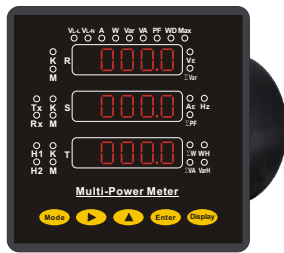


集合式電力錶 MULTI - POWER METER

Case : 110x110mm



CP500 Multi-Power Meter
CP510 Multi-Power Meter(Demand)

Case : 144x144mm



PM900 Multi-Power Meter
PM910 Multi-Power Meter(Demand)

Features

- Display of all the electric parameters V, A, W, Var, VA, PF, Hz, WH, VarHect.
- True RMS conversion.
- Maximum function.
- Field programmable PT and CT ratio.
- Memory for all setup and energy data.
- Option :
 - 2 channels digital input
 - 2 channels D/O output.

Specifications

- Display** : Red LED 0.4" high --- CP500
Red LED 0.56" high --- PM900
- Over range Indication** : " o.L "
- Conversion Rate** : 1 / sec.
- Isolation** : Input / Output / Power / Case
- Operating Temp.** : 0~60°C / Below 90%R.H.
- Storage Temp.** : -10~70°C / Below 80% R.H.
- Temp. Coefficient** : $\pm 0.1\%$ F.S /°C
- CT, PT ratio** : 1~9999
- Interface** : RS-485(Standard)
- Power Supply** : AC 90~260V, 50/60Hz
- Option** : DC 24, 120V $\pm 20\%$
- Power Consumption** : Approx. 7VA
- Dielectric Strength** : DIN-IEC688, AC 2.3KV/1min, between terminal.
AC 2.8KV/1min, between terminal and case
- Isolation Resistance** : DC 500V, 100M Ω at above terminals
- Dimensions** : 110(W) \times 110(H) \times 140(D)mm --- CP500
144(W) \times 144(H) \times 100(D)mm --- PM900

Input

- Voltage** : V1, V2, V3, Neutral
(These are the 3phase Voltage and neutral)
- Range** : 600VL-L / 347VL-N
- Current** : 1S, 1L, 2S, 2L, 3S, 3L
(These are the 3phase currents)
- Range** : 0.05~1A, 0.5~5A
- Over load** : Voltage.....750V continuous
1.25 \times rated continuous
Current.....3 \times rated continuous
10 \times rated for 10sec.
- Burden** : $\leq 0.2VA$ per Voltage circuit
 $\leq 0.2VA$ per Current circuit
- Frequency** : 45~65Hz

RS-485 Interface

- Address : 1 ~ 255
- Baudrate : 2.4K, 4.8K, 9.6K, 19.2K, 38.4K, 57.6K, 115.2K
- Protocol : Modbus RTU Mode

DO output

- 2 channel Relay output
- Contact Capacity :
AC 250V, 1A resistive load
DC 30V, 2A resistive load

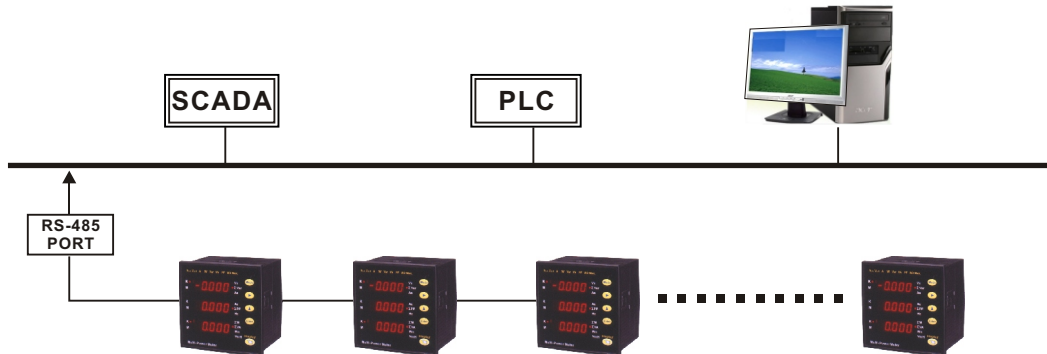
DI input

- Digital input : 2 x point
- Output : RS-485

■ RS-485 Connection

We use the most convenient and the easiest RS-485 as our standard output port, besides, we adopt Modbus RTU mode, one of the most popular protocol in the world, as our standard protocol.

RS-485 communications allows multiple devices to be connected on the same bus. Up to 30 devices can be connected on a single RS-485 bus, which consists of a shield twisted pair cable. The overall length of the RS-485 cable connecting all devices cannot exceed 4000ft (1219m).



■ Power Meter

Measurement	Items	PM900 / CP500	PM910 / CP510
V_{L-N}	V1, V2, V3, V_E	●	●
V_{L-L}	V12, V23, V13, V_E	●	●
A	A1, A2, A3, A_E	●	●
W	W1, W2, W3, ΣW	●	●
Var	Var1, Var2, Var3, ΣVar	●	●
VA	VA1, VA2, VA3, ΣVA	●	●
PF	PF1, PF2, PF3, ΣPF	●	●
Hz		●	●
WH	ΣWH	●	●
VarH	$\Sigma VarH$	●	●
Demand W	DW, Max.DW (1~60min free setting)		●
RS-485		●	●

■ Programmable Measurement & Indicating

Items	L1	L2	L3	Total	Average	Accuracy(F.S)	Display (Max.)
V_{L-N}	V1	V2	V3		V_E	$\pm 0.25\%$	9999V / KV
V_{L-L}	V12	V23	V13		A_E	$\pm 0.25\%$	9999A / KA
A	A1	A2	A3	ΣW		$\pm 0.5\%$	$\pm 9999W / KW / MW$
W	W1	W2	W3		ΣVar	$\pm 0.5\%$	$\pm 9999Var / KVar / MVar$
Var	Var1	Var2	Var3	ΣVA	$\pm 0.5\%$	9999VA / KVA / MVA	
VA	VA1	VA2	VA3	ΣPF	$\pm 0.5\%$	± 0.999	
PF	PF1	PF2	PF3	WH	$\pm 0.5\%$	9999999999 KWH	
WH				VarH	$\pm 0.5\%$	9999999999 KVarH	
VarH				Hz	$\pm 0.1\%$	45.0~65.0Hz	
Hz				Accuracy performance range V : 10~100% PF : 0.5~ ± 1.0 A : 5~100% Hz : 45~65Hz			Measurement range V : 10~120% A : 5~120%

$$V_E = (V_{12} + V_{23} + V_{13}) / 3$$

$$\Sigma PF = \Sigma W / [V_1 A_1 + V_2 A_2 + V_3 A_3]$$

$$A_E = (A_1 + A_2 + A_3) / 3$$

$$\Sigma VAR = \sqrt{VA_1^2 - W_1^2} + \sqrt{VA_2^2 - W_2^2} + \sqrt{VA_3^2 - W_3^2}$$

$$\Sigma W = W_1 + W_2 + W_3$$

Order Code

Model — — — —

Input ACV

1 : 600VL-L / 347VL-N

Input ACA

1 : AC 0.5~5A
2 : AC 0.05~1A

Y : Option

Power Supply

1 : AC 90~260V, 50/60Hz

2 : DC 24V

3 : DC 120V

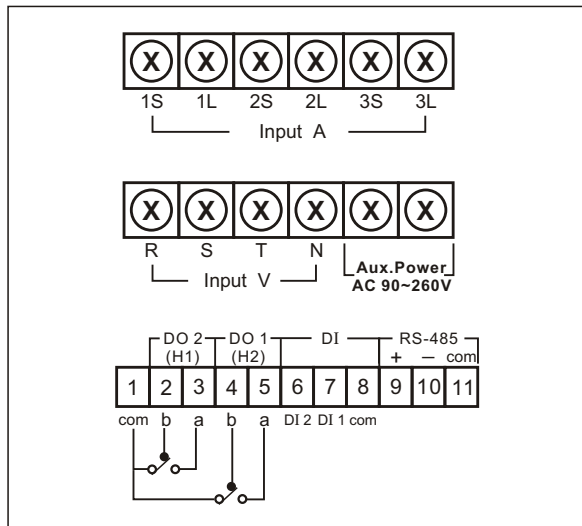
Option

1 : 2 digital input (DI) + 2 Relay output (DO)

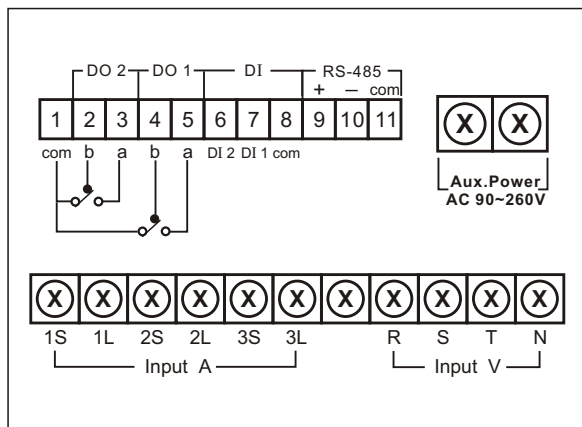
N : None

Connection Diagram

Model : CP500



Model : PM900



Writing diagrams of input

