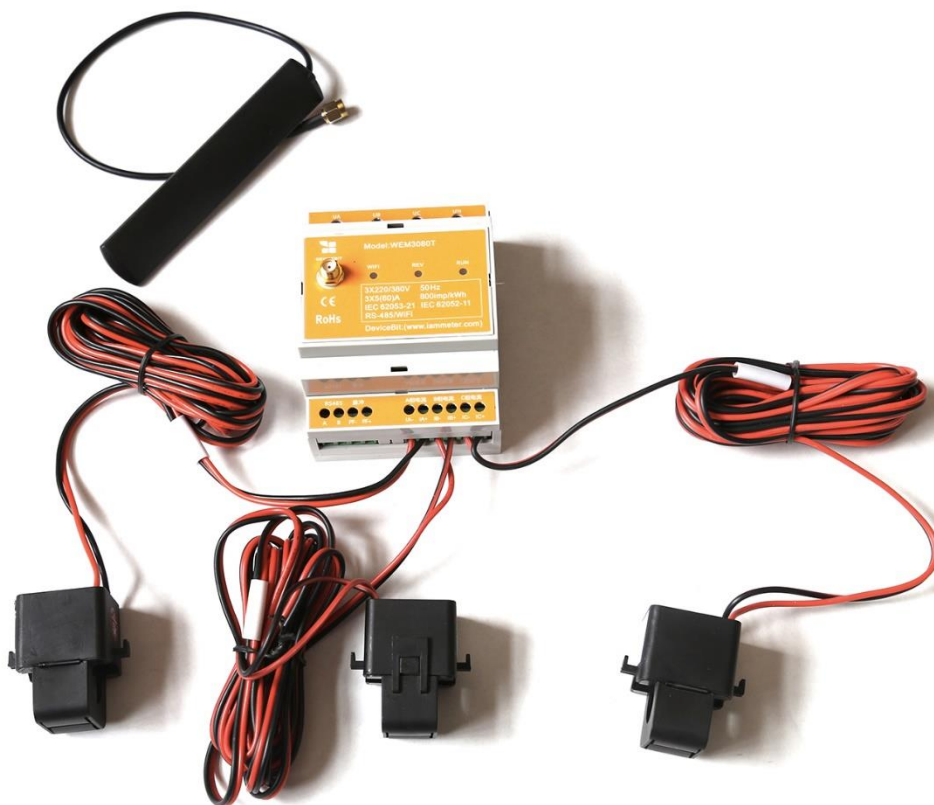




Data Interface Description

Wi-Fi Energy Meter (WEM3080T)



MAR, 2019

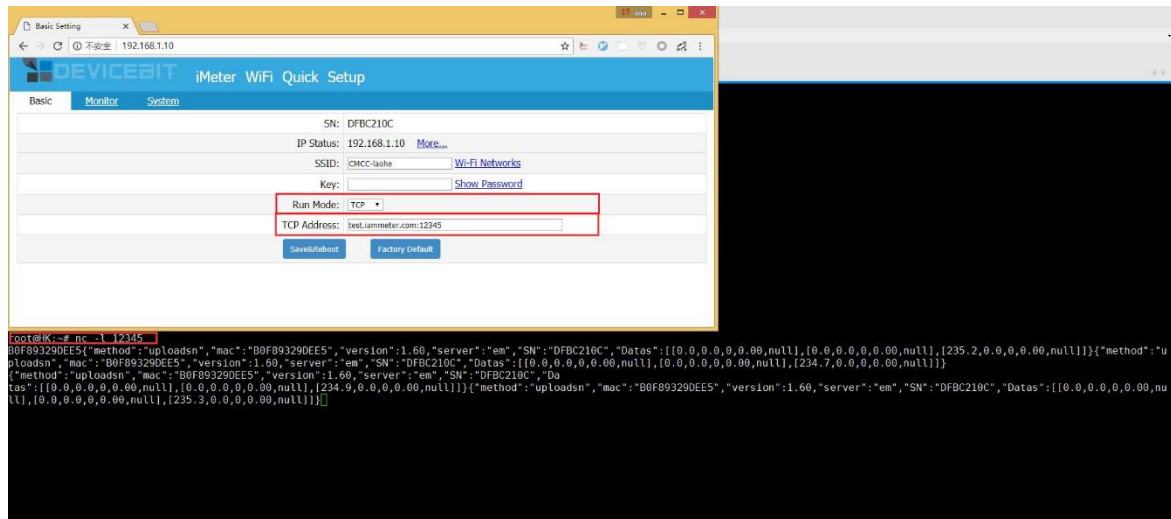
1. Introduction

To cater for different application scenarios, the three phase Wi-Fi energy meter, WEM3080T provides open interface for integration to the server of the third party. The WEM3080T has two different open data interfaces as below:

1. Working as a TCP client, it can post the data to remote TCP server every minute or the remote TCP server can read the data by command;
2. Working as HTTP server only in Local Area Network (LAN), its data can be read by "Http Get" in same LAN.

2. Working as a TCP client

WTH3080T can work as a TCP client. You can set its TCP socket parameter to set up the communication with remote TCP server.



Communication Process:

Please refer to the above demo for communication process:

1. We use Netcat to set up a TCP server on our server of the domain name test.iammeter.com and then type the command (nc -l 12345) to listen to the port 12345.
2. Login to the configuration webpage of the WEM3080T, select the Run Mode as "TCP" and set the TCP address for remote TCP server (domain name or IP address: Port number).
3. TCP server receives the data packet every minute after starting the communication with WEM3080T
4. Remote TCP server can also send a read command (nc command: ctrl+D), then it will receive the data packet immediately.

Date packet description:

The data packet is JSON format.

The example of data format is as below:

```
{ "method": "uploadsn", "mac": "B0F89329DEE5", "version": "1.60", "server": "em", "SN": "DFBC210C", "Dats": [[0.0,0.0,0.0,0.00,null],[0.0,0.0,0.0,0.00,null],[235.2,0.0,0.0,0.00,null]] }
```

The description of necessary data strings are as below:

mac: The MAC address of this meter;

version: The firmware version of this meter;

SN: The serial number of this meter;

Dats":[[0.0,0.0,0.0,0.00,null],[0.0,0.0,0.0,0.00,null],[235.2,0.0,0.0,0.00,null]]: The measurement reading of "Voltage(V)", "Current(A)", "Active Power(W)" and "Energy(Kwh)" for Phase A, B, C in sequence. For example, the voltage of Phase C is 235.2V.

3. Working as a HTTP server

WEM3080T can work as a HTTP server in a LAN. After connected to a Wi-Fi router, an ip address is allocated to the WEM3080T. In the same LAN, the real-time data of the WEM3080T can be read by "HTTP Get" by visiting the webpage **ip address/monitorjson**. The data packet is the same as described above.

