

Application

- Load management
- Data Center
- Telecommunication



Function

- **Measuring:** 1 main circuit + 42 branch circuits
- **DI/DO:** 4 status inputs (dry contact), 2 relay outputs, 1 pulse output
- **Settable Pre-Alarm function:**
 - Main circuit: Alarm for voltage, current, current unbalance
(optional alarm for leakage current / temperature alarm)
 - Branch circuit: Alarm for current (lo-lo-limit, lo-limit, hi-limit, hi-hi-limit)
- **Communication:** RS485, support Modbus -RTU protocol
- **Phase sequence of branch circuit is programmable**
- **Optional CT input for branch circuit:** 50A, 100A, 200A
- **Settable wiring for branch circuit:** Either single phase or 3 phase
- **Historical kWh record:** kWh yearly consumption of last 10 years,
kWh monthly consumption of last 12 months



Measurement

Main circuit measuring:

- | | Accuracy |
|---|-------------|
| ➤ Voltage-Ua, Ub, Uc, Un | (0.5%) |
| ➤ Current -Ia, Ib, Ic, In, I unbal, Max. I | (0.5%) |
| ➤ Active power- Pa, Pb, Pc, ΣP | (1.0%) |
| ➤ Reactive power - Qa, Qb, Qc, ΣQ | (2.0%) |
| ➤ Power factor- PFa, PFb, PFc, ΣPF | (1.0%) |
| ➤ Frequency - F | (±0.01Hz) |
| ➤ Active energy - kWh | (1.0%) |
| ➤ Reactive energy - kvarh | (2.0%) |
| ➤ Demand (for 3I, 3P, Ptot) and Max. demand | |
| ➤ THD for U, I | (2~31st) |
| ➤ Leakage current (optional) | (0.5%) |
| ➤ Temperature (optional) | (0~120°C) |

Branch circuit measuring:

- | | Accuracy |
|--|----------|
| ➤ Current-I, Max. I, | (0.5%) |
| ➤ Active power - P, | (1.0%) |
| ➤ Reactive power - Q, | (1.0%) |
| ➤ Power factor - PF | (1.0%) |
| ➤ Active energy - kWh, | (1.0%) |
| ➤ Reactive energy - kvarh, | (2.0%) |
| ➤ Demand (for I, P) and Max. demand(for I,P) | |
| ➤ THD for I | |

PMAC202 & Accessories:

Unit: mm

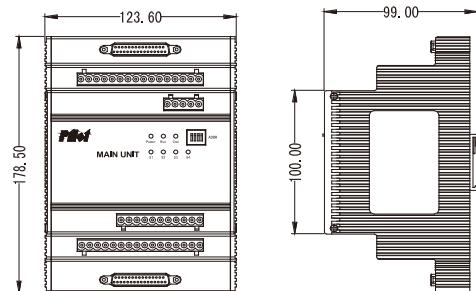
Main Module : Monitoring 21 or 42 branch circuits

PMAC202-M (For multiple fixed CT strip)

PMAC202-S1 (For 25mA input CT)

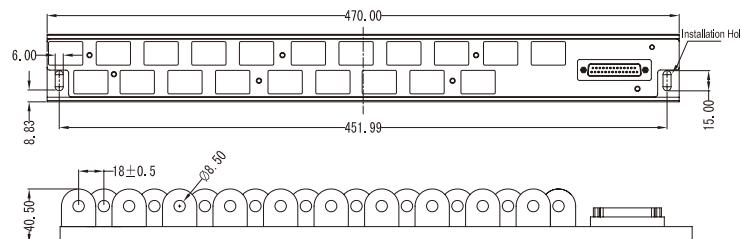
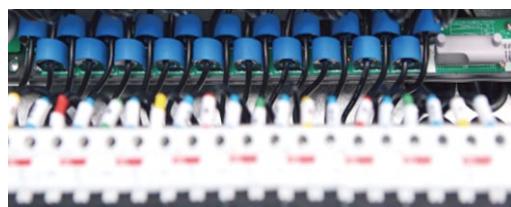
PMAC202-S2 (For 50mA input CT)

PMAC202-S3 (For 100mA input CT)

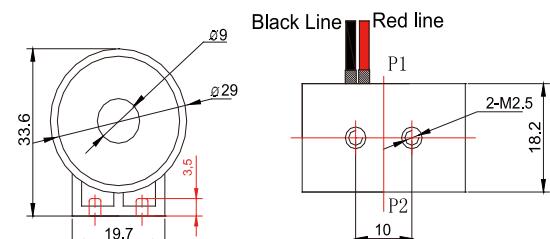


CT module:

1) **Multiple fixed CT strip:** Multiple fixed CT strip, rated current 50A/ 25mA, Each CT strip has 21 fixed CTs, accuracy: class 0.5 Unit: mm



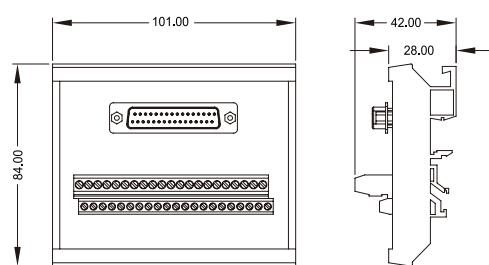
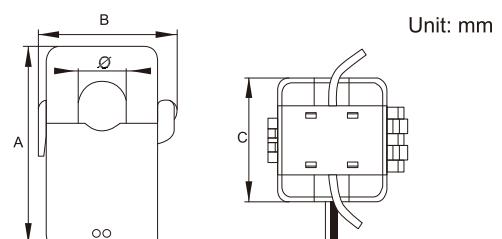
2) **Independent fixed CT:** Rated current 50A/ 25mA, standard CT cable length : 2.5m, accuracy : class 0.5 Unit: mm



3) **Split core CTs:** Rated current: 50A/ 25mA, diameter: 10mm or 16mm (Optional), standard CT cable length: 2m, accuracy : class 0.5

Rated current: 100A/50mA or 100A/100mA, diameter: 16mm, standard CT cable length: 2m, accuracy : class 0.5

Rated Current: 200A/100mA, diameter 24mm, standard CT cable length: 2m, accuracy : class 0.5



Dimensions (mm/ inch)			
Ø	A	B	C
10.0 (0.39)	41.5 (1.63)	30.0 (1.18)	26.5 (1.04)
16.0 (0.63)	53.0 (2.09)	36.0 (1.42)	30.5 (1.20)

PMAC202 AC Branch Circuit Power Meter

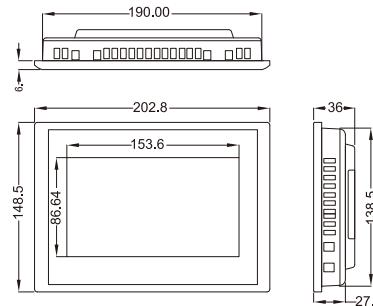
Optional devices:

1) HMI: 7" touch screen LCD. One HMI monitors max. 4 units of PMAC202 main module

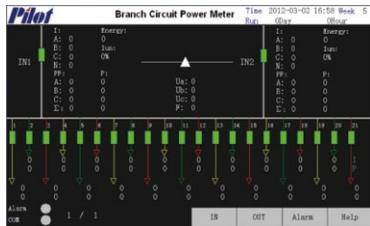
Resolution ratio: 800×480



PMAC201V



Unit: mm



Circuit diagram

OUT 1 to 7								
Item/OUT	1	2	3	4	5	6	7	Unit
1	0	0	0	0	0	0	0	A
Max_1	0	0	0	0	0	0	0	A
Dmd_1	0	0	0	0	0	0	0	A
Dmd_Max_1	0	0	0	0	0	0	0	A
P	0	0	0	0	0	0	0	W
Dmd_L_P	0	0	0	0	0	0	0	W
Dmd_Max_P	0	0	0	0	0	0	0	W
PF	0	0	0	0	0	0	0	
Energy	0	0	0	0	0	0	0	kWh
OUT set	1Set	2Set	3Set	4Set	5Set	6Set	7Set	

Real time measurement

Branch 1 to 21		CT config	
1 - 3	4 - 6	7 - 9	10 - 12
<input checked="" type="radio"/> 50A			
<input type="radio"/> 100A	<input type="radio"/> 100A	<input type="radio"/> 100A	<input type="radio"/> 100A
<input type="radio"/> 200A	<input type="radio"/> 200A	<input type="radio"/> 200A	<input type="radio"/> 200A
13 - 15	16 - 18	19 - 21	
<input type="radio"/> 50A	<input type="radio"/> 50A	<input type="radio"/> 50A	
<input type="radio"/> 100A	<input type="radio"/> 100A	<input type="radio"/> 100A	
<input type="radio"/> 200A	<input type="radio"/> 200A	<input type="radio"/> 200A	

1/3 Phase adjustment



Parameter and Alarm Setting

Alarm		
Date	Time	Description
		History

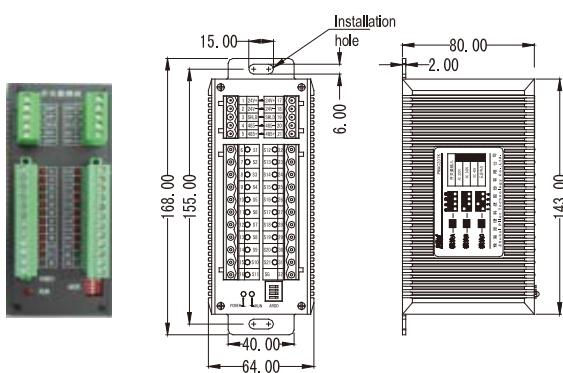
History and Alarm record

Year XXXX	Branch 1 to 42	Yearly kWh monthly	Main line	0 kWh
Branch line	1	2	3	4
Energy data	0	0	0	0 kWh
Branch line	8	9	10	11
Energy data	0	0	0	0 kWh
Branch line	15	16	17	18
Energy data	0	0	0	0 kWh
Branch line	22	23	24	25
Energy data	0	0	0	0 kWh
Branch line	29	30	31	32
Energy data	0	0	0	0 kWh
Branch line	36	37	38	39
Energy data	0	0	0	0 kWh
Search data of last	1	Year	Refresh	Monthly

History Energy Record

2) DI module: Each DI module has 21 digital input

Unit: mm

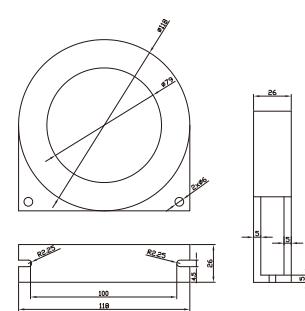


3) Leakage Current CT Module

Unit: mm



PMAC503L-250



4) Temperature Sensor

Unit: mm



PT100

