

Google map: - Add in your meter and monitor the individual meter energy consumption or overall energy consumption

Energy Display based on the area of the google map



AC Branch Circuit Power Meter

MCAC- Meter

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

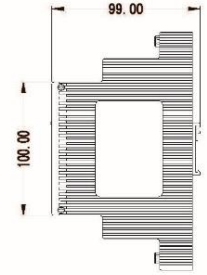
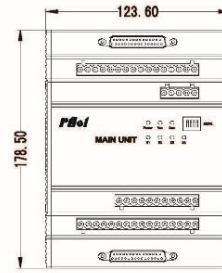


MCAC- Meter

Unit: mm

Main Module: Monitoring up to 42 branch circuits

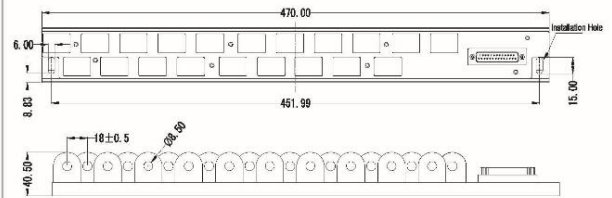
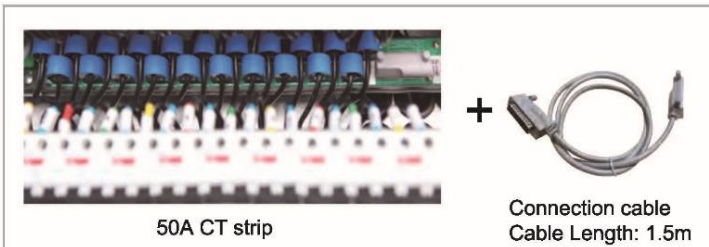
- MCAC-M (For multiple fixed CT strip)
- MCAC-S1 (For 25mA input CT)
- MCAC-S2 (For 50mA input CT)
- MCAC-S3 (For 100mA input CT)



CT module:

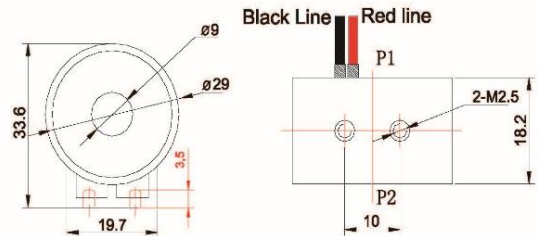
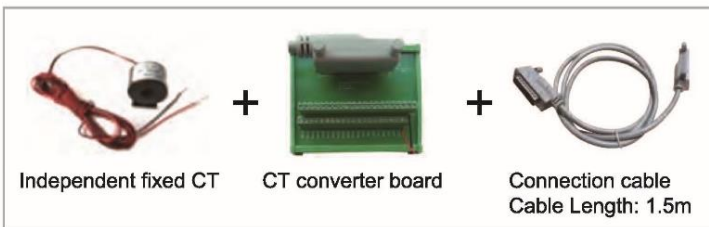
1) **Multiple fixed CT strip:** Multiple fixed CT strip, rated current 50A/ 25mA, Each CT strip has 21 fixed CTs, accuracy: class 0.5

Unit: mm



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

Unit: mm

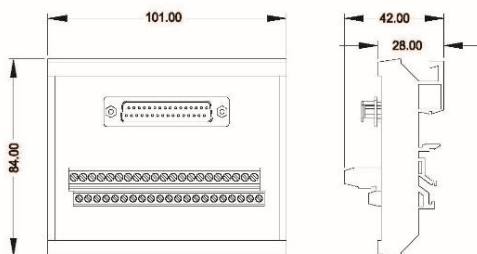
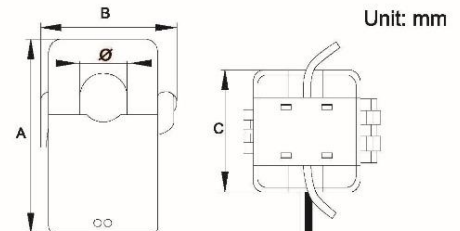


3) **Split Core CTs:** Rated Current: 50A/ 25mA. Diameter: 10mm or 16mm (Optional). Standard CT cable length: 2m.

Accuracy: class 1.0 (for 10mm) or class 0.5 (for 16mm)

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)

Technical Specification

Incoming circuit	1 circuit, three phase 220V/380V ac	Demand	Demand Interval: 15 mins Slip interval: 1 min.
Outgoing circuit	Max. up to 42 circuit per unit	Communication	RS485 port Baud rate: 2400, 4800, 9600, 19200, 38400 (optional)
Power supply	24V DC , range: 18~30V DC	DI module	Incoming circuit: Dry contact Outgoing circuit: wet contact, 220Vac Range: 70%~120% or Dry contact
MTBF	≥50000h	Relay output capacity	250Vac/5A or 30Vdc/5A
Service Life	10 years	IP index	Main Module: IP20 HMI (Front board): IP65
Rated Voltage	220V/380V ac Range: 10%~120%, Accuracy: 0.5%	Insulation Resistance	≥100MΩ
Rated incoming circuit current	5A, Range: 1%~120%, Accuracy: 0.5%	Environment	Operation: -10℃~ +55℃ Storage : -25℃~ +70℃ Humidity: 5%~95%, non-condensing
Rated outgoing circuit current	CT Strip: 50A/25mA (Max. 65A), Accuracy:0.5% Independent CT: 50A/25mA(Max.65A), Accuracy: 1.0% or 0.5% Split core CT: 50A(65A), 100A, 200A, Accuracy: 0.5%		
Rated Frequency	50Hz, Range: 45~65Hz, ±0.01Hz		

Order Information

BCPM	Order code		Description
Main module	DHS-MCAC	- M	for multiple fixed CT strip
		- S1	For 25mA input CT
		- S2	For 50mA input CT
		- S3	For 100mA input CT
Optional module			HMI - 7" touch screen LCD DI module - Each DI module has 21 digital input Leakage Current CT for 250A Temperature sensor
Accessory	MDR-2		24VDC Power supply
CT Accessory (for other measure range, please contact us)	CT for - M (25mA Secondary)		50A CT Strip : Φ8.5mm , 50A/ 25mA, Class 0.5 21 unit CT in one Strip.
	CT for - S1 (25mA Secondary)		Independent Fixed CT: Φ9mm, 50A/25mA, Class 0.5 Split Core CT: Φ10mm, 50A/25mA, Class 1.0 Split Core CT: Φ16mm, 50A/25mA, Class 0.5
	CT for - S2 (50mA Secondary)		Split Core CT: Φ16mm, 100A/50mA, Class 0.5
	CT for - S3 (100mA Secondary)		Split Core CT: Φ16mm, 100A/100mA, Class 0.5 Split Core CT: Φ24mm, 200A/100mA, Class 0.5

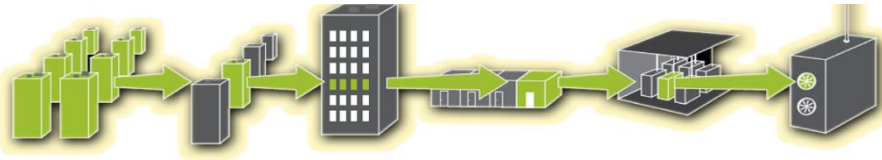
Your representative





Case Study

長沙灣天主教英文中學



Point Schedule

Equipment

Energy Bill

Analysis

Dashboard

Smart Based Metering for the school A/C and Lighting with Touch screen for education purpose in the school

Map > Cheung Sha Wan Catholic Secondary School > Energy

Cheung Sha Wan Catholic Secondary School

Address: 533 Fuk Wing Street, Cheung Sha Wan
 Room: Room search list

GFA: 50,250 m²
 Today: 19 Nov 2021

Location selection

More on this location

November 2021

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Third Floor

Energy consumption average per hour

Energy type consumption

0 kW Lighting

314.1



Van Catholic Secondary School > Third Floor > Overview

Room comparison

Room 317: 1.5 kWh, Room 318: 3.0 kWh

Area Selected

Room 318
Room 317

November 2021

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Floor Plan

