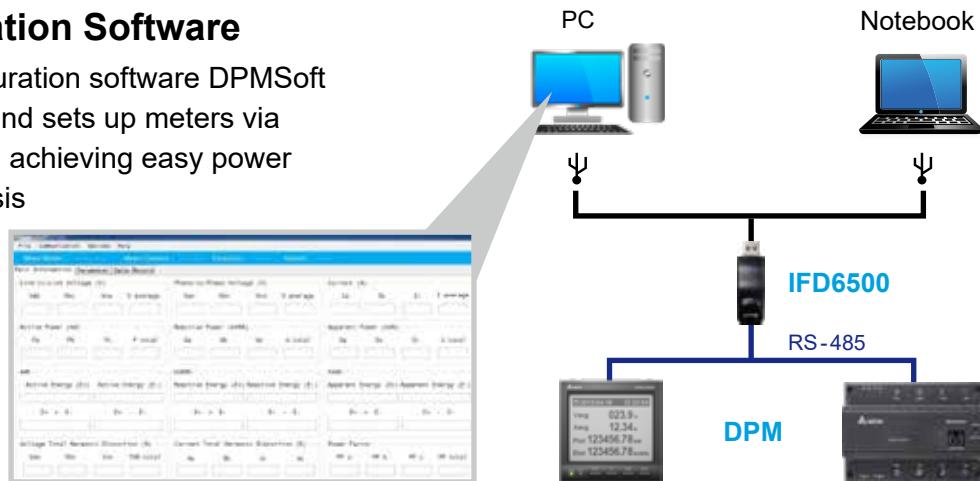
## Built-in Protocols for Easy Integration

- Built-in RS-485 communication port supports Modbus for transmission of all measurement values to the PLCs, PCs and monitoring software



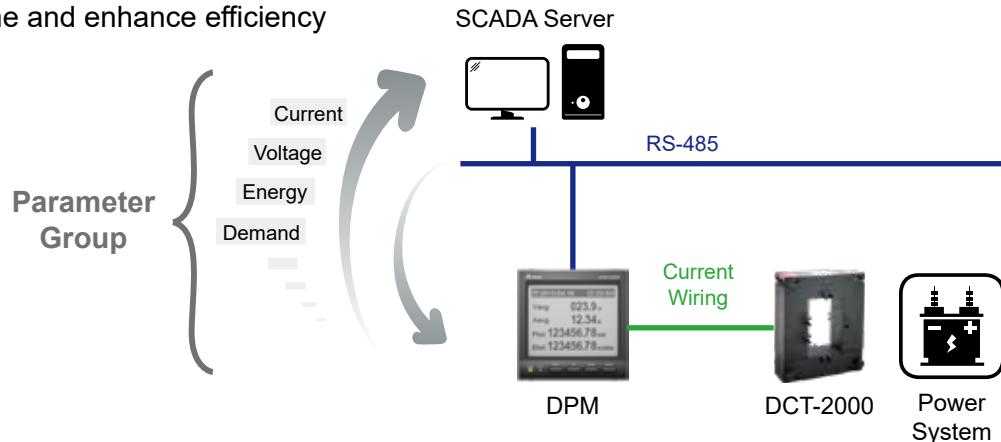
## PC-based Configuration Software

- The power meter configuration software DPMSoft collects electricity data and sets up meters via Modbus communication, achieving easy power management and analysis



## User-defined Parameter Groups

- Allows user-defined Modbus addresses to multiple corresponding parameters for the host computer to acquire data at one time and enhance efficiency



# Panel Mount Type DPM-C Series

- Suitable for applications in general power systems
- Large LCD displays power data in real time
- A variety of communication protocols for easy integration
- Various power monitoring functions for different applications

## Applications

Distribution board | Electrical room |  
Factory/Building energy management system



## Features

### Multi-Language Display

- Large dot matrix LCD (198x168 dots), high font recognition
- Multi-language display: English (capital and small letters), Chinese, Japanese and other languages



DPM-C530: dot matrix LCD for high recognition display, better than segment LCD display

Ptot 123456.78 kW  
Etot 123456.78 kVARh

>>> EASY

### Event Alarms and History Logs

- Keeps max. 2 months of electricity measurement values for analysis;  
up to 17 power parameters selectable for recordings of different time intervals (e.g. recording 17 electricity parameters every 5 minutes for up to 2 months);  
29 types of built-in alarms and up to 500 alarms recording

Capacity	Interval	0~59 secs.	1~5 mins.	5~60 mins.
Max. Data Types		6	17	17
Max. Storage Time (Days)		7	31	62

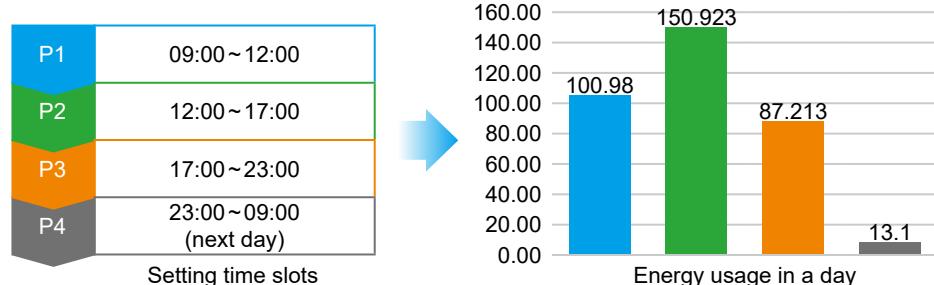
## Auto-Recording

- Automatic calculation of monthly energy consumption
- Allows users to setup specific dates for monthly calculation



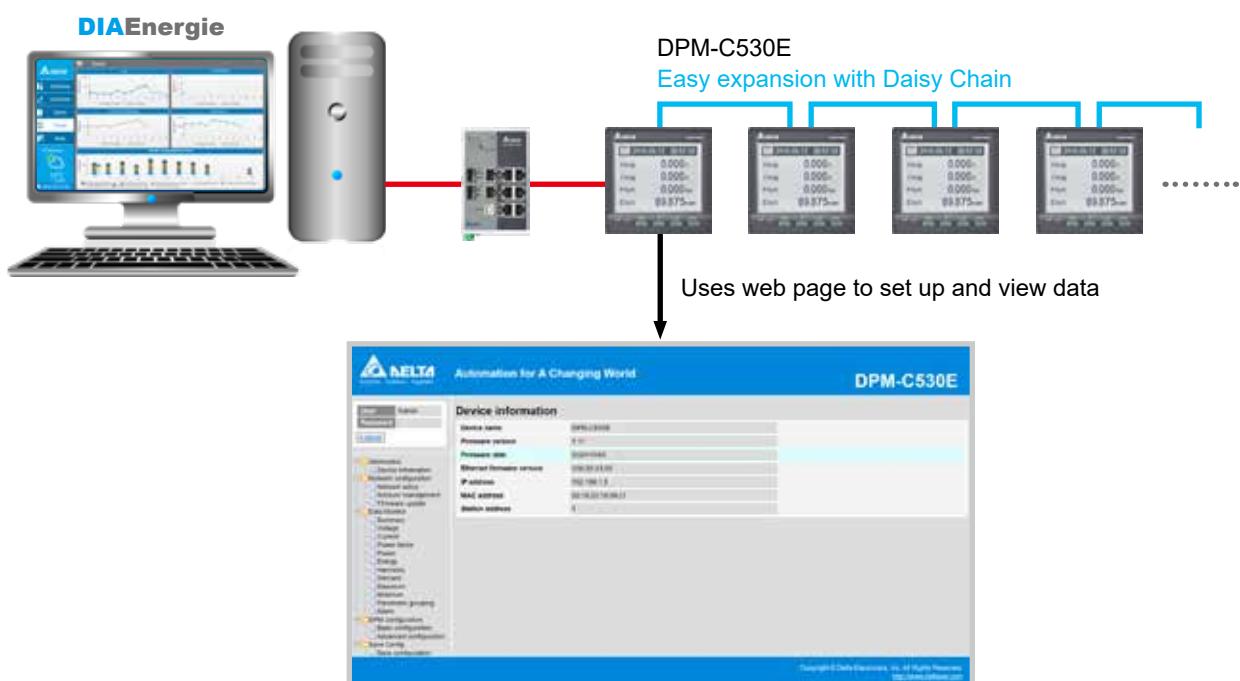
## Multi-Tariff

- Automatic measurement & calculation of power consumption during a specific time period
- Multiple interval groups setting to measure power consumption at different periods of time



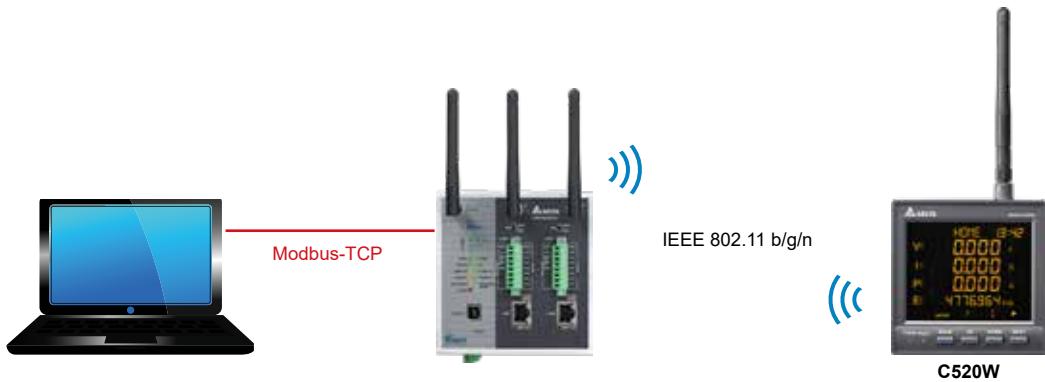
## Ethernet Communication

- Dual Ethernet protocols support Modbus TCP
- Easy serial connection without gateway, no need to occupy communication ports
- Basic settings and data viewing on web page



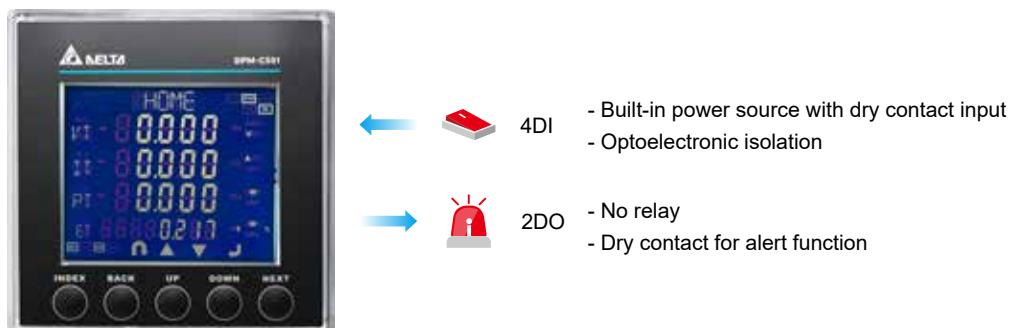
## WiFi

- WiFi transmission
  - Reduced wiring cost and time
  - High-speed data exchange and data transmission capability (faster than RS-485)
  - Highly secure wireless data exchange
- No wiring limit, reduces cost and manpower for wiring



## DI/DO Digital Input and Output Functions

- Adopts built-in power source to input alert signals with dry contact and save wiring cost; the optoelectronic isolation functions ensure cable safety
- Offers normal open (NO) relay and dry contact (2A/30V<sub>DC</sub> or 2A/250V<sub>AC</sub>) for output broadly applied in alert control output



# DMP-C Series Information

Model	DPM-C530	DPM-C530E	DPM-C520	DPM-C520W
Product Appearance				
Front Panel Dimensions	96x96 mm	96x96 mm	96x96 mm	96x96 mm
Accuracy Class				
Active Energy (IEC 62053-22)	Class 0.5S	Class 0.5S	Class 0.5S	Class 0.5S
Instantaneous Measurement				
Current	●	●	●	●
Voltage	●	●	●	●
Frequency	●	●	●	●
Active, Reactive and Apparent Power	●	●	●	●
Power Factor	●	●	●	●
Active, Reactive and Apparent Energy	●	●	●	●
Demand Value				
Current	●	●		
Power	●	●		
Calculation Mode	Fixed Block	Sliding Block/Fixed Block		
Power Quality Analysis				
Current/Voltage Unbalance	●	●	●	●
Total Harmonic Distortion (Current/Voltage)	●	●	●	●
Individual Current/Voltage Harmonics	31 <sup>st</sup>	31 <sup>st</sup>		
Advanced Function				
Max./Min. Instantaneous Values with Timestamp	●	●	●	●
Alarm Function	●	●	●	●
Alarm Condition	29	29	10	10
Alarm Logs	●	●		
Data Logs	●	●		
User-defined Modbus Address	35	35	5	5
Monthly Energy Usage	●	●		
Multi-Tariff (Section number)	8	8		
Multi-Language UI	Chinese/English/Japanese	Chinese/English/Japanese		
I/O				
Digital Input				
Relay				
Communication				
RS-485	●		●	●
Ethernet		● (2 ports)		
Modbus	RTU/ASCII	TCP	RTU	RTU/TCP
BACnet MS/TP	●			
WiFi (802.11 b/g/n)				●

Model	DPM-C320	DPM-C501L	DPM-C502
Product Appearance			
Front Panel Dimensions	72x72 mm	96x96 mm	96x96 mm
<b>Accuracy Class</b>			
Active Energy (IEC 62053-22)	Class 0.5S	0.5%	0.5%
<b>Instantaneous Measurement</b>			
Current	●	●	●
Voltage	●	●	●
Frequency	●	●	●
Active, Reactive and Apparent Power	●	●	●
Power Factor	●	●	●
Active, Reactive and Apparent Energy	●	●	●
<b>Demand Value</b>			
Current			
Power			●
Calculation Mode			Sliding Block
<b>Power Quality Analysis</b>			
Current/Voltage Unbalance	●	●	●
Total Harmonic Distortion (Current/Voltage)	●	●	●
Individual Current / Voltage Harmonics			31 <sup>st</sup>
<b>Advanced Function</b>			
Max./Min. Instantaneous Values with Timestamp	●	●	●
Alarm Function	●	●	●
Alarm Condition	10	10	10
Alarm Logs			●
Data Logs			
User-defined Modbus Address	5	5	5
Monthly Energy Usage			
Multi-Tariff (Section number)			4
Multi-Language UI			
<b>I/O</b>			
Digital Input		4	4
Relay		2	2
<b>Communication</b>			
RS-485	●	●	●
Modbus	RTU	RTU	RTU

# Technical Specifications

Model	DPM-C530	DPM-C530E	DPM-C520	DPM-C520W
<b>Measurement Accuracy</b>				
Current	± 0.5%	± 0.5%	± 0.5%	± 0.5%
Voltage	± 0.5%	± 0.5%	± 0.5%	± 0.5%
Active Energy			IEC 62053-22 Class 0.5S	
Reactive Energy	± 1%	± 1%	± 1%	± 1%
Apparent Energy	± 2%	± 2%	± 2%	± 2%
Active Power	± 0.5%	± 0.5%	± 0.5%	± 0.5%
Reactive Power	± 1%	± 1%	± 1%	± 1%
Apparent Power	± 2%	± 2%	± 2%	± 2%
Power Factor	± 0.5%	± 0.5%	± 0.5%	± 0.5%
Frequency	± 0.5%	± 0.5%	± 0.5%	± 0.5%
<b>Input</b>				
Measuring System Type	1P2W, 1P3W, 3P3W, 3P4W			
Voltage	35 V <sub>AC</sub> ~ 690 V <sub>AC</sub> (L-L) 20 V <sub>AC</sub> ~ 400 V <sub>AC</sub> (L-N)			
Current	1A/5A			
Frequency	45 ~ 70 Hz			
Control Power	AC: 100 ~ 240 V (max. power consumption 4.6 W) DC: 100 ~ 300 V			
<b>Data Record</b>				
Max./Min. Value	●	●	●	●
Alarm Status & Timestamp	●	●	●	●
Alarm Counting	●	●	●	●
Alarm Logs	500	500		
Data Logs	Up to 17 parameters with configurable interval & duration (e.g. 17 parameters for 30 days at 1 minute intervals)	Up to 17 parameters with configurable interval & duration (e.g. 17 parameters for 30 days at 1 minute intervals)		
Customizable Data Logs	●	●		
<b>Communication</b>				
Protocol (Interface)	Modbus RTU/ASCII (RS-485) BACnet MS/TP (RS-485)	Modbus TCP (Ethernet)	Modbus RTU (RS-485)	Modbus RTU (RS-485) / Modbus TCP (WiFi, IEEE802.11 b/g/n)
<b>Mechanical Design</b>				
IP Rating - Front Panel	IP52			
IP Rating - Case	IP20			
Dimensions (WxHxD, mm)	96 x 96 x 95.4	96 x 96 x 127.5	96 x 96 x 95.4	96 x 96 x 95.4
<b>Operating Environment</b>				
Operating Temperature	-20 °C ~ +60 °C			
Storage Temperature	-30 °C ~ +70 °C			
Relative Humidity	~ 95% RH			
Altitude	Below 2,000 meters			
<b>Electromagnetic Compatibility</b>				
Electrostatic Discharge	IEC 61000-4-2			
Immunity to Radiated Fields	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			
Radiated Emissions	FCC Part 15, EN 55011 Class A			
Conducted Emissions	FCC Part 15, EN 55011 Class A			
Harmonics Emissions	IEC 61000-3-2			
Flicker Emissions	IEC 61000-3-3			
<b>Certification</b>				
Safety	UL/CE/RCM	UL/CE		
Accuracy	IEC 62053-22/CMA			
WiFi				CE/FCC/JRF/KCC/NCC/NTC/IC

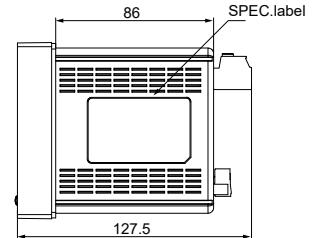
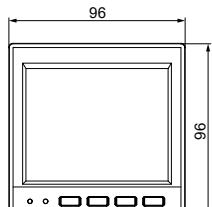
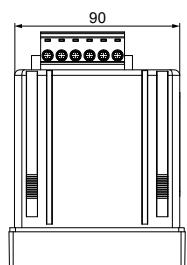
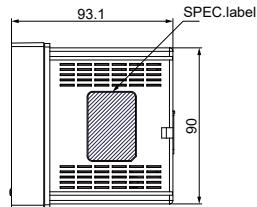
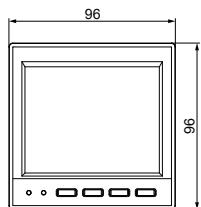
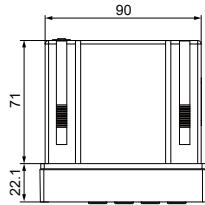
<b>Model</b>	<b>DPM-C320</b>	<b>DPM-C501L</b>	<b>DPM-C502</b>		
<b>Measurement Accuracy</b>					
<b>Current</b>	± 0.5%	± 0.5%	± 0.5%		
<b>Voltage</b>	± 0.5%	± 0.5%	± 0.5%		
<b>Active Energy</b>	IEC 62053-22 Class 0.5S	± 0.5%	± 0.5%		
<b>Reactive Energy</b>	± 1%	± 1%	± 1%		
<b>Apparent Energy</b>	± 2%	± 2%	± 2%		
<b>Active Power</b>	± 0.5%	± 0.5%	± 0.5%		
<b>Reactive Power</b>	± 1%	± 1%	± 1%		
<b>Apparent Power</b>	± 2%	± 2%	± 2%		
<b>Power Factor</b>	± 0.5%	± 0.5%	± 0.5%		
<b>Frequency</b>	± 0.5%	± 0.5%	± 0.5%		
<b>Input</b>					
<b>Measuring System Type</b>	1P2W, 1P3W, 3P3W, 3P4W				
<b>Voltage</b>	35V <sub>AC</sub> ~690V <sub>AC</sub> (L-L) 20V <sub>AC</sub> ~400V <sub>AC</sub> (L-N)				
<b>Current</b>	1A/5A				
<b>Frequency</b>	45~70Hz				
<b>Control Power</b>	AC: 100~240V (max. power consumption 4.6 W) DC: 100~300V				
<b>Data Record</b>					
<b>Max./Min. Value</b>	●	●	●		
<b>Alarm Status &amp; Timestamp</b>	●	●	●		
<b>Alarm Counting</b>	●	●	●		
<b>Alarm Logs</b>					
<b>Data Logs</b>					
	Fixed 4 parameters with configurable interval & duration (e.g. 4 parameters for 7 days at 1 minute intervals)				
<b>Customizable Data Logs</b>					
<b>Communication</b>					
<b>Protocol (Interface)</b>	Modbus RTU (RS-485)	Modbus RTU (RS-485)	Modbus RTU (RS-485)		
<b>Mechanical Design</b>					
<b>IP Rating - Front Panel</b>	IP52				
<b>IP Rating - Case</b>	IP20				
<b>Dimensions (WxHxD, mm)</b>	72x72x107.7	96x96x95.4			
<b>Operating Environment</b>					
<b>Operating Temperature</b>	-20 °C ~ +60 °C	-20 °C ~ +50 °C			
<b>Storage Temperature</b>	-30 °C ~ +70 °C	-30 °C ~ +60 °C			
<b>Relative Humidity</b>	~ 95% RH				
<b>Altitude</b>	Below 2,000 meters				
<b>Electromagnetic Compatibility</b>					
<b>Electrostatic Discharge</b>	IEC 61000-4-2				
<b>Immunity to Radiated Fields</b>	IEC 61000-4-3				
<b>Immunity to Fast Transients</b>	IEC 61000-4-4				
<b>Immunity to Impulse Waves</b>	IEC 61000-4-5				
<b>Conducted Immunity</b>	IEC 61000-4-6				
<b>Immunity to Magnetic Fields</b>	IEC 61000-4-8				
<b>Immunity to Voltage Dips</b>	IEC 61000-4-11				
<b>Radiated Emissions</b>	FCC Part 15, EN 55011 Class A				
<b>Conducted Emissions</b>	FCC Part 15, EN 55011 Class A				
<b>Harmonics Emissions</b>	IEC 61000-3-2				
<b>Flicker Emissions</b>	IEC 61000-3-3				
<b>Certification</b>					
<b>Safety</b>	UL/CE				
<b>Accuracy</b>	IEC 62053-22/CMA	CMA			

# Dimensions

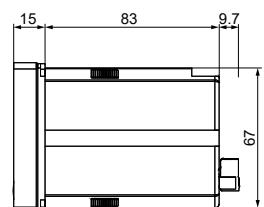
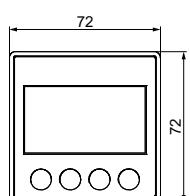
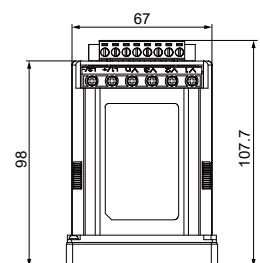
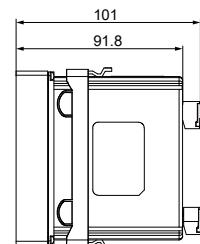
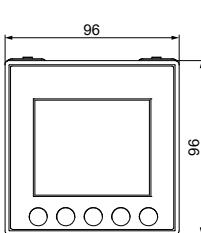
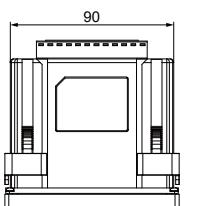
DPM-C530

DPM-C520

DPM-C520W



DPM-C501L  
DPM-C502



# DIN Rail Mount Type DPM-D Series

- Easy installation and integration for various equipment
- Applicable to general energy management systems
- Multiple energy measurement functions for different applications

## Applications

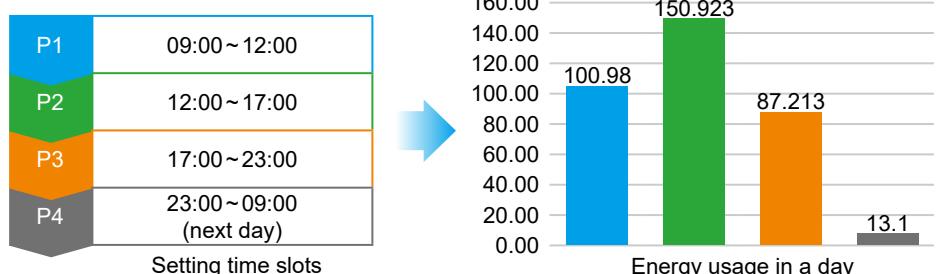
High power consuming equipment |  
Electrical equipment cabinet | Enclosure



## Features

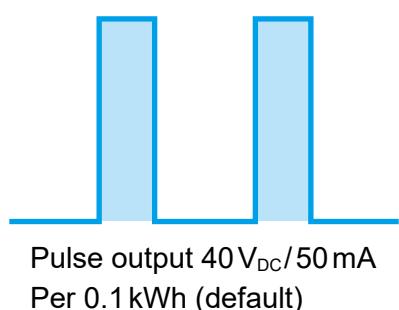
### Multi-Tariff

- Automatic measurement & calculation of power consumption during a specific time period
- Multiple interval groups setting to measure power consumption at different periods of time



### Pulse Output

- DPM-DA510/D530: Pulse output by active energy/reactive energy (import/export)
- Frequency divider: 1~9,999
- Pulse width: 0~5,000 ms (0 = 50% duty cycle)



## Data Recording

- User-defined time intervals for recording (Units: day/hour/min./sec.)
- Max. 50 parameters recording
- Max. 16 alarm conditions and max. 16 alarms recording

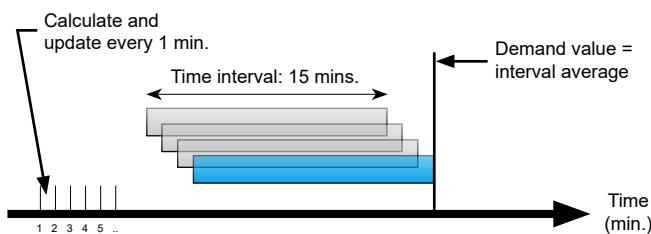
Recorded items vs. Record duration (at 1 minute intervals)

Parameter(s)	Recording Days
1	90
7	30
20	12

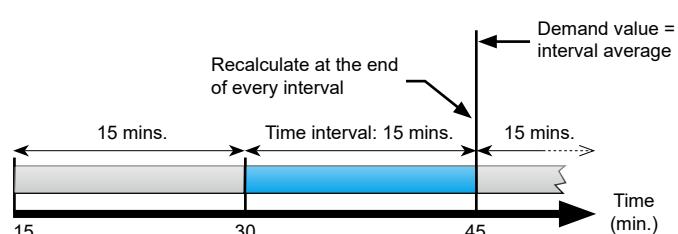
## Demand Calculation

- Defines time intervals (default: 15 mins.)
- Demand calculation methods: Sliding block/fixed block
- Calculates the max. demand value/time in each tariff period

### Sliding Block



### Fixed Block

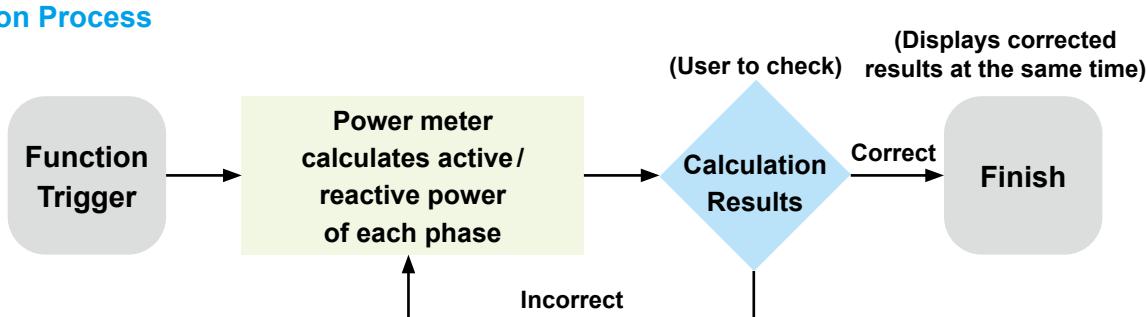


## Automatic Wiring Correction (DPM-DA530)

- Automatic wiring correction via algorithm to save manpower for on-site re-wiring
- Fixes phase wiring errors and adjusts power flow direction

\* Refer to product manual for function restrictions

## Operation Process



## DPM-D Series Information

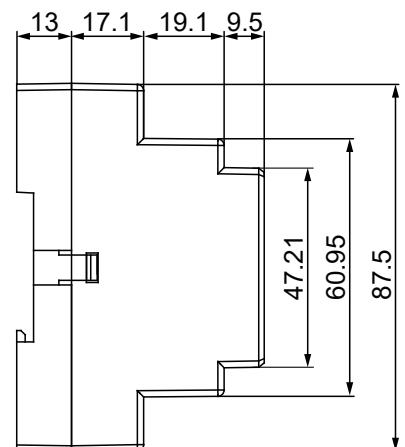
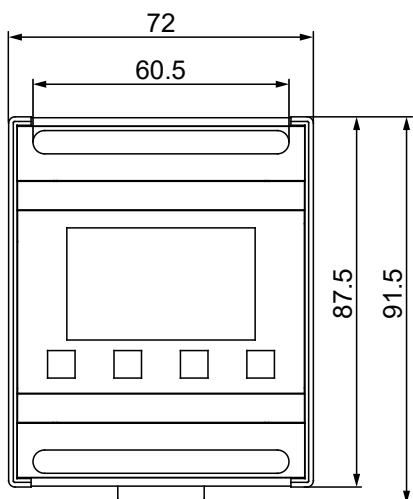
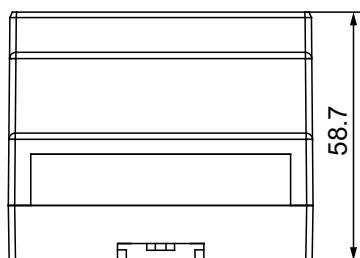
Model	DPM-D520I	DPM-DA530	DPM-DA510
Product Appearance			
<b>Accuracy Class</b>			
Active Energy (IEC 62053-22)	0.5%	0.5%	0.5%
<b>Instantaneous Measurement</b>			
Current	●	●	●
Voltage	●	●	●
Frequency	●	●	●
Active, Reactive and Apparent Power	●	●	●
Power Factor	●	●	●
Active, Reactive and Apparent Energy	●	●	●
Phasor Diagram (Current/Voltage)		●	●
<b>Demand Value</b>			
Current	●	●	
Power	●	●	
Calculation Mode	Fixed Block	Sliding Block/Fixed Block	
<b>Power Quality Analysis</b>			
Current/Voltage Unbalance	●	●	
Total Harmonic Distortion (Current/Voltage)	●	●	
Individual Current/Voltage Harmonics	31 <sup>st</sup>		
<b>Advanced Function</b>			
Max./Min. Instantaneous Values with Timestamp	●	●	
Alarm Function	●	●	
Alarm Condition	29	16	
Alarm Logs	●	●	
Data Logs	●	●	
User-defined Modbus Address	35	20	
Monthly Energy Usage	●		
Multi-Tariff (Section number)	8	8	
Auto Wiring Correction		●	
CO <sub>2</sub> Emission		●	
<b>I/O</b>			
Pulse Output		1	1
<b>Communication</b>			
RS-485	●	●	●
Modbus	RTU/ASCII	RTU	RTU

# Technical Specifications

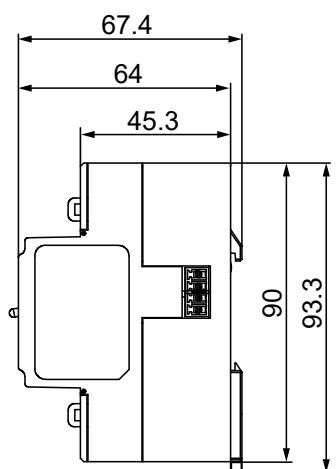
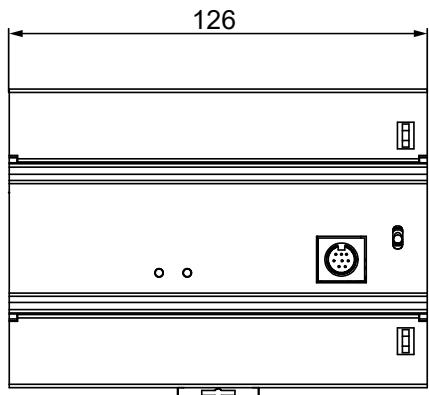
Model	DPM-D520I	DPM-DA530	DPM-DA510
<b>Measurement Accuracy</b>			
Current	± 0.5%	± 0.5%	± 0.5%
Voltage	± 0.5%	± 0.5%	± 0.5%
Active Energy	± 0.5%	± 0.5%	± 0.5%
Reactive Energy	± 1%	± 2%	± 2%
Apparent Energy	± 2%	± 2%	± 2%
Active Power	± 0.5%	± 0.5%	± 0.5%
Reactive Power	± 1%	± 2%	± 2%
Apparent Power	± 2%	± 2%	± 2%
Power Factor	± 0.5%	± 0.5%	± 0.5%
Frequency	± 0.5%	± 0.5%	± 0.5%
<b>Input</b>			
Measuring System Type	1P2W, 1P3W, 3P3W, 3P4W		
Voltage	35V <sub>AC</sub> ~690V <sub>AC</sub> (L-L) 20V <sub>AC</sub> ~400V <sub>AC</sub> (L-N)	35V <sub>AC</sub> ~600V <sub>AC</sub> (L-L) 20V <sub>AC</sub> ~350V <sub>AC</sub> (L-N)	
Current	63A	1A/5A	
Frequency	45~70Hz	45~65Hz	
Control Power	AC: 80~265V (Max. Power Consumption 4.6 W) DC: 100~300V	AC: 100~240V ( Max. Power Consumption 3W) DC: 100~250V	
<b>Data Record</b>			
Max./Min. Value	●	●	
Alarm Status & Timestamp	●	●	
Alarm Counting	●	●	
Alarm Logs	500	16	
Data Logs	Up to 17 parameters with configurable interval & duration (e.g. 17 parameters for 30 days at 1 minute intervals)	Up to 50 parameters with configurable interval & duration (e.g. 7 parameters for 30 days at 1 minute intervals)	
Customizable Data Logs	●	●	
<b>Communication</b>			
Protocol (Interface)	Modbus RTU/ASCII (RS-485)	Modbus RTU (RS-485)	Modbus RTU (RS-485)
<b>Mechanical Design</b>			
IP Rating - Case	IP20	IP20	
Dimensions (WxHxD, mm)	126x90x67.4	72x87.5x58.7	
<b>Operating Environment</b>			
Operating Temperature	-20°C~+60°C	0°C~+60°C	
Storage Temperature	-30°C~+70°C	-10°C~+70°C	
Relative Humidity	~95% RH		
Altitude	Below 2,000 meters		
<b>Electromagnetic Compatibility</b>			
Electrostatic Discharge	IEC 61000-4-2		
Immunity to Radiated Fields	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		
Radiated Emissions	FCC Part 15, EN 55011 Class A		
Conducted Emissions	FCC Part 15, EN 55011 Class A		
Harmonics Emissions	IEC 61000-3-2		
Flicker Emissions	IEC 61000-3-3		
<b>Certification</b>			
Safety	CE/RCM	CE	
Accuracy	CMA		

## Dimensions

DPM-DA530  
DPM-DA510



DPM-D520I



# Multi-loop Type DPM-M Series

- Multiple and selective circuit monitoring reduces the use of power meters in large-scale areas
- Suitable for applications with lots of power circuits to save cost
- AC/DC measurement

## Applications

Shopping mall | Dormitory | Telecommunication System

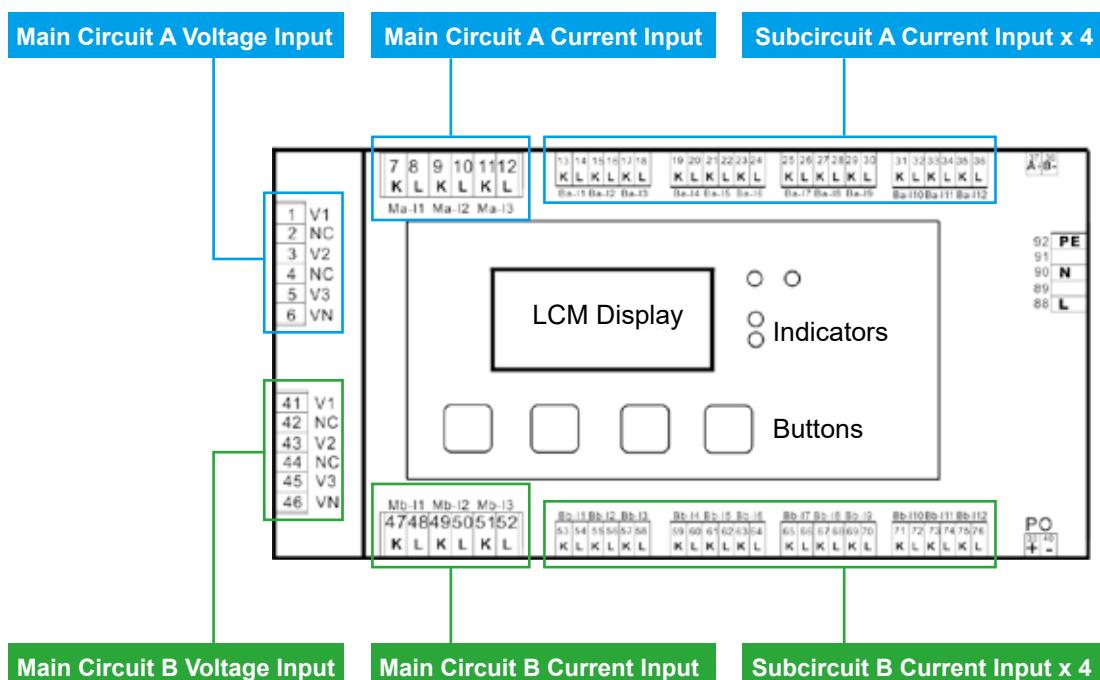


## Features

### Scalable Multi-Loop Configuration (DPM-MA3222)

- Dual main circuits with isolation for connection to different power systems
- Each main circuit connects 4 subcircuits; configures a total of 8 circuits (three-phase) or 24 circuits (single-phase)
- Subcircuit can be set to three-phase, single-phase, or three-phase & single-phase modes

**Multi-loop  
AC Power Meter**  
**DPM-MA3222**



## I/O Configuration (DPM-MA3222)

- Various I/O types for control and integration with peripheral devices

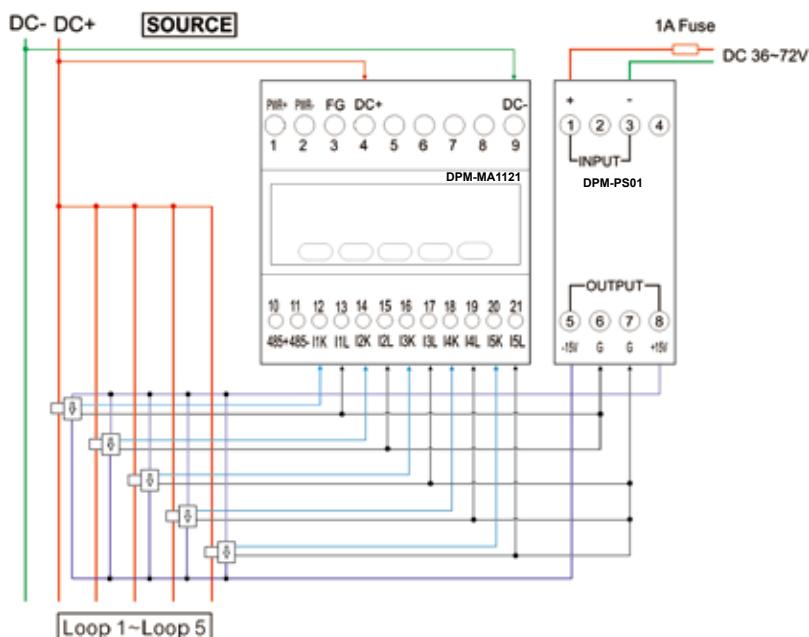


I/O Type	Qty.	Functions
Relay Output (RO)	4	<ul style="list-style-type: none"> <li>5A/250V<sub>AC</sub>, 5A/30V<sub>DC</sub></li> <li>Alarm linkage: Hi/Lo/Hi hold/Lo hold</li> </ul>
Digital Input (DI)	2	<ul style="list-style-type: none"> <li>Demand calculation trigger/stop</li> <li>Record clearing: demand, max. demand, energy, max./min. value</li> <li>Relay homing</li> </ul>
Pulse Output (PO)	1	<ul style="list-style-type: none"> <li>30V<sub>DC</sub>, 30mA</li> <li>Active/Reactive power output of any circuit</li> </ul>

## Multi-Loop DC Measurement (DPM-MA1121)

- Supports max. 5 DC circuits
- Suitable for telecommunication, green energy, energy storage applications
- Dedicated power supply for Hall sensor (optional)

Multi-loop  
DC Power Meter  
DPM-MA1121



Hall Current Transformer (CT) Power Supply  
DPM-PS01



- Input voltage: 36 ~ 72 V<sub>DC</sub>
- Output voltage: ±15 V<sub>DC</sub>
- Output current: ±100 mA

## DPM-M Series Information

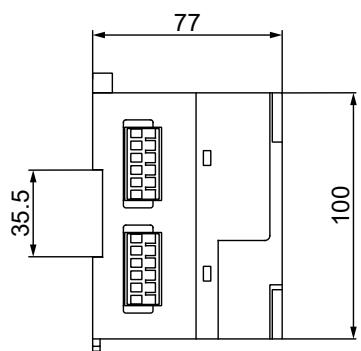
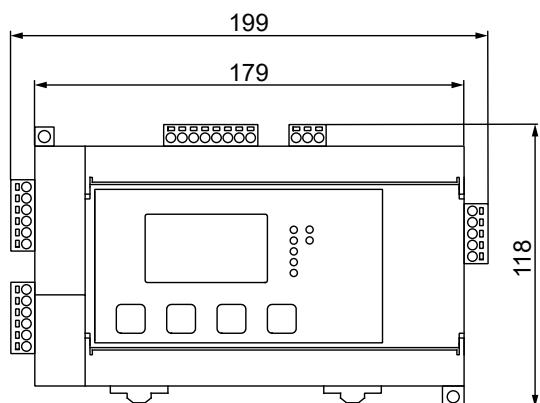
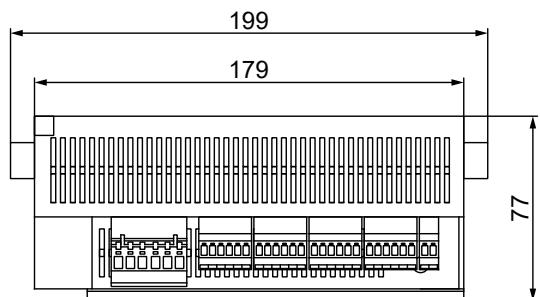
Model	DPM-MA3222	DPM-MA1121
Product Appearance		
<b>Accuracy Class</b>		
Active Energy	0.5%	0.5%
<b>Circuit Qty.</b>		
3-Phase Measurement	8	
Single-Phase Measurement	24	5
<b>Instantaneous Measurement</b>		
Current	●	●
Voltage	●	●
Frequency	●	
Active power	●	●
Reactive and Apparent Power	●	
Power Factor	●	
Active Energy	●	●
Reactive and Apparent Energy	●	
<b>Demand Value</b>		
Current	●	
Power	●	
Calculation Mode	Sliding Block/Fixed Block	
<b>Power Quality Analysis</b>		
Current/Voltage Unbalance	●	
Total Harmonic Distortion (Current/Voltage)	●	
Individual Current/Voltage Harmonics	31 <sup>st</sup>	
<b>Advanced Function</b>		
Max./Min. Instantaneous Values with Timestamp	●	
Alarm Function	●	
Alarm Condition	48	
Data Logs	●	●
User-defined Modbus Address	80	20
<b>I/O</b>		
Digital Input	2	
Relay	4	
Pulse Output	1	
<b>Communication</b>		
RS-485	●	●
Modbus	RTU	RTU

# Technical Specifications

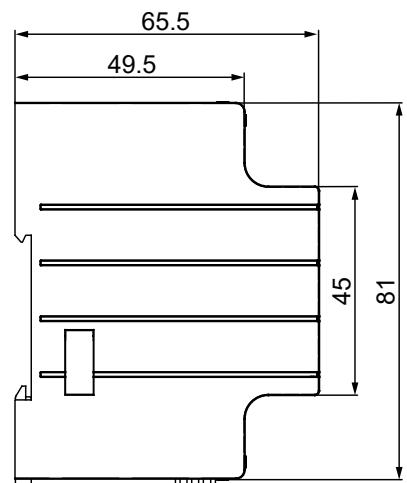
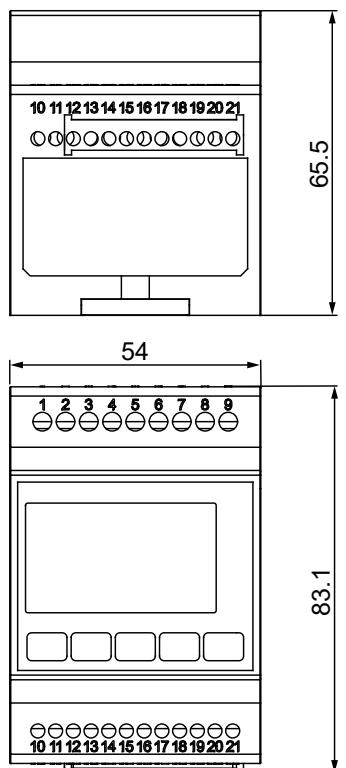
Model	DPM-MA3222	DPM-MA1121
<b>Measurement Accuracy</b>		
<b>Current</b>	± 0.5%	± 0.5%
<b>Voltage</b>	± 0.5%	± 0.5%
<b>Active Energy</b>	± 0.5%	± 0.5%
<b>Reactive Energy</b>	± 2%	N/A
<b>Apparent Energy</b>	± 2%	N/A
<b>Active Power</b>	± 0.5%	± 0.5%
<b>Reactive Power</b>	± 2%	N/A
<b>Apparent Power</b>	± 2%	N/A
<b>Power Factor</b>	± 0.5%	N/A
<b>Frequency</b>	± 0.5%	N/A
<b>Input</b>		
<b>Measuring System Type</b>	1P2W, 1P3W, 3P3W, 3P4W	1P2W
<b>Voltage</b>	35V <sub>AC</sub> ~600V <sub>AC</sub> (L-L) 20V <sub>AC</sub> ~400V <sub>AC</sub> (L-N)	≤100V <sub>DC</sub>
<b>Current</b>	Main: 5A Subcircuit: 333mV	±4V <sub>DC</sub> (Hall CT)
<b>Frequency</b>	45 ~ 65 Hz	
<b>Control Power</b>	AC: 100~240V (max. power consumption 15W) DC: 100~250V	DC: 20~56V (max. power consumption 4W)
<b>Data Record</b>		
<b>Max./Min. Value</b>	●	
<b>Data Logs</b>	Up to 86 parameters with configurable interval & duration (e.g. 40 parameters for 7 days at 1 minute Intervals)	Up to 21 parameters with configurable interval & duration (e.g. 20 parameters for 6 days at 1 minute Intervals)
<b>Customizable Data Logs</b>	●	●
<b>Communication</b>		
<b>Protocol (Interface)</b>	Modbus RTU (RS-485)	Modbus RTU (RS-485)
<b>Mechanical Design</b>		
<b>IP Rating - Case</b>	IP20	
<b>Dimensions (WxHxD, mm)</b>	199x118x77	54x81x65.5
<b>Operating Environment</b>		
<b>Operating Temperature</b>	0°C~+60°C	
<b>Storage Temperature</b>	-10°C~+70°C	
<b>Relative Humidity</b>	~95% RH	
<b>Altitude</b>	Below 2,000 meters	
<b>Electromagnetic Compatibility</b>		
<b>Electrostatic Discharge</b>	IEC 61000-4-2	
<b>Immunity to Radiated Fields</b>	IEC 61000-4-3	
<b>Immunity to Fast Transients</b>	IEC 61000-4-4	
<b>Immunity to Impulse Waves</b>	IEC 61000-4-5	
<b>Conducted Immunity</b>	IEC 61000-4-6	
<b>Immunity to Magnetic Fields</b>	IEC 61000-4-8	
<b>Immunity to Voltage Dips</b>	IEC 61000-4-11	
<b>Radiated Emissions</b>	FCC Part 15, EN 55011 Class A	
<b>Conducted Emissions</b>	FCC Part 15, EN 55011 Class A	
<b>Harmonics Emissions</b>	IEC 61000-3-2	
<b>Flicker Emissions</b>	IEC 61000-3-3	
<b>Certification</b>		
<b>Safety</b>	CE	

## Dimensions

**DPM-MA3222**



**DPM-MA1121**



# Current Transformer (CT)

- Accessories for current measurement, suitable for all types of power meters
- Proportionally transforms high circuit current into low current (or low voltage) signals for current measurement

## Applications

Matches with all types of power meters to transform high current into measurable low current (voltage)

## Product Information (Refer to Ordering Information for more details)

Type	Model	Features
Solid Core CT 	DCT-MC	<ul style="list-style-type: none"><li>• Installation through the CT core</li><li>• Applicable to new system configuration</li></ul>
Compact Split Core CT 	DCT-CS	<ul style="list-style-type: none"><li>• Compact size, easy to install/dismantle by opening the split top</li><li>• Suitable for various applications</li></ul>
	DCT-MV	
Split Core CT 	DCT-S	<ul style="list-style-type: none"><li>• Easy to install/dismantle by opening the split top</li><li>• Complies with safety certifications</li></ul>

# Ordering Information

## Panel Mount Type Power Meter

Model	Functions (Refer to Technical Specs. for details)	Front Panel Dimensions (mm)	Current Measurement	Communication	Certifications
DPM-C530	<ul style="list-style-type: none"> <li>Electrical parameters measurement (Active energy accuracy Class 0.5S)</li> <li>Multi-tariff power measurement</li> </ul>	96x96	Through external CT (secondary side): 1A/5A	RS-485 (Modbus/BACNet MS/TP)	CE/UL/RCM
DPM-C530E	<ul style="list-style-type: none"> <li>Demand value calculation</li> <li>Data recording</li> <li>Harmonics measurement</li> </ul>			Ethernet x2 (Modbus)	CE/UL
DPM-C502	<ul style="list-style-type: none"> <li>Electrical parameters measurement (Active energy accuracy 0.5%)</li> <li>4DI/2DO</li> <li>Other functions are similar to DPM-C530, refer to Technical Specs. for details</li> </ul>			RS-485 (Modbus)	
DPM-C520	<ul style="list-style-type: none"> <li>Electrical parameters measurement (Active energy accuracy Class 0.5S)</li> </ul>	96x96	RS-485 (Modbus)	Wifi (802.11 b/g/n)	CE/UL
DPM-C520W	<ul style="list-style-type: none"> <li>Harmonics measurement</li> </ul>				
DPM-C320		72x72			
DPM-C501L	<ul style="list-style-type: none"> <li>Electrical parameters measurement (Active energy accuracy 0.5%)</li> <li>Harmonics measurement</li> <li>4DI/2DO</li> </ul>	96x96		RS-485 (Modbus)	

## DIN Rail Mount Type Power Meter

Model	Functions (Refer to Technical Specs. for details)	Current Measurement	Communication	Certifications
DPM-D520I	<ul style="list-style-type: none"> <li>Electrical parameters measurement (Active energy accuracy 0.5%)</li> <li>Multi-tariff power measurement</li> </ul>	Direct measurement: 63A	RS-485 (Modbus)	CE
DPM-DA530	<ul style="list-style-type: none"> <li>Demand value calculation</li> <li>Data recording</li> <li>Harmonics measurement</li> <li>Pulse output x 1 (DPM-DA530)</li> </ul>			
DPM-DA510	<ul style="list-style-type: none"> <li>Electrical parameters measurement (Active energy accuracy 0.5%)</li> <li>Pulse output x 1</li> </ul>	Through external CT (secondary side): 1A/5A	RS-485 (Modbus)	CE

## Multi-Loop Type Power Meter

Model	Functions (Refer to Technical Specs. for details)	Current Measurement	Communication	Certifications
DPM-MA3222	<ul style="list-style-type: none"> <li>AC electrical parameters measurement (Active energy accuracy 0.5%)</li> <li>Circuit qty.: 8 (three-phase)/24 (single-phase)</li> <li>Data recording</li> <li>Harmonics measurement</li> <li>2DI/4RO/1PO</li> </ul>	Through external CT <ul style="list-style-type: none"> <li>Main circuit: 5A (secondary side)</li> <li>Subcircuit: 333mV (secondary side)</li> </ul>	RS-485 (Modbus)	CE
DPM-MA1121	<ul style="list-style-type: none"> <li>DC electrical parameters measurement (Active energy accuracy 0.5%)</li> <li>Circuit qty.: 5</li> <li>Data recording</li> </ul>	Through Hall Sensor		

## Solid Core CT

Model	Certification	Primary Current	Secondary Current	Max. Load	Measurement Accuracy (PF=1)	Dimensions (Unit: mm)
DCT-MC010-5	-	100A	5A	1.5VA	1%	Outer: 80x60x38 Inner: 20x30.5
DCT-MC020-5	-	200A	5A	3.75VA	0.5%	
DCT-MC030-5	-	300A	5A	5VA	0.5%	Outer: 98x74.5x43 Inner: 42x42
DCT-MC040-5	-	400A	5A	7.5VA	0.5%	
DCT-MC050-5	-	500A	5A	5VA	0.5%	Outer: 127x103x45 Inner: 51x61
DCT-MC060-5	-	600A	5A	10VA	0.5%	

## Compact Split Core CT

Model	Certification	Primary Current	Secondary Current	Wiring Length	Measurement Accuracy (PF=1)	Dimensions (Unit: mm)
DCT-CS010-5	-	100A	5A	1,000 mm	1%	Outer: 66.8x49.8x34.2 Inner: 23.8x25.2
DCT-CS020-5	-	200A	5A	1,000 mm	1%	
DCT-CS030-5	-	300A	5A	1,000 mm	1%	
DCT-CS040-5	-	400A	5A	1,000 mm	1%	Outer: 85x69x42.5 Inner: 36.5x36.5
DCT-CS050-5	-	500A	5A	1,000 mm	1%	
DCT-CS060-5	-	600A	5A	1,000 mm	1%	
DCT-MV005-3	CE	5A	330mV	1,200 mm	1%	Outer: 30.8x28.8x42.8 Inner: Φ10.2
DCT-MV060-3	CE	60A		1,200 mm	0.5%	Outer: 30.3x33.9x49 Inner: Φ16.1
DCT-MV100-3	CE	100A		1,200 mm	0.5%	
DCT-MV200-3	CE	200A		1,200 mm	0.5%	Outer: 53.3x40.2x70 Inner: Φ24.1
DCT-MV300-3	CE	300A		1,200 mm	0.5%	Outer: 67x42.8x83 Inner: Φ24.1
DCT-MV400-3	CE	400A		1,200 mm	0.5%	

## Split Core CT

Model	Certification	Primary Current	Secondary Current	Max. Load	Measurement Accuracy (PF=1)	Dimensions (Unit: mm)
DCT-S201B	UL	100A	5A	1.0VA	1.0%	Outer: 90x40x110 Inner: 30x20
DCT-S211B	UL	200A	5A	1.0VA	0.5%	
DCT-S221B	UL	300A	5A	1.5VA	0.5%	
DCT-S231B	UL	400A	5A	1.5VA	0.5%	
DCT-S241B	UL	500A	5A	2.5VA	0.5%	Outer: 115x37x159 Inner: 80x50
DCT-S251B	UL	600A	5A	2.5VA	0.5%	
DCT-S261B	UL	750A	5A	2.5VA	0.5%	
DCT-S2C1B	UL	800A	5A	3.75VA	0.5%	
DCT-S271B	UL	1,000A	5A	5VA	0.5%	Outer: 89x40x115 Inner: 32x21
DCT-S301C	CE	100A	5A	1.5VA	1.0%	
DCT-S211C	CE	200A	5A	1.0VA	0.5%	
DCT-S221C	CE	300A	5A	1.5VA	0.5%	
DCT-S231C	CE	400A	5A	2.5VA	0.5%	Outer: 116x51x145 Inner: 80x50
DCT-S241C	CE	500A	5A	2.5VA	0.5%	
DCT-S251C	CE	600A	5A	2.5VA	0.5%	
DCT-S261C	CE	750A	5A	2.5VA	0.5%	
DCT-S271C	CE	1,000A	5A	5VA	0.5%	Outer: 146x51.6x196 Inner: 80x122
DCT-S281C	CE	1,500A	5A	7.5VA	0.5%	
DCT-S291C	CE	2,000A	5A	10VA	0.5%	
DCT-S2A1C	CE	2,500A	5A	15VA	0.5%	
DCT-S2B1C	CE	3,000A	5A	20VA	0.5%	Outer: 186x67x250 Inner: 81x160.5

## Hall Sensor Power Supply

Model	Input Voltage		Output		Ripple & Noise (mVp-p, Typ./Max.)	Efficiency (% , @ Full load)	Dimensions (mm)
DPM-PS01	Normal (V <sub>dc</sub> , Range)	Max. (V <sub>dc</sub> )	Voltage (V <sub>dc</sub> )	Current (mA, Max./Min.)	40/75	80	65.5x26x81
	48 (36~72)	80	±15	±100/±5			

# Global Operations

## ASIA (Taiwan)



Taoyuan  
Technology Center  
(Green Building)



Taoyuan Plant 1



Tainan Plant  
(Diamond-rated Green Building)

## ASIA (China)



Wujiang Plant 3



Shanghai Office



**ASIA (Japan)**

Tokyo Office

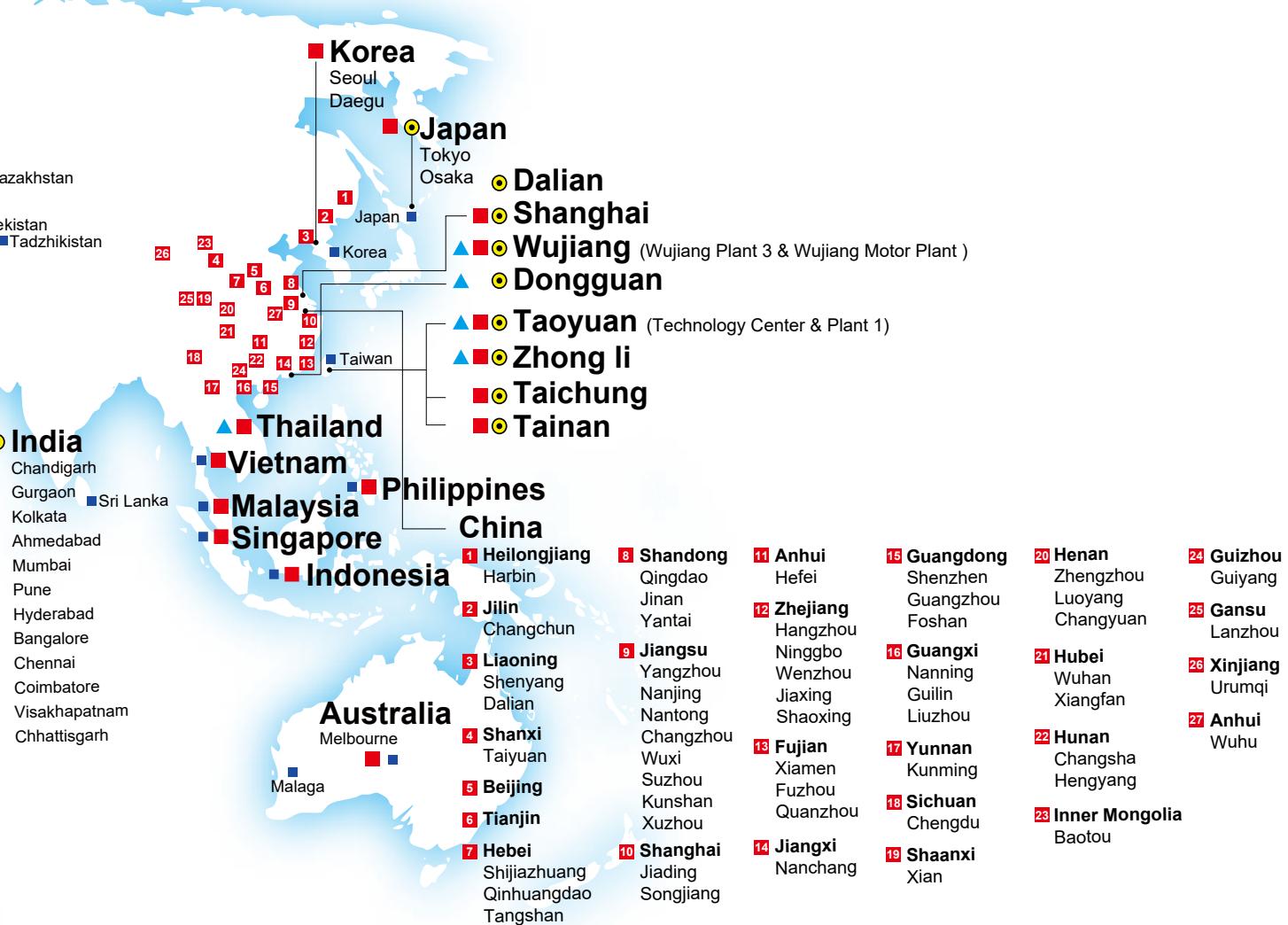
**ASIA (India)**Rudrapur Plant  
(Green Building)**EUROPE**

Amsterdam, the Netherlands

**AMERICA**

Research Triangle Park, U.S.A.

▲ 6 Factories ■ 117 Branch Offices ○ 13 R&D Centers ■ 915 Distributors





Smarter. Greener. Together.

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