4-Digit, Multi-Function POWER METER
(with 2 x alarms & RS485)

APM

FEATURES

- Measuring power parameters: V, A, W, Q (Var), S (VA), PF, Hz, KWH, KQH, DM (Demand)
- 1P2W / 1P3W / 3P3W / 3P4W system programmable
- Display range: -9999~9999; decimal point selectable
- 2 Alarms output or 2 Digital input / 2 Pulses output for forward KWH & reverse KWH
  RS-485 communication optional (The above option can be exist together)
- DIN case: 96 x 96 mm
- High stability, non-flammable case (PC), high safety

ORDER INFORMATION: APM - Code 1 Code 2 - Code 3 - Code 4 Code 5 Code 6

Code 1	Input Volt
1	0~300V
2	0~600V
O	Option

Code 2	Input Amp
1	0~1A
2	0~5A
O	Option

Code 3	Aux. Power
A	AC/DC 100~240V
B	DC 24V
C	DC 30~90V

Code 4	Alarm Output
N	None
D2	2 Digital Input
R2	2 Relays

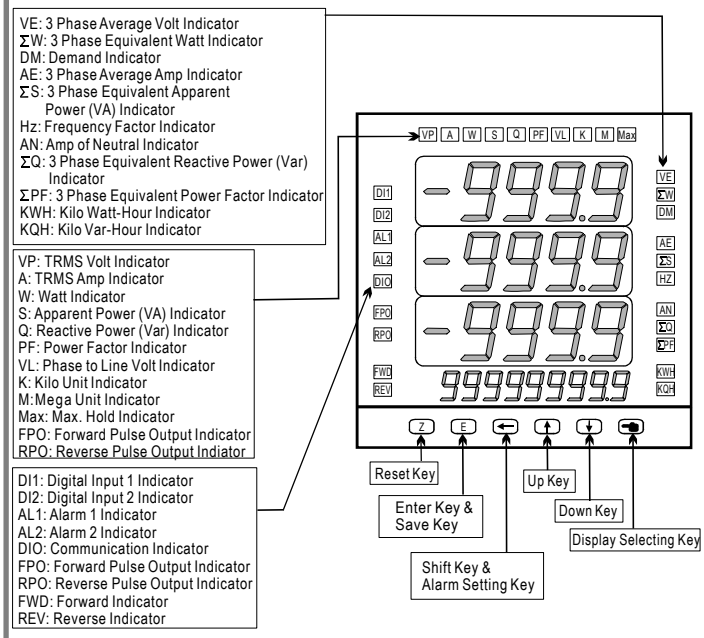
Code 5	Pulse Output
N	None
Y	Yes

Code 6	RS-485
N	None
Y	Yes

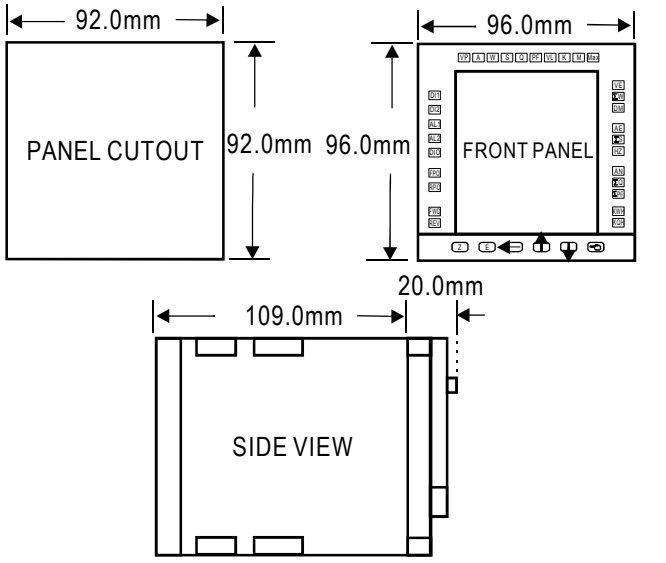
SPECIFICATION

♦ Accuracy:	±0.25% for VL-N: V1, V2, V3, VE
	±0.25% for VL-L: V12, V23, V13, VE
	±0.25% for A: A1, A2, A3, AE
	±0.5% for W (Watt): W1, W2, W3, ΣW
	±0.5% for Q (Var): Q1, Q2, Q3, ΣQ
	±0.5% for S (VA): S1, S2, S3, ΣS
	±0.5% for PF: PF1, PF2, PF3, ΣPF
	±0.1% for Hz
	±0.5% for KWH
	±0.5% for KQH
	±0.5% for DM (Demand)
♦ Measuring Range:	1P2W, 1P3W, 3P3W, 3P4W systems
	Voltage: 0~600Vac
	Current: 0~5Aac
	Frequency: 50/60 Hz
♦ Display Screen:	High brightness LED; 14.22mm (0.56")
	High brightness LED; 10.2mm (0.4")
♦ Sampling Time:	1 cycle / sec
♦ Display Range:	-9999~9999
	0~999999999 for KWH & KQH
♦ Parameters Setting:	Push buttons
♦ Back Up Memory:	EEPROM
♦ Alarm Action:	"≧(Hi) on" or "< (Lo) on"
♦ Alarm Run Delay Time:	0~99 sec
♦ Relay Contact:	AC 277V / 7A; DC 30V / 7A
♦ Communication:	RS-485 Modbus RTU mode
♦ Baud Rate:	19200 / 9600 / 4800 / 2400 bps
♦ Temperature Coefficient:	100ppm / ℃ (0~60℃)
♦ Operating Temperature:	0~60℃
♦ Operating Humidity:	20~90% RH (non-condensing)
♦ Storage Temperature:	-10~70℃
♦ Storage Humidity:	20~90% RH (non-condensing)
♦ Power Supply:	AC 100~240V; DC 24 / 30~90V
♦ Power Consumption:	10VA (all functions output)
♦ Surge Test:	1KVac / 1min (Input / Power)
	3KVac / 1min (Terminals / Case)
♦ Insulation Resistance:	>100MΩ with 500Vdc
♦ Input Impendence:	Voltage: >2V for 20KΩ / V; ≦2V for >200MΩ
	Current: ≧0.2A at 100mV; <0.2A at 1V
♦ Safety:	IEC 61000-4-2
	IEC 61000-4-3
	IEC 61000-4-4
	IEC 61000-4-5
	IEC 61000-4-6
	IEC 61000-4-8
	IEC 61000-4-11

FRONT PANEL & KEY FUNCTIONS

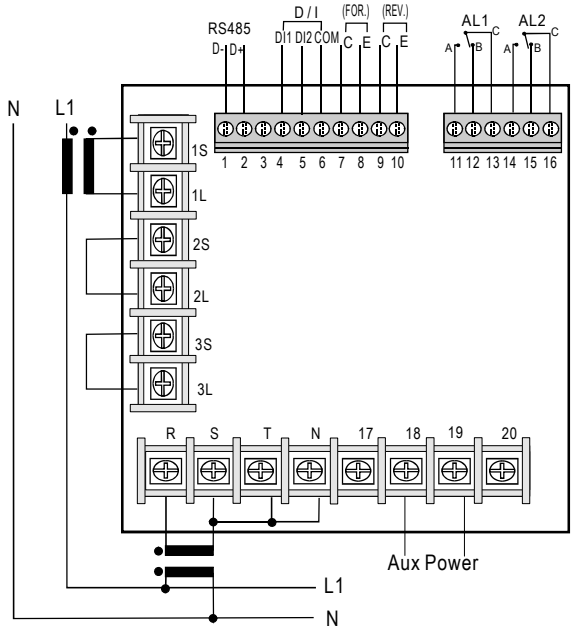


DIMENSION

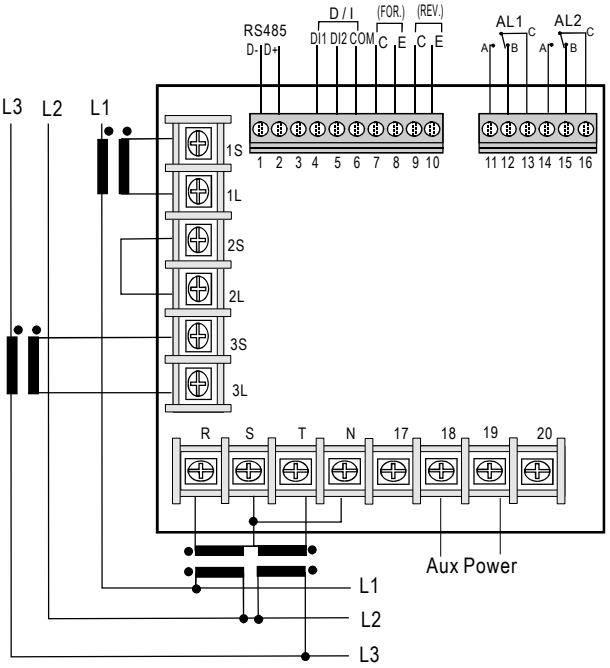


■ WIRING CONNECTION

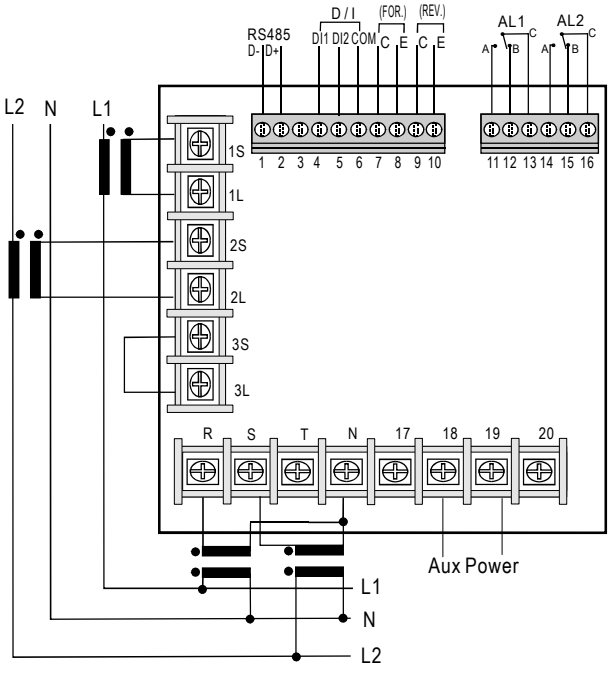
● 1φ2 W



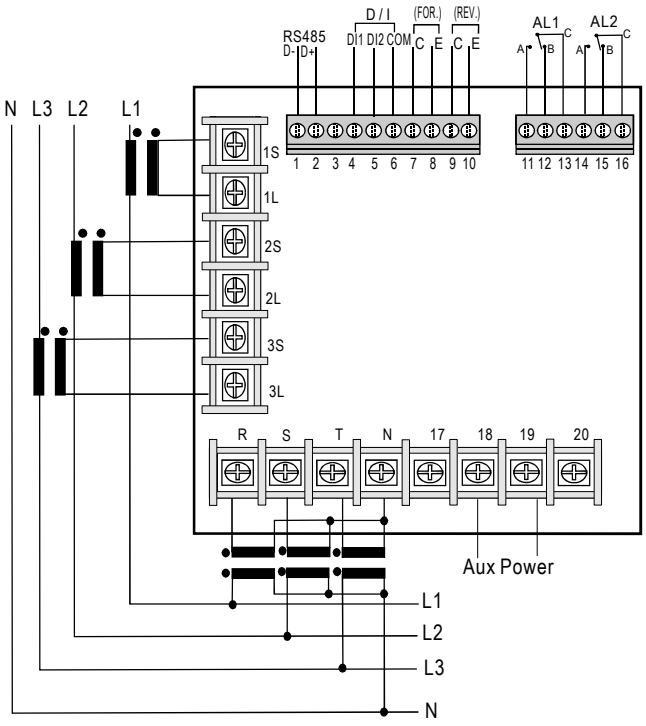
● 3φ3 W



● 1φ3 W

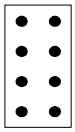


● 3φ4 W

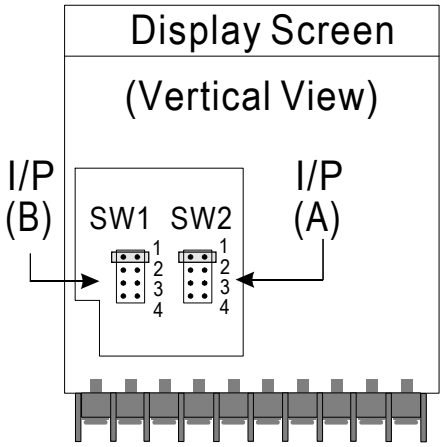


Frequency Input Signal Modification

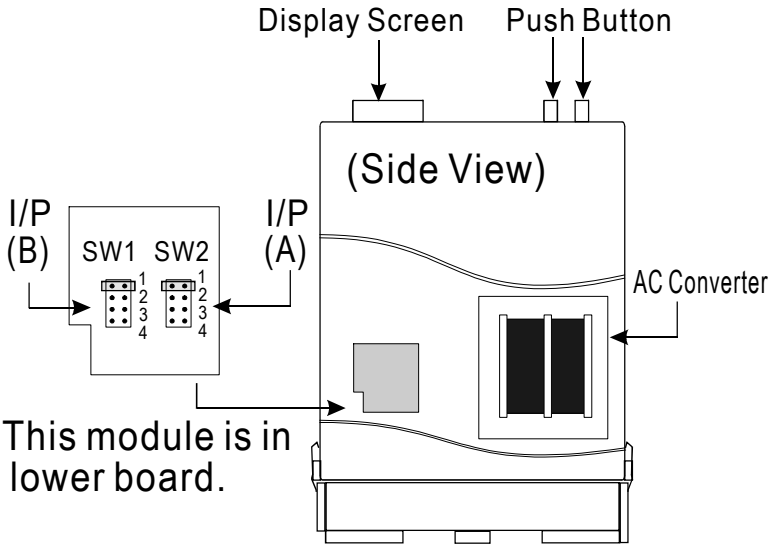
**To Select the pin to modify the input signal for different sensors.
PS: In dual input type, excitation power must be the same.

SW1/SW2	JUMPER	DEFINITION
	1	Open: 12V; Close: 5V
	2	Open: 100KHz; Close: 100Hz
	3	Open: NPN; Close: PNP
	4	Open: PNP; Close: NPN

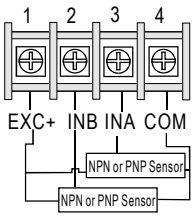
*Meter Type:



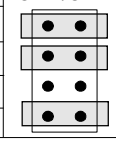
*Transmitter Type:



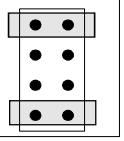
**Connection:



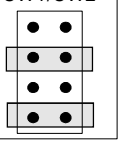
NPN (5V): 0~100 Hz

JUMPER	SW1/SW2
1	
2	
3	
4	

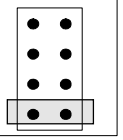
NPN (5V): 0~100 KHz

JUMPER	SW1/SW2
1	
2	
3	
4	

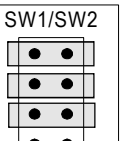
NPN (12V): 0~100 Hz

JUMPER	SW1/SW2
1	
2	
3	
4	

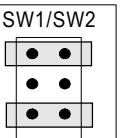
NPN (12V): 0~100 KHz

JUMPER	SW1/SW2
1	
2	
3	
4	

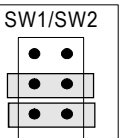
PNP (5V): 0~100 Hz

JUMPER	SW1/SW2
1	
2	
3	
4	

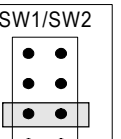
PNP (5V): 0~100 KHz

JUMPER	SW1/SW2
1	
2	
3	
4	

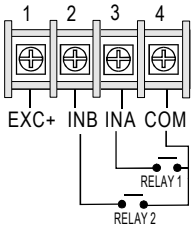
PNP (12V): 0~100 Hz

JUMPER	SW1/SW2
1	
2	
3	
4	

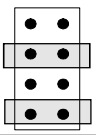
PNP (12V): 0~100 KHz

JUMPER	SW1/SW2
1	
2	
3	
4	

**Connection:



Relay Contact: NPN 0~100 Hz

JUMPER	SW1/SW2
1	
2	
3	
4	

**For relay input type, please select NPN 0~ 100 Hz.