

1. Safety Instructions

WIFI din rail smart energy meter is designed to measure three phase four wire AC active energy and variable parameter.

The meter have wifi communication, it can use APP for remote reading and control on/off.

It's data communication rules obey the requirment of WIFI 802.11b/g/n.

It is a long life meter with the advantage of high stability, high over load capability , low power loss and small volume.

The meter is manufactured complying with international standard IEC62052-11 on "Electricity metering equipment (AC) General requirements test and test conditions "and IEC62053-21 on " Static meters for active energy classes 1.

2. Specification and Technical Parameters

Meter type	Wifi IVAP
Rate frequency	50Hz or 60Hz
Rated current	3x5(30)A 3x10(40)A 3x15(60)A 3x20(80)A 3x30(100)A
Rated voltage	3x220/380V 3x230/400V
Limits voltage range	85~300V(L~N)
Accuracy	Class1
LCD display kwh	999999.99kwh
Starting current	40mA(min measure)
Voltage circuit	<2W/10VA
WIFI	802.1 1b/g/n,only support 2.4GHz nctwork, not support 5GHz network
Operation temperature	-25~70 ℃
Relay control	Meter relay signal output to control the AC contactor for on/off
(Note:The meter has relay function	n and no relay function, two Select)

3. Basic Feature:

3.1 Measuring positive & negative active energy with negative energy accumulated intopositive energy.

3.2 The meter display total active energy, positive active energy,negative active energy,total reactive energy,positive reactive energy,negative reactive energy,three phase voltage,three phase current,total active power,three phase active power,total reactive power,three phase reactive power,total power factor,three phase power factor,frequency.

3.3 Pulse LED indicates working of meter, Pulse output with optical coupling isolation

3.4 Set product button:you can push this button to check the different data display, if you push the setting button last 10s, meter will enter into the status of waiting for WIFI distribution network .if you want to reset status of WIFI distribution network, you also can push thesetting button last 10s.

3.5 APP can display total active energy, positive active energy,negative active energy,total reactive energy,positive reactive energy,negative reactive energy,three phase voltage,three phase current,total active power,three phase active power,total reactive power,three phase reactive power,total power factor,three phase power factor,frequency.

3.6 APP on/off operation

GRE<u>-</u>GO

3.7 Installation: The meter can be installed on a 35 mm DIN rail

3.8 The meter should be install in the water proof box indoor or outdoor.the meter's boxshould be fixed on strong and flame-resistant wall with a recommended height of about 1.8m,where there is no corrosive gas around.

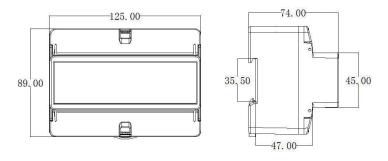
3.9 The meter should be install fully in accordance with connection diagram on the terminalcover, it is better to use copper as the leading wire for connection. All screws should betightened.

- 4.0 WIFI led indication, if you push the setting button last 10s, the WIFI led will flash 1s interval after the LCD display " , its means meter enter into the status of waiting for WIFI distribution network. if WIFI led light on all time, it means meter connect the WIFI successfully.
- 4.1 Impulse led indication: it will flash green color with different speed according the current load of the meter.
- 4.2 Relay indication: indication light off means relay switch on, indication light on means relay switch off.

4. Working principles

Single phase voltage and current are sampled from respective sampling circuit andtransformed into suitable signal, which is carried into integrated circuit, then the meter outputpulse signal in positive appropriation to measured power to drive LCD counter to realize energymeasurement. The meter has energy pulse output for testing with pulse width of 80+20ms

5. Product outline drawing and structure drawing



												Terminal	Notice
	8	9	10	11 1	2 13	14	15	16	17	18		1/2	la Input/output
	+ - + - + + +								- 185		3/4 Ib Input/output		
												5/6	lc Input/output
			2	3	4	-	5	6		7		7	Neutral Line
_	input			-							1 outpu	11/12	Pulse output
_	input input										2 outpu 3 outpu	1-11-	Rs485 Port
N ii	nput									N	output		1

2



Display item

	INFORMATION	LCD DISPLAY		INFORMATION	LCD DISPLAY
01	Meter serial 12digil	H 000000	10	Three phase Voltage V	000.00
OI Weter serial izugi		L 000000	10		000.00
02	Baud rate	2400	11	Three phase Current A	000.000
03	Impulse imp/kWh	400imp/kWh	12	Total active power kW	000.000
04	Total energy kWh	000000.00	13	Three phase active power kW	00.000
05	Active energy kWh	000000.00	14	Total reactive power kvar	00.000
06	Reactive energy kWh	000000.00	15	Three phase reactive power kvar	00.000
07	Total reactive energy kvar·h	000000.00	16	Total power factor COSo	00.000
08	Import reactive energy kvar·h	000000.00	17	Three phase power factor COS o	00.000
09	Export reactive energy kvar·h	000000.00	18	Frequency Hz	00.000

6 Warranty period

Within 12 months from the day of selling and provided that users operate correctly according to the requirement of the user's manual, if the meter doesn't reach its technical specification. It can be repaired or replaced in free charge by the manufacturer.

APP OPERATION INSTRUCTION

- 1. Please download the" SMARTLIFE" software from google play or App store.
- 2. Meter input power

When the meter power on, you can push the setting button last 10s, meter enter into the statusof waiting for WFI distribution network and the WIFI led will flash Is interval. It means meterenter into waiting for WIFI distribution network.

3. Add device

Please check firstly that your telephone have connected the available WIFI network, thenclick the "add device" button. If you open the Bluetooth, it will automatic find the meterwhich is waiting for adding.









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3.2

< Add Device ÷ Searching for nearby devices. Make sure your device has entered pairing mode. Discovering devices... (0 Add Manually Electrical Socket 11 11 Lighting Plug Socket Socket (BLE+Wi-Fi) (Wi-Fi) (Zigbee) 3.3 Enter Wi-Fi Information Choose Wi-Fi and enter password × (1. 2.4G 5G TP-XTYD2.4G









3.5



total active power 0.000KW						
active power of phase A 0.000KW						
active power of phase B 0.000KW						
active power of phase C 0.000KW						
total reactive power 0.000KVar						
reactive power of phase A 0.000KVar						
reactive power of phase B 0.000KVar						
reactive power of phase C 0.000KVar						
total power factor 0,000						
power factor of phase A 0.000						
power factor of phase B 0,000						
power factor of phase C 0,000						
frequence 49.99Hz						
() Switch OFF						

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