

Automation for a Changing World

# Power Meter DPM-C530





Delta's Power Meter DPM-C530 Series offers precise measurement of various electrical energy values and power quality parameters, including power factor, harmonics, and current/voltage unbalance with functions such as off-limit alarms and history logs. It provides exceptional communication quality and monitoring functions that are especially suitable for sectors where power quality is critical.





# **Features**

# **High Precision Power Measurement**

- ▶ Highly precise measurement of bidirectional electrical energy and power parameters, meeting Class 0.5S of IEC62053 and CNS14607 standards and certified to CMC.
- Supports power quality measurement, including total harmonic distortion, up to 31<sup>st</sup> harmonics, voltage and current unbalance, and more



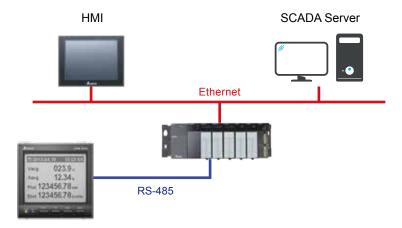
## Large Screen LCD

White-light widescreen LCD with resolution of 198x160 dots



# **Easy Operation & Installation**

- ▶ Two mounting clips hold the meter in place, no other tools required
- Language customization: Traditional Chinese, Simplified Chinese & English
- ▶ Built-in RS-485 communication port supports Modbus RTU/ASCII
- ▶ Transmission of all measurement values to the upper-level controllers via communication



### **Event Alarms and History Logs**

- ▶ Built-in 8M bytes of storage for up to 500 units of event records, the highest capacity in the industry
- ▶ Keeps max. 2 months of power and electrical energy measurement values for history analysis
- ▶ 29 built-in types of event alarms
- ► Front LED indicators for real-time alarms. Alarm messages with time stamps can be transmitted to upper-level controllers via communication



#### **Auto Meter Reading**

Two built-in individual data registers record real energy and reactive energy in certain given time laps when triggered by communication

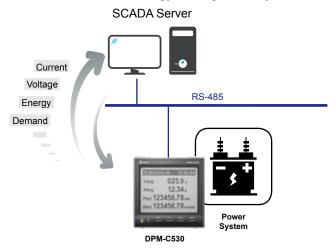




# **Features**

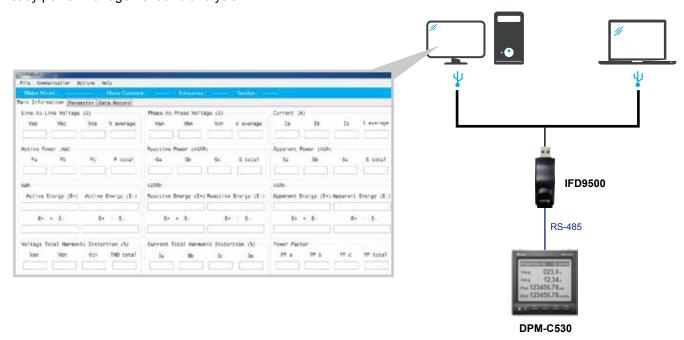
# **Parameter Grouping**

Grouping the measurands for faster data transmission and reading by the upper-level controllers improves the efficiency and performance of the whole energy management system



# **PC-Based Configuration Software**

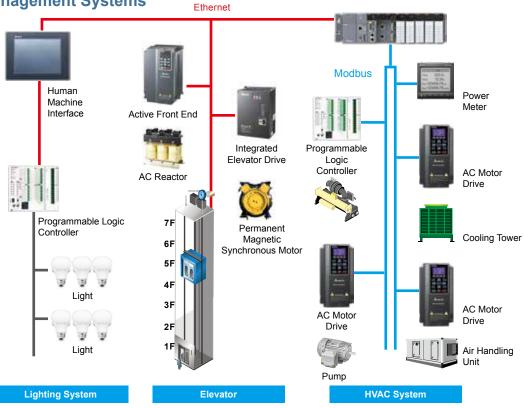
Utilizing DPMSoft software through Modbus communication for power meter setup and data acquisition provides easy power management and analysis



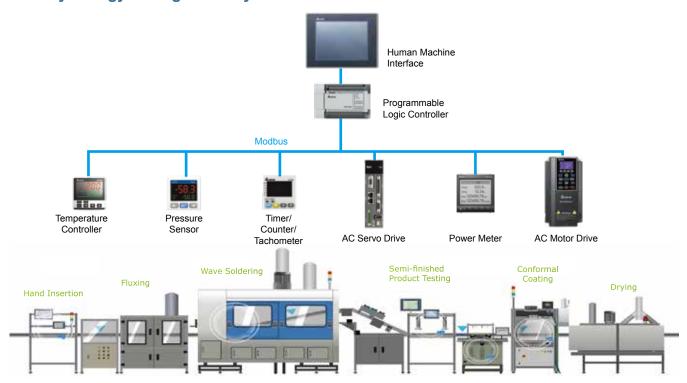
# **Applications**

Medium/low voltage power distribution panels / Energy Management Systems / Building Energy Management Systems / Factory Energy Management Systems

# **Energy Management Systems**



# **Factory Energy Management Systems**



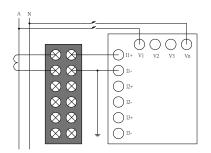


# **Specifications**

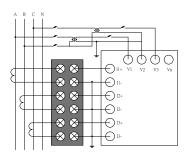
		Voltage, Current	±0.2%
Measurement Accuracy	Power	J.	±0.2%
		Active Power, Reactive Power, Apparent Power	
	Electrical	Active	±0.5%
	Energy	Reactive	±0.5%
	Power Factor		±0.5%
	Active Power Demand Value		±0.5%
	Reactive Power Demand Value		±0.5%
	Apparent Power Demand Value		±0.5%
	Total Harmonic Distortion THD (Current)		±1%
	Total Harmonic Distortion THD (Voltage)		±1%
	Harmonics		±1%
		Frequency Accuracy	±0.5%
Input	Wiring Method		1 Phase 2 Wire (1CT) / 1 Phase 3 Wire (2CT) 3 Phase 3 Wire, Δ connection (3CT, no PT) 3 Phase 3 Wire, Δ connection (2CT, no PT) 3 Phase 3 Wire, Δ connection (3CT, 2PT) 3 Phase 4 Wire, Y connection (3CT, no PT) 3 Phase 4 Wire, Y connection (3CT, 3 PT) 3 Phase 4 Wire, Y connection (2CT, 3 PT) Line voltage: 35~690V AC (L-L)
	Voltage	Operating Range	Phase voltage: 20~400V AC(L-N)
	Current	Operating Range	1A/5A
	Frequency		45~70Hz
Alarm		Alarm Parameter Selections	29 types of Over/Under limit alarm
Power Supply	Operating Range		80~265VAC (Max. power consumption 3.7W) 100~300VDC
Communication Interface	RS-485 Interface		Modbus-RTU, Modbus-ASCII Baud rate: 9600/19200/38400bps
Case	Dimension (W*H*D)		96*96*95.4mm
	IP Degree of Protection		IP52(Front panel), IP20(Power meter)
Environment	Operating Temperature		-20°C ~ +70°C
	Storage Temerature		-30°C ~ +80°C
	Humidity Rating		~95% RH
	Altitude		Below 2000m
	Ailitude		200011 2000111

# **Wiring Diagram**

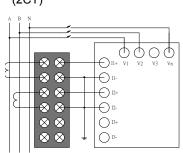
• 1 Phase 2 Wire (1CT)



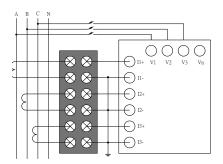
• 3 Phase 3 Wire,  $\Delta$  connection (3CT, 2PT)



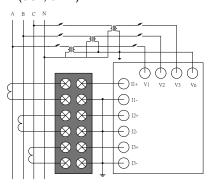
• 1 Phase 3 Wire (2CT)



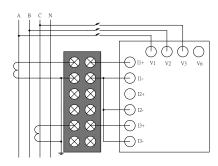
• 3 Phase 3 Wire, ∆ connection (3CT, no PT)



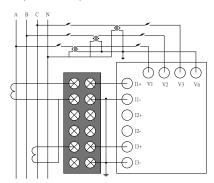
• 3 Phase 4 Wire , Y connection (3CT, 3 PT)



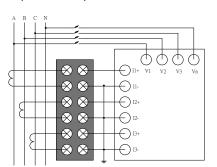
 3 Phase 3 Wire, ∆ connection (2CT, no PT)



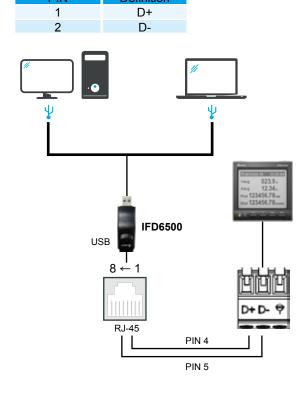
 3 Phase 4 Wire, Y connection (2CT, 3 PT)



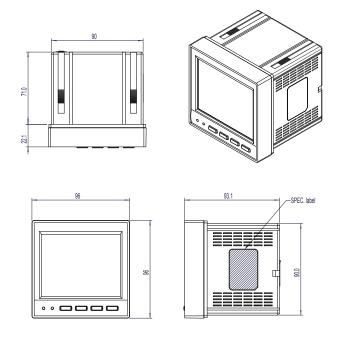
 3 Phase 4 Wire, Y connection (3CT, no PT)



# **DPMSoft User Guide**



# **Dimensions** (mm)







Smarter. Greener. Together.

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<sup>\*</sup>We reserve the right to change the information in this catalogue without prior notice.