WiFi Bridge/Repeater

Quick Setting Guide
Declaration

Copyright © 2018 Shenzhen HouTian Network Communication Technology Co.,Ltd

All rights reserved, with retained ownership Without Shenzhen HouTian Network Communication Technology Co.,Ltd written authorization, any company or personal can’t copy, writer or translation part or all contents. Can’t do commodity distribution for any commercial or profitable purposes by any ways(electricity, mechanical, photoprint, record or other methods).

**VONETS** is the registered trademark of Shenzhen HouTian Network Communication Technology Co.,Ltd. The other all trademarks or registered trademarks mentioned in this documents are belong to the individual owners. The product specifications and information technology mentioned in this manual are just for reference, if any updates, without other notice. Except for special agreements, this manual is just for user guidance, any statements, information and so on in this manual can’t constitute the warranty of any forms.

**Form 1**

<table>
<thead>
<tr>
<th>Model</th>
<th>No-barrier point to point Transmission distance</th>
<th>Transmission rate (Mbps)</th>
<th>Band</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAP11N-300</td>
<td>50m--80m</td>
<td>300</td>
<td>2.4G</td>
</tr>
<tr>
<td>VAP11G-300</td>
<td>80m--100m</td>
<td>300</td>
<td>2.4G</td>
</tr>
<tr>
<td>VAP11G-500</td>
<td>250m--300m</td>
<td>300</td>
<td>2.4G</td>
</tr>
<tr>
<td>VAP11AC</td>
<td>250m--300m</td>
<td>300+900</td>
<td>2.4G/5G</td>
</tr>
</tbody>
</table>

**Form2**

<table>
<thead>
<tr>
<th>Model</th>
<th>Power Supply Voltage Range</th>
<th>Input Power</th>
<th>Typical Power Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAP11N-300</td>
<td>DC5--15V</td>
<td>≥5W</td>
<td>5V/1A</td>
</tr>
<tr>
<td>VAP11G-300</td>
<td>DC5--15V</td>
<td>≥5W</td>
<td>5V/1A</td>
</tr>
<tr>
<td>VAP11G-500</td>
<td>DC5--15V</td>
<td>≥10W</td>
<td>5V/2A</td>
</tr>
<tr>
<td>VAP11AC</td>
<td>DC5--15V</td>
<td>≥10W</td>
<td>5V/2A</td>
</tr>
</tbody>
</table>
Application Method

1. WiFi Repeater:

In this application, VONETS devices are used to extend the wireless signal coverage of existing AP or wireless router. The computer can connect to the device wirelessly. After the VONETS device adds a source hotspot, its DHCP server is disable by default.

2. WiFi Bridge:

In this application, VONETS devices are used to extend the wireless signal coverage of existing AP or wireless router. The computer can connect to the device wired. After the VONETS device adds a source hotspot, its DHCP server is disable by default.

3. WiFi AP:

In this application, VONETS device implements the wireless access function of the wired LAN. The computer can connect to the device wirelessly. After VONETS device successfully connects to the wired LAN, its DHCP server is disable by default.
Setting Guide

1. Connect Device
VONETS device is powered on (5V/2A) and then connected to the computer. There are two ways to do this:
1) The computer is wired connected to the LAN port of VONETS device;

2) The computer is connected to WiFi signal of VONETS device, its hotspot parameters as below:

WiFi SSID: VONETS_***** (Corresponds to the MAC address of the VONETS device)
WiFi password: 12345678
2. The application configuration of Repeater + bridge (The application configuration method of repeater & bridge is basically the same).

1) Open Browser, input configured page: http://vonets.cfg (or IP: 192.168.254.254), then press Enter;

2) Enter User name and Password in login page (both are “admin”), click “Login” button to enter configured page;

3) “Scan Hotspots”, choose the source hotspots, click “Next”;
4) Input “Source wireless hotspot password”, click “Apply”; (The “Advanced Setting” here can be kept unchanged, for instructions on this option, go to www.vonets.com and download the “VONETS Series Product Instruction Guide”).

- IP layer transparent transmission (factory default), transparent transmission of IP layer data, can meet most of WiFi bridge applications;
- MAC layer transparent transmission, transparent transmission of all data above the MAC layer (link layer) and MAC layer, including IP layer data. MAC transparent transmission can solve some special applications for MAC layer encryption, such as GoPro camera, Cisco AP, Hikvision monitoring system, etc.
- The configuration parameters of WiFi repeater security is synchronized with source hotspot" is default ticked, it means The SSID of the VONETS repeater is associated with the SSID of the source hotspot, and the WiFi password is the same as the password of the source hotspot;
- If you select “Disable hotspot” on the right side of the SSID, the device will not transmit the corresponding hotspot and can only be used as a bridge application.
5) Click “Reboot”, VONETS device will connect to the configured WiFi hotspot automatically, if connection is successfully, the WiFi LED light will quick flash;

### LED Light Form

<table>
<thead>
<tr>
<th>Model</th>
<th>Blue Light</th>
<th>Green Light</th>
<th>Yellow Light</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAP11N-300</td>
<td>2.4G WiFi connection status light</td>
<td>Ethernet cable connection status light</td>
<td>No</td>
</tr>
<tr>
<td>VAP11G-300</td>
<td>2.4G WiFi connection status light</td>
<td>Ethernet cable connection status light</td>
<td>No</td>
</tr>
<tr>
<td>VAP11G-500</td>
<td>2.4G WiFi connection status light</td>
<td>Ethernet cable connection status light</td>
<td>No</td>
</tr>
<tr>
<td>VAP11AC</td>
<td>2.4G WiFi connection status light</td>
<td>5G WiFi connection status light</td>
<td>Ethernet cable connection status light</td>
</tr>
</tbody>
</table>

1) VONETS bridge is not connected to any hotspot, WiFi connection status light will quick flash;
2) VONETS bridge is connected to hotspot successfully, WiFi connection status light will quick flash;
3) VONETS bridge is connected to hotspot failed, WiFi connection status light will slow flash.

### Remark 1:

3. **The application configuration of AP**

VONETS device can be configured as an AP application. The wireless terminal device can connect to VONETS hotspot to connect to the network; however, it is best to change its WiFi name and password for network security.

1) Log in to the configuration page [http://vonets.cfg](http://vonets.cfg) (or IP: 192.168.254.254) in your computer browser, both user name and password is “admin”;
2) Revise WiFi name: Jump to “WiFi Repeater”---- “Basic Settings”, enter new WiFi name in “WiFi Repeater (SSID)”, click “Apply”;

3) Revise WiFi password, in “WiFi Repeater”----“WiFi Security”, enter new WiFi password in “Pass Phrase”, click “Apply”;

4) For model VAP11G-300, VAP11G-500 and VAP11AC, “WiFi Tx Power” can be changed, jump to “System Settings”---- “Advance Settings”, choose suitable transmit power, then click “Apply”;
5) Reboot device, jump to “System Settings” ---- “Reboot Device”, click “Reboot”, when it is finished, then it will take effort.

Remark 2: When VONETS Bridge connect to external network, the IP address of the device will change. At this time, when log in configured page, we suggest you enter configured domain name: http://vonets.cfg. Or in Windows command window, enter the command: ping vonets.cfg, to get the IP address of the device, then log in configuration page with this IP.

Appendix    Frequently Asked Questions

1. How to reset to the factory default parameters?

   Power on the device, after 60 seconds, long press Reset button until 5 seconds, the green light will flash a few, then the device will automatically reset to the factory default parameters (it will take about 60 seconds to reset the device), during the recovery of the factory operation, the product can’t be powered off, otherwise it may cause the product to Damage.

2. Does VONETS bridge support firmware upgrade, how to upgrade?

   VONETS bridge supports firmware upgrade, and support online upgrade, please visit website: www.vonets.com to refer to the related documents.
3. The device WiFi hot spot can be found, but the smart phone or PC can’t connect to this device hotspot?

- Reason 1. Due to some unexpected operation or power down, caused the destroy of device parameters. At this time, just need to reset the device to factory default parameters;
- Reason 2. The device WiFi doesn’t work at the best channel, make the performance worse. At this time, you can try to change the source WiFi hot spot and this device WiFi channel to make the performance better;
- Reason 3. The smart phone or PC haven’t configured the correct WiFi password;

4. The device has been configured the source WiFi hot spot parameters, the smart phone or PC has connected to the device WiFi hot spot, but still doesn’t get internet?

- First, check the status light to know the current state of the device, then according to the state of the device to analyze the fault reasons;
- Reason 1. The distance between the device and source WiFi hot spot is too long, cause the communication performance degradation, finally effect the user’s access to the Internet. At this time, just need shorten the distance between the device and source WiFi hot spot to solve this problem;
- Reason 2. Due to some unexpected operation or power down, caused the destroy of device parameters. At this time, just need to reset the device to factory default parameters;
- Reason 3. The device WiFi doesn’t work at the best channel, make the performance worse. At this time, you can try to change the source WiFi hot spot WiFi channel to make it the same as the default channel of the device, the reboot the device, the device will automatically exchange to the same channel as the source WiFi hotspot, to make the performance better;
- Reason 4. There are several WiFi hot spot around the device, WiFi channel mutual interference, make the performance worse. At this time, you can try to change the source WiFi hot spot and this device WiFi channel to make the performance better;
- Reason 5. The configured source WiFi hot spot parameters are not correct. At this time, just need to configure the correct parameters then reboot the device;

5. The smart phone or PC has been connected the device by WiFi or Ethernet cable, but user can’t log in the device WEB page, or after log in the WEB it shows error?

- Reason 1. The users don’t use the browser recommended by VONETS(IE,Google Chrome, Safari, the mobile phone browser);
- Reason 2. The smart phone or PC installed the firewall, the security level is set too high, caused the above problem. At this time, only need to close the firewall;
- Reason 3. The security level of browser is too high, it will also cause the above problem. At this time, just need to reduce the browser’s security level, then log in again;
- Reason 4. The IP address of the device input error. For the new device from the factory, user only need input the correct IP address according to the instruction guide; for the device that has connected the source hot spot, user only operate according to <Remark 2>.