## Wi-Fi RTU

### user's manual

<table>
<thead>
<tr>
<th>Version</th>
<th>Updated Content</th>
<th>Updated by</th>
<th>Approved By</th>
<th>Date</th>
<th>Note</th>
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<tbody>
<tr>
<td>1.0</td>
<td>The first version released</td>
<td>Kevin Yuan</td>
<td>Mencius</td>
<td>2016-12-3</td>
<td></td>
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</table>
1 Product structure diagram

Product specification

<table>
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<tr>
<th>Category</th>
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<th>Parameters</th>
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<tr>
<td>General</td>
<td>Size (Length/Width/Height)</td>
<td>90<em>66</em>26mm</td>
</tr>
<tr>
<td></td>
<td>Weight</td>
<td>187g</td>
</tr>
<tr>
<td>Parameter</td>
<td>Protection class</td>
<td>IP21</td>
</tr>
<tr>
<td></td>
<td>Rated voltage</td>
<td>DC5V~28V</td>
</tr>
<tr>
<td></td>
<td>Maximum current</td>
<td>200mA(5V)</td>
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### Operating temperature
-30°C ~ +85°C

### Storage temperature
-40°C ~ +90°C

### External Interface
- **Serial port**: RS485 or RS232, used for communication
- **Wi-Fi**: 1 pcs, 2.4GHz, 802.11 b/g/n, AP+STA
- **Antenna interface**: Wi-Fi Onboard (External antenna can be selected)

### Hardware part
- **Data input**: RS485 / RS232
- **Data output**: Wi-Fi
- **Serial port Baud rate**: 9600 bps
- **Delay time**: 1.5s
- **Software watchdog**: Available

### Wi-Fi part
- **Wireless standard**: 802.11 b/g/n
- **Frequency range**: 2.4GHz
- **Antenna gain**: >2.5 dBi
- **Data rate**: 11Mbps@11b, 54Mbps@11g, 72Mbps@11n
- **Hardware encryption**: WEP, WPA/WPA2
- **Communication distance**: 100M (Open environment)
- **Working mode**: AP (Wireless access point) mode; AP+STA (Coexistence mode)
- **Built-in server language**: Chinese, English

### Software part
- **Supported application protocols**: Modbus-RTU
- **Supported network**: Modbus-TCP
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2 Install Wi-Fi RTU and Set Parameters

2.1 Install Wi-Fi RTU

Use RS-485 cable to connect the Wi-Fi RTU and the equipment. And use RS-485 cable or adaptor to supply power. The PWR light will be blue when it works.

2.2 Set Parameters

2.2.1 Enter the Web Server into Wi-Fi RTU Setting

Use computer with wireless network adapter to connect the Wi-Fi AP (The Access is the PN number, Password is 12345678). Start the web browser and enter default IP address “192.168.8.66” to get the login interface (the default user name and password is admin).

![Web Server Setting](image)

2.2.2 Set the network parameter

Clink on “STA Set” to set the network parameter. You can use the Searching to get AP access nearby, and then put the password. You can also to change the name
of AP access of Wi-Fi RTU.

2.2.3 Set the device address parameter

Clink on “Device Set” to set the device address parameter.

2.2.4 Restart the Wi-Fi RTU form System Set

2.2.5 Check the setting

Check the device connect status or and the network connect status from “Device Set” and “Network Set”.
3  Check Data for the Monitor System

3.1  Enter Monitor System

Enter www.shinemonitor.com in the web browser to get Monitor System.

3.2  Register

Use the PN number to register a new user.

3.3  Check Data

The system has created a plant when register.
Clink on one plant to view the detail data of it, including energy output, device status, warnings etc.

Check the real-time output power and detail data from “Device Management”. 
3.4 Creating new Plant

Create a new plant for the Home page of System if needed.

3.5 Add new Data Connector

Add new Data Connector from Device setting if needed.
4 Attention

4.1 The Web Server of Wi-Fi RTU needs to load the first web and then to load the second one, Please do not refresh the web frequently.

4.2 The web of the Monitor System can not support the version under IE9, please use IE9 or above IE9, or Chome.