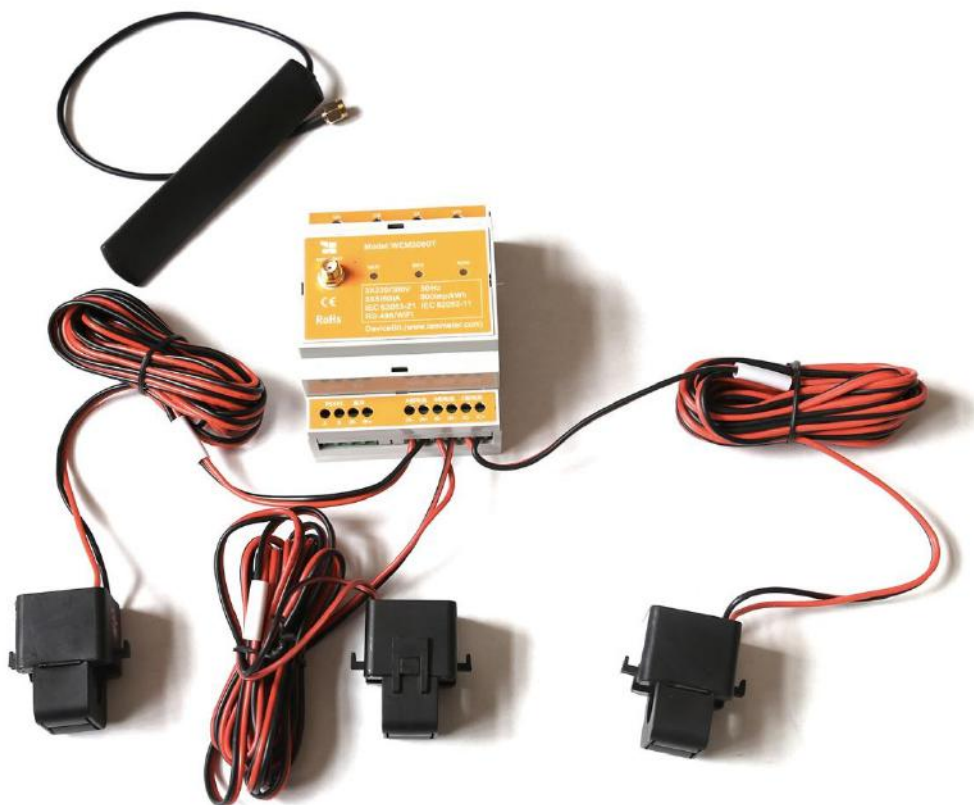




DataSheet

Wi-Fi Energy Meter (WEM3080T)



OCT, 2017

1 General Specification

Specification	Description
Standard package	<ol style="list-style-type: none"> 1. Wi-Fi Energy Meter (WEM3080T) x 1 2. Split-Core Current Transformer (150A and 250A optional) x 3 3. 2.4G Wi-Fi Antenna x 1
Phase	Three Phase
Power Supply	Built-in universal power supply
Communication	Built-in Wi-Fi
Antenna	external 2.4G antenna with SMA male
Reporting interval	1-5 minutes interval, typically 1 minute
Report contents	Active Energy (Forward and Reverse), Active Power, Voltage, Current, Frequency
Configuration	<ol style="list-style-type: none"> 1. Wi-Fi access point and webpage for setting SSID and password; 2. Mobile App for setting SSID and password
Monitoring Scenarios	<ol style="list-style-type: none"> 1. Monitor on Iammeter cloud 2. Monitor locally on your PC via WLAN (Http get interface) 3. Integrate with third party server, such as your own server, PVoutput and HomeAssistant (TCP/SSL interface)

2 Electrical characteristics

Specification	Description
Input Voltage	80V ~ 277VAC (Phase Voltage), 140V ~ 480 VAC (Line Voltage)
CT rating	150A or 250A optional
Measurement Accuracy	<ol style="list-style-type: none"> 1. Voltage: $\pm 1.0\%$ 2. Current: $\pm 1.0\%$ 3. Active Power: $\pm 1.0\%$ 4. Active Energy: Class 1 as defined by IEC62053-21

Specification	Description
Typical power consumption	≤2W (220VAC input)

3 Mechanical characteristics

Specification	Description
Weight	0.62kg (150A model); 1.02kg (250A model)
Dimension	90.2*71*57.5mm (2 DIN pole)
Protection	IP51
Connection	AC input: UA-Live wire Phase A, UB-Live wire Phase B, UC-Live wire Phase C, UN-Neutral wire RS485 interface: A-Positive, B-Negative CT: IA+ is Positive Phase A, IA- is Negative Phase A; IB+ is Positive Phase B, IB- is Negative Phase B; IC+ is Positive Phase A, IC- is Negative Phase C SMA port: External Antenna Port

4 Environmental conditions

Specification	Description
Operating Temperature	-20 ~ +60°C
Operating Humidity	5 ~ 95%
Altitude	0 ~ 3000m

5 Wi-Fi Network

Specification	Description
WLAN	Channel: Auto Security: WPA2-PSK

Specification	Description
SSID	iMeter_xxxxxxxx (8 digits device SN), no password
Configuration page	URL: http://11.11.11.1 Login username: admin Password: admin

6 Wi-Fi Parameters

Specification	Description
Wi-Fi Mode	IEEE802.11b/g/n, Wi-Fi Channel 1-13
Transmit power	18.5dBm@11b, 16.5dBm@11g, 15.5dBm@11n;
Wi-Fi Frequency	2.412 ~ 2.484GHZ
Transmit Speed	72.2Mbps@20M Bandwidth; 150Mbps@40M Bandwidth
Maximum Connections	8
Wi-Fi Antenna	External, 8dBi gain

7 RS485 interface

Specification	Description
Protocol	Modbus-RTU
Data format	"n,8,1"
Baud rate	1200、2400、4800、9600Bps; 9600Bps by default

8 Indicator

Indicator	Description
RUN	Always on after powering on , flashing while the Wi-Fi module is

Indicator	Description
	communicating with the power meter
REV	Always on when: <ol style="list-style-type: none"> the current is reversed as per the bottom-marked current direction of CT for any phase, or The CT is connected to the wrong phase
WIFI	Always on after the Wi-Fi module is connected to the router

9 Compliance Certificates and standard

- Certification: RoHS, CE
- CE Standard Applied

Essential Requirements	Applied Standard
Health and Safety	EN60950-1:2006+A11; 2009+A1;2010+A12;2011+A2;2013
Electromagnetic Compatibility	EN62311:2008
Effective Use of the Radio Spectrum	<ol style="list-style-type: none"> ETSI EN 301 489-1 V2.1.1 (2017-02) ETSI EN 301 489-1 V3.1.1 (2017-02) ETSI EN 300 328 V2.1.1 (2016-11)

- IEC Standard Applied

Essential Requirements	Applied Standard	Meters of Class
General Requirement	IEC62052-11	Protective class I , Indoor
Accuracy requirement	IEC62053-21	Accuracy index class 1
Mechanical requirement	IEC62053-21	Protective class I , Indoor