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## DataSheet

### Wi-Fi Energy Meter (WEM3080)



FEB, 2017

# 1 General Specification

Specification	Description
Standard package	<ol style="list-style-type: none"> <li>1. Wi-Fi Energy Monitor (WEM3162)</li> <li>2. Split-Core Current Transformer (60A or 250A optional)</li> <li>3. 2.4G Wi-Fi Antenna</li> </ol>
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, active power, to grid energy, voltage, current
Configuration	Wi-Fi access point and webpage for setting SSID and password
Monitoring Scenarios	<ol style="list-style-type: none"> <li>1. Monitor on Iammeter Cloud</li> <li>2. Monitor locally on your PC via LAN</li> <li>3. Monitor on your own cloud</li> </ol>

## 2 Electrical characteristics

Specification	Description
Input Voltage	80 ~ 265 V AC
CT rating	60A or 250A optional
Measurement Accuracy	<ol style="list-style-type: none"> <li>1. Voltage: <math>\pm 1.0\%</math></li> <li>2. Current: <math>\pm 1.0\%</math></li> <li>3. Active Power: <math>\pm 1.0\%</math></li> <li>4. Active Energy: Class 1 as defined by IEC62053-21</li> </ol>
Typical power consumption	$\leq 2W$ (220VAC input)

## 3 Mechanical characteristics

Specification	Description
Weight	0.3kg
Dimension	90×36.5×58mm (2 DIN pole)
Protection	IP51
Connection	AC input:UL-Live wire,UN-Neutral wire RS485 interface:A-Positive, B-Negative CT: I+ is Positive, I- is Negative SMA port: External antenna port

## 4 Environmental conditions

Specification	Description
Operating Temperature	-20 ~ +70°C
Operating Humidity	5 ~ 95%
Altitude	0 ~ 3000m

## 5 Wi-Fi Network

Specification	Description
WLAN	Channel:Auto Security:WPA2-PSK
SSID	iMeter_xxxxxxx(8 digits serial no), no password
Configuration page	URL:http://11.11.11.1 Login username: admin Password:admin

## 6 Wi-Fi Parameters

Specification	Description
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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 WiFi module is communicating with the power meter
REV	Always on when the current is reversed as per the bottom-marked current direction of CT
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	1. ETSI EN 301 489-1 V2.1.1 (2017-02) 2. ETSI EN 301 489-1 V3.1.1 (2017-02) 3. 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