Vonets VAP11N-300

Vonets VAP11N-300 User Manual

2.4GHz Mini WiFi Bridge / WLAN Repeater

1. INTRODUCTION

This manual provides comprehensive instructions for the setup, operation, and maintenance of your Vonets VAP11N-300 2.4GHz Mini WiFi Bridge/Repeater. Please read this manual carefully before using the device to ensure proper functionality and to maximize its performance.

The Vonets VAP11N-300 is a versatile networking device designed to extend wireless connectivity to wired devices or to expand your existing Wi-Fi network. Its compact size and flexible power options make it suitable for a wide range of applications.

2. WHAT'S IN THE BOX

Upon unpacking, please ensure all items listed below are present and in good condition:

- Vonets VAP11N-300 Mini WiFi Bridge/Repeater Unit
- USB Power Cable with Ethernet Connector
- User Manual (this document)

If any items are missing or damaged, please contact Vonets customer support.

3. PRODUCT OVERVIEW

The Vonets VAP11N-300 is an industrial-grade mini WiFi bridge/repeater that offers super stability and versatile networking functions. It supports both WiFi to wired and wired to WiFi functionalities.

Key features include:

- **2025 New Upgrade:** Features a new process design for enhanced stability.
- **Flexible Power Supply:** Supports wide voltage (DC5V-15V) and low power consumption (<2W). Power can be supplied via DC2.5 power hole, DC2.0 power plug, or USB interface, allowing convenient power sharing with customer equipment.
- **High-Speed Transmission:** Achieves 300Mbps WiFi rate with 802.11b/g/n WiFi protocol. Point-to-Point transmission distance can reach up to 60 meters without obstacles for small data, and less than

50 meters for video transmission.

- **Continuous Update Service:** The device software is continuously optimized, allowing online firmware upgrades for optimal function.
- **SSA Signal Strength Detection:** Supports automatic matching connection function for improved WiFi application.
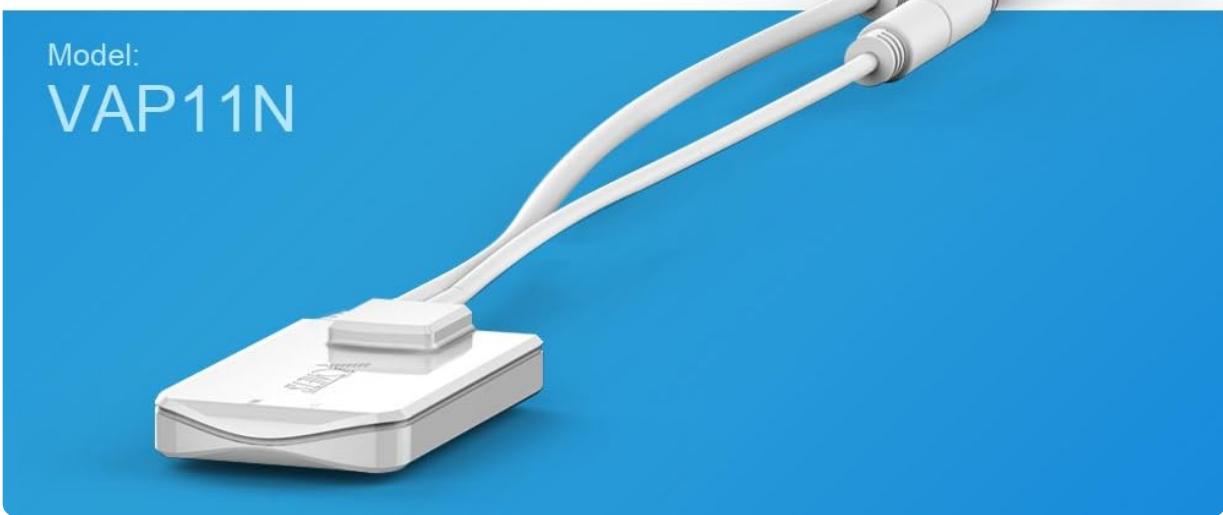

Image: The Vonets VAP11N-300 Mini WiFi Bridge/Repeater, highlighting its compact design and 300Mbps professional capabilities.

Image: The Vonets VAP11N-300 device shown with its integrated USB power cable and Ethernet connector.

4. SETUP

Follow these steps for initial setup and configuration of your Vonets VAP11N-300.

4.1. Initial Connection

1. **Power On:** Connect the VAP11N-300 to a power source. A 5V/1A power supply (e.g., a computer USB port or a USB wall adapter) is recommended. The device's LED light should illuminate.
2. **Connect to Computer:** Use the Ethernet cable to connect the VAP11N-300 to your computer's LAN port.

Image: Close-up of the Vonets VAP11N-300 showing the Ethernet port and USB power input, illustrating how it connects to an IP camera for shared power.

4.2. Configuration via Web Browser

The VAP11N-300 can be configured using a web browser on a computer or smartphone. The configuration process is demonstrated in the video below.

Video: Official Vonets VAP11N-300 Configuration Video. This video guides users through the setup process using both a computer and a smartphone, demonstrating how to access the device's web interface, enter login credentials, scan for Wi-Fi hotspots, input Wi-Fi passwords, and reboot the device for successful configuration.

1. **Access Web Interface:** Open a web browser (e.g., Internet Explorer, Chrome) and enter the configured domain `http://vonets.cfg` or the default IP address `192.168.254.254` in the address bar.
2. **Login:** Enter the User ID and password. Both are typically "admin" by default. Click "Login".
3. **Scan Hotspots:** Navigate to the "Scan Hotspots" section. The device will search for available Wi-Fi networks.
4. **Select Network:** Choose your desired Wi-Fi network (SSID) from the list and click "Next".
5. **Enter Password:** Input the password for your selected Wi-Fi network.
6. **Apply & Reboot:** Click "Apply" to save the settings. Then, click "Reboot" or power cycle the device. The device will take approximately 1 minute to reboot. Wait until the LED light flashes normally, indicating a successful connection.

Note: If you encounter issues accessing the configuration page after connecting as a bridge, try using `vonets.cfg` or ensure your computer's IP settings are compatible (e.g., temporarily disable DHCP server on the device if network conflicts occur).

5. OPERATING MODES

The Vonets VAP11N-300 supports two primary operating modes:

5.1. AP Mode (Access Point Mode)

In AP mode, the device functions as a wireless access point, converting a wired network connection into a wireless one. This is suitable for scenarios where an Ethernet cable provides internet access to a computer, and you wish to share this connection wirelessly without dialing.

Application Mode Introduction

AP Mode: AP mode Wired networks to wireless access, suit for the scene that the Ethernet cable access to the computer to access the Internet without dialing.

Repeater Mode: Repeater mode can extend the existing network, easy network expansion. And can convert WiFi to RJ45 network, to a computer using a network cable to the Internet.
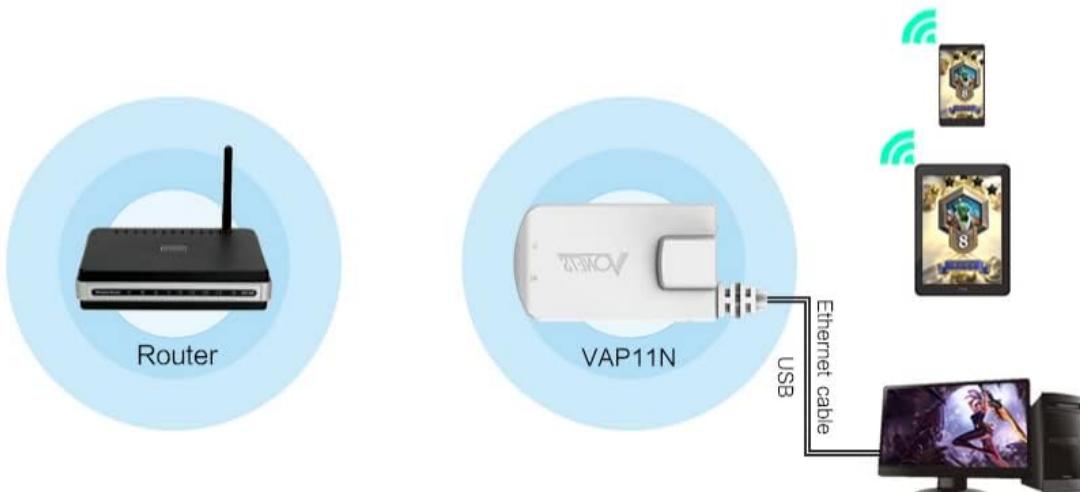
Image: Diagram illustrating the AP Mode, where the VAP11N-300 connects to a wired network and broadcasts a Wi-Fi signal for wireless devices.

5.2. Repeater Mode (Bridge Mode)

In Repeater mode, the device extends the range of an existing Wi-Fi network. It can convert a Wi-Fi signal to an RJ45 network connection, allowing devices with only an Ethernet port (like some smart TVs or gaming

consoles) to connect to the internet wirelessly. It also functions as a Wi-Fi signal repeater to boost coverage.
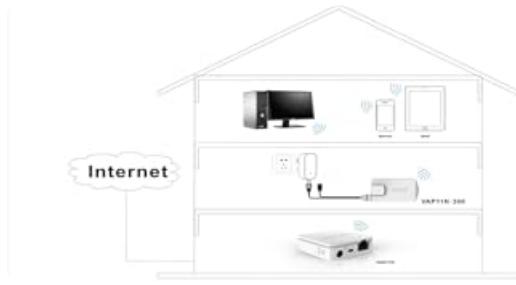
Image: Diagram illustrating the Repeater Mode, showing the VAP11N-300 extending Wi-Fi coverage within a multi-story building.

6. APPLICATION SCENARIOS

The Vonets VAP11N-300 is a good partner for various network applications due to its compact size and versatile functionality. Common uses include:

- Electronic scales
- DVRs (Digital Video Recorders)
- IP cameras and SIR cameras (for wireless monitoring)
- Medical devices
- IoT devices
- Gaming consoles (e.g., PS3)
- Network printers
- Robots
- Doll machines
- Wireless video surveillance systems (point-to-point or multipoint connectivity)

Wireless Monitoring Application Diagram

The best solution of remote video surveillance by using VAP11N
point to point or multipoint wireless connectivity

Video surveillance applications

Solution one   Camera--Bridge   Bridge--Recorder--Monitor

Recorder

Monitor

Solution Two   Camera 1,2,3--Bridge   Bridge--Recorder--Monitor
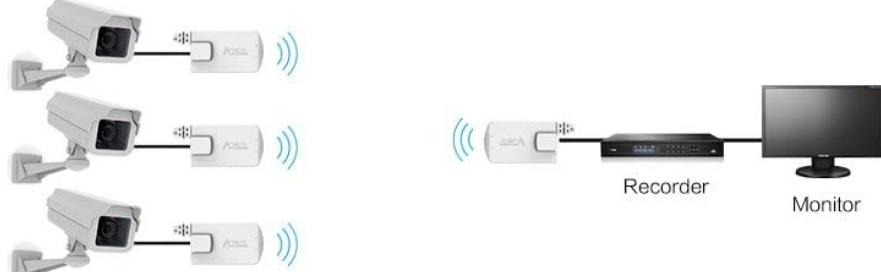
Recorder

Monitor

Solution Three   Camera 1,2,3--Switch--Bridge   Bridge--Recorder--Monitor

Switch
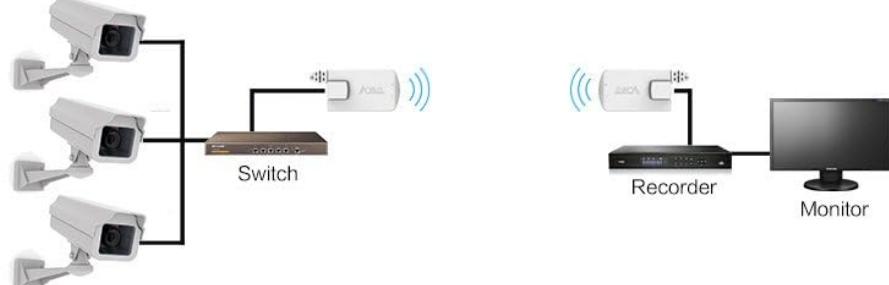
Recorder

Monitor

Image: A diagram showing various wireless monitoring applications, including connecting cameras to a recorder via the VAP11N-300 in bridge mode.

Security System   Industrial automation control system   Data Collection

WiFi Bridge Of Application Scenarios

Power System   Smart Farm System   Medical Devices
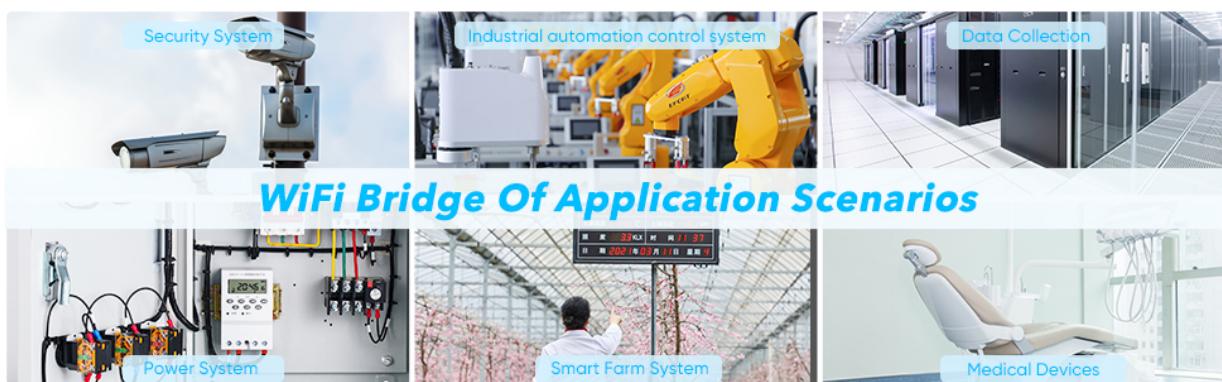
Image: Collage of various application scenarios for the WiFi bridge, including security systems, industrial automation, data collection, power systems, smart farms, and medical devices.

7. SPECIFICATIONS

Below are the technical specifications for the Vonets VAP11N-300:

Attribute	Value
Product Name	VAP11N-300
WiFi Function	Repeater/Bridge
WiFi Frequency	2.4 GHz Radio Frequency
WiFi Protocol	802.11b/g/n
Transmission Rate	300 Megabits Per Second
Color	White
Device Size	59.5 x 35 x 11.5 mm (L x W x H)
Work Voltage	DC5V-15V
Power Consumption	<2W
Connector Type	RJ45
Item Weight	2.08 ounces
Manufacturer	Shenzhen Houtian Network Communication Technology Co.,Ltd
Date First Available	June 23, 2022

Product Specification/Parameter

Product Name	VAP11N
WiFi Function	Repeater/Bridge
WiFi Frequency	2.4GHz
WiFi Protocol	802.11b/g/n
transmission rate	300Mbps
Color	White
Device size	59.5x35x11.5mm
Work Voltage	5V–15V
Package	95x95x30mm
Weight	65g

LAN
DC
USB
Reset button
Ethernet cable connection light
Hotspot connection status light
DC power supply hole
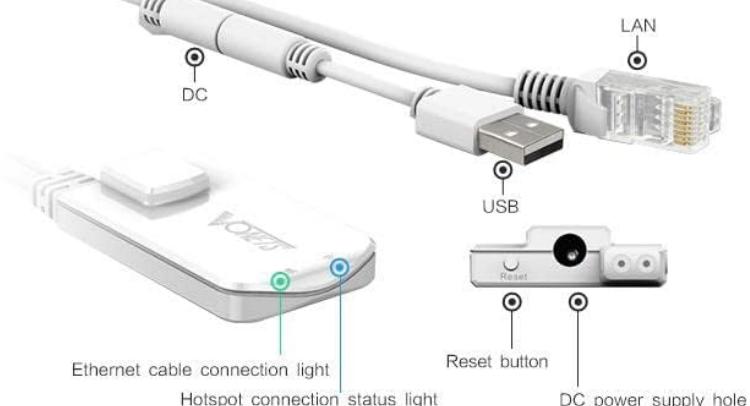
Product Features

1、Repeater/Bridge mode
VAP11N has WiFi repeater mode and bridge mode

2、TAFC
The original creation D/A temperature compensated auto frequency control technology（TAFC），make sure the lasting stability, that the WiFi signal is not dropped.

3、Support Domain name configuration
Domain name configuration technology, support WEB management, Chinese and English configuration interface, solve the worries of user configuration

4、IEEE 802.11n
Adopt advanced 802.11N WiFi technology 300Mbps WiFi transmission rate

5、Industrial Solution
Using mature wireless solutions, wireless performance is stable

6、2.4G WiFi network can be disable
The user can turn off the WiFi 2.4G network separately in the configuration interface

7、So small size, Suit for embedded
59.5mm x 35mm x 11.5mm（L x W x H）

8、WiFi intelligent bridge mode
AP Station (WiFi hotspot) mode
AP Client (WiFi client) mode
Repeater (WiFi signal repeater) mode

Image: Detailed product specifications and parameters for the VAP11N-300.

8. MAINTENANCE

To ensure the longevity and optimal performance of your Vonets VAP11N-300, consider the following maintenance tips:

- **Firmware Updates:** Regularly check the official Vonets website for the latest firmware updates. Updating the firmware can improve performance, add new features, and fix bugs. The device supports online software optimization.
- **Proper Placement:** Place the device in a well-ventilated area, away from direct sunlight, heat sources, and moisture. Avoid placing it near large metal objects or other electronic devices that may cause interference.

- **Regular Reboots:** Periodically rebooting the device (power cycling it) can help clear its memory and resolve minor performance issues.
- **Cleaning:** Keep the device clean and free from dust. Use a soft, dry cloth to wipe the exterior. Do not use liquid cleaners or aerosols.
- **Power Supply:** Always use a stable power supply within the specified voltage range (DC5V-15V).

9. TROUBLESHOOTING

If you encounter issues with your Vonets VAP11N-300, try the following troubleshooting steps:

- **Cannot Access Web Interface:**

  - Ensure the device is properly powered on and connected to your computer via Ethernet.
  - Verify you are using the correct IP address (`192.168.254.254`) or domain (`http://vonets.cfg`).
  - Check your computer's network settings to ensure it's configured to obtain an IP address automatically (DHCP).
  - Temporarily disable any firewall or antivirus software that might be blocking access.

- **No Internet Connection After Setup:**

  - Double-check the Wi-Fi password entered during configuration. Ensure it matches your router's Wi-Fi password exactly.
  - Confirm that the selected Wi-Fi hotspot is active and providing internet access.
  - Reboot both the VAP11N-300 and your main router.
  - Ensure the DHCP server setting on the VAP11N-300 is set to "Disable" (recommended configuration) to avoid IP conflicts with your main router.

- **Frequent Disconnections:**

  - Check the signal strength of the Wi-Fi network the VAP11N-300 is connected to. If the signal is weak, try moving the device closer to the main router or reducing obstacles.
  - Ensure there are no strong sources of interference (e.g., microwaves, cordless phones) nearby.
  - Update the device firmware to the latest version.

- **Device Gets Warm:**

  - It is normal for networking devices to generate some heat during operation. Ensure adequate ventilation around the device.
  - If the device becomes excessively hot or exhibits unusual behavior, disconnect power and contact support.

10. WARRANTY & SUPPORT

For warranty information, please refer to the documentation provided with your purchase or contact your retailer. Vonets is committed to providing reliable products and customer satisfaction.
For technical support or further assistance, please feel free to contact Vonets support via email:
support@vonets.com
You can also visit the official Vonets website for more information and resources:www.vonets.com

Documents - Vonets – VAP11N-300

[VONETS Series Product Manual: WiFi Repeater, Router, and Bridge Setup Guide](#)
Comprehensive guide to setting up and troubleshooting VONETS WiFi repeaters, routers, and bridges. Covers Class A, B, and C product series with detailed instructions and common fault solutions.
lang:en score:55 filesize: 735.91 K page_count: 14 document date: 2016-07-26

[VONETS WiFi Bridge/Repeater Quick Setting Guide](#)
A quick guide to setting up and configuring VONETS WiFi Bridge and Repeater devices, including application methods and troubleshooting.
lang:en score:46 filesize: 894.71 K page_count: 10 document date: 2018-11-16

[pdf] User Manual
Administrator E C REP UK WARNIN GBrand VONETS Model VAP11N 300 Batch No 202406 Country of Origin China G EN Configure correctly as per manual Place in well ventilated area to avoid 71gVdVUPN6Lm media amazon images I 71gVdVUPN6L |||
Manufacturer: Shenzhen Houtian NetworkCommunication Technology Co ,Ltd Add: Floor 3,Building B, No.29, LongfengRoad, longgang District, Shenzhen City.Guangdong Province Email:support Vonets.com Brand: VONETS Model: **VAP11N-300** Batch No: 202406 Country of Origin: China EC UK eVatmaster Consulting Gm...
lang:it score:41 filesize: 157.75 K page_count: 1 document date: 2024-08-29

VONETS WiFi Bridge application in Electronic scales

Nowadays the electronic scales support to access to the network host to achieve data analysis, but most of them can only be wired RJ45 network port connection, but when one electronic scale need to put anywhere in the market, it requires complicated network cabling.   So if electronic scale can achieve wireless access, it can greatly reduce the human and material costs, VONETS WiFi bridge can be a perfect solution to this problem.   The following VAP11N-300 as an example to illustrate such applications.

I. Application topology

II. Configure WiFi bridge, connect to Internet by Wireless

1. After VAP11N-300 is powered on, connect VAP11N-300 Ethernet cable to computer, then login webpage and input http://vonets.cfg in browser, both user name and password are "admin";

2. Enter the hot spot information:

2.1 In the market, most of the hot spot are the same, so it is
----
I'm a grain of sand on the beach, but I can be found in public
HTTP://WWW.VONETS.COM

[pdf]

Administrator VONETS WiFi Bridge application in Electronic scales vonets VAP11N

We belong to China, we also belong to the world.....HouTian -- ... man and material costs, VONETS WiFi bridge can be a perfect solution to this problem. The following **VAP11N-300** as an example to illustrate such applications. I. Application topology II. Configure WiFi...

lang:en score:36 filesize: 425.39 K page_count: 6 document date: 2017-09-06

VAP11N-300 Product Specification

VAP11N-300 is a professional 300Mbps WiFi repeater/bridge that is elaborately developed by HouTian Network, the original creation D/A temperature compensated auto frequency control technology（TAFC）,   it solved the common failing of the traditional wifi signal or wifi products that easily drop the network, make sure the lasting stability to ensure that the WiFi signal is not dropped. It is based on IEEE 802.11N standard, can extend WiFi Network range, provide the stable transmission up to 300Mbps, also is compatible with IEEE 802.11B and IEEE 802.11G standard.

VAP11N-300 is an environmentally and safe WiFi signal repeater. Working in the repeater mode, VAP11N-300 can be doubled to extend the original WiFi signal coverage, while it can ensure the security of the wireless signal, its working principle is: at the edges of the original WiFi hot spot signal coverage, the VAP11N-300 that in "repeater mode" is able to receive weak WiFi signal, and then zoom in to the normal, safe strength, and after optimization, error correction processing, to achieve signal coverage distance doubled extension under safe. This differs from traditional wireless signal amplifier - only amplifies the signal and ignore the wireless security.

➤   Environmental Safe, Portable
➤   Support 802.11b/g/n WiFi transmission protocol, 300Mbps rate of transmission
➤   Professional intelligent WiFi repeater
➤   WiFi intelligent bridge function, Wireless switch wired, wired switch wireless, intelligent switch;
➤   WiFi intelligent repeater mode, it supports WiFi hot spots scan automatically and WiFi hot spot memory function
➤   Support turn off the wifi hotspot function
➤   Support WEB remote firmware upgrade, can get the latest firmware free
➤   Support local WEB management, Chinese and English configuration interface
➤   It can be USB powered, easy to use power bank supply
➤   Adopt the original creation D/A temperature compensated auto frequency control technology (TAFC) , make sure the lasting stability to ensure that the WiFi signal is not dropped
➤   Original creation VDNS virtual domain configuration technology to solve the user's trouble of configuration
➤   Support connecting more than 20pcs WiFi terminal at the same time.
➤   Support WPA-PSK/WPA2-PSK、64/128/WEP security mechanism.
➤   Input voltage（DC5V-15V）, Needn't extra power supply,   reducing e-waste.
➤   The transmission distance (without obstacle) : 80m.

Shenzhen Houtian Network Communication Technology Co., Ltd
http://www.vonets.com

[pdf] Specifications Datasheet

VAP11G WIFI Bridge   VAP11N 300 Product Specification is a professional 300Mbps WiFi repeater bridge that elaborately developed by HouTian Network the original creation View Datasheet vonets ||| **VAP11N-300** Product Specification **VAP11N-300** is a professional 300Mbps WiFi repeater/bridge that is elaborately developed by HouTian Network, the original creation D/A temperature compensated auto frequency control technology TAFC it solved the common failing of the traditional wifi signal or wifi...

lang:en score:30 filesize: 233.16 K page_count: 3 document date: 2020-12-04

VAP11N-300 Product Specification

VAP11N-300 is a professional 300Mbps WiFi repeater/bridge that is elaborately developed by HouTian Network, the original creation D/A temperature compensated auto frequency control technology （TAFC）,   it solved the common failing of the traditional WiFi signal or WiFi products that easily drop the network, make sure the lasting stability to ensure that the WiFi signal is not dropped. It is based on IEEE 802.11N standard, can extend WiFi Network range, provide the stable transmission up to 300Mbps, also is compatible with IEEE 802.11B and IEEE 802.11G standard.

VAP11N-300 is an environmentally and safe WiFi signal repeater. Working in the repeater mode, VAP11N-300 can be doubled to extend the original WiFi signal coverage, while it can ensure the security of the WiFi signal, its working principle is: at the edges of the original WiFi hot spot signal coverage, the VAP11N-300 that in "repeater mode" is able to receive weak WiFi signal, and then zoom in to the normal, safe strength, and after optimization, error correction processing, to achieve signal coverage distance doubled extension under safe. This differs from traditional WiFi signal amplifier - only amplifies the signal and ignore the WiFi security.

➤   Environmental Safe, Portable
➤   Support 802.11b/g/n WiFi transmission protocol, 300Mbps rate of transmission
➤   Professional smart WiFi repeater
➤   WiFi smart bridge function, WiFi to wired, wired to WiFi, smart exchange;
➤   WiFi smart repeater mode, it supports WiFi hotspots scan automatically and WiFi hotspot memory function
➤   Support turn off the WiFi hotspot function
➤   Support WEB remote firmware upgrade, can get the latest firmware free
➤   Support local WEB management, Chinese and English configuration interface
➤   It can be USB powered, easy to use power bank supply
➤   Adopt the original creation D/A temperature compensated auto frequency control technology (TAFC) , make sure the lasting stability to ensure that the WiFi signal is not dropped
➤   Original creation VDNS virtual domain configuration technology to solve the user's trouble of configuration
➤   WiFi hotspot memory, maximum memory 100 hotspots;
➤   Support connecting more than 20pcs WiFi terminal at the same time.
➤   Support WPA-PSK/WPA2-PSK、64/128/WEP security mechanism.
➤   Input voltage（DC5V-15V）, Needn't extra power supply,   reducing e-waste.
➤   The transmission distance (without obstacle) : 80m.

Shenzhen Houtian Network Communication Technology Co., Ltd
http://www.vonets.com

[pdf] Specifications

VAP11G WIFI Bridge   VAP11N 300 Product Specification

ShenzhenHoutianNetworkCommunicationTechnologyCo Ltd vonets is a professional 300Mbps WiFi repeater bridge that elaborately developed by HouTian Network the original creation View ||| **VAP11N-300** Product Specification **VAP11N-300** is a professional 300Mbps WiFi repeater/bridge that is elaborately developed by HouTian Network, the original creation D/A temperature compensated auto frequency control technology TAFC it solved the common failing of the traditional WiFi signal or WiFi ...

lang:en score:30 filesize: 234.25 K page_count: 3 document date: 2021-07-01
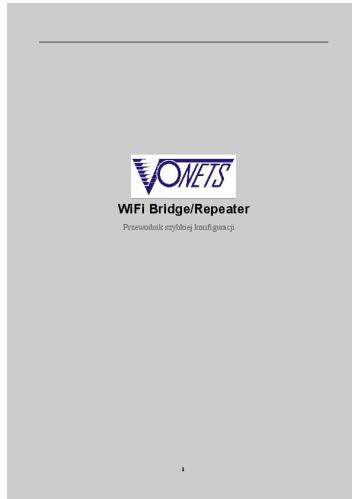
[VONETS WiFi Bridge/Repeater - Przewodnik Szybkiej Konfiguracji](#)

Szczegółowy przewodnik konfiguracji urządzenia VONETS WiFi Bridge/Repeater, opisujący tryby pracy (Repeater, Bridge, AP), podłączanie, ustawienia sieciowe, konfigurację punktu dostępu oraz często zadawane pytania. Zawiera również informacje o certyfikacji zgodności CE.

lang:pl score:28 filesize: 1.7 M page_count: 11 document date: 2019-01-21

[pdf]

SCL WIFI BRIDGE shopping geocities jp succul product img wifi router |||

VONETS VONETS 1 VAP11G-300 A LAN Mbps DC5V-15V/500mA 80m--100m 300 **VAP11N-300** DC5V-15V/500mA 50m--80m 300 MINI300 DC5V/500mA 50m--80m 300 VRP300 AC110V-240V 50m--80m 300 VRP5G AC110V-240V 50m--80m 300 450 VAP11G-500 DC5.5V--15V/2A 300m--500m 300 VAP11G-10...

lang:en score:24 filesize: 521.65 K page_count: 8 document date: 2016-11-26
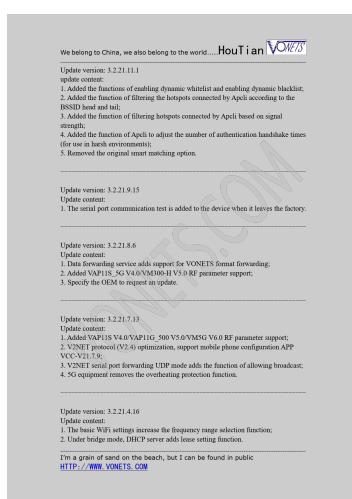
[pdf]

VONETS   think HouTian Update version 3 2 21 11 1 update content Added the functions of enabling dynamic whitelist and blacklist url asp id 75 vonets |||

HouTian We belong to China, we also belong to the world..... ---------------------------------- ----- ... -- VM300 2.0/1.0 MINI300 5.0/4.0/3.0/2.0/1.0 **VAP11N-300** 4.0/1.0 VAP11G-300 6.0/5.0/4.0/3.0/2.0/1.0 VRP300-PLUS 3.0 VAP11G-500 5.0/4.0 VAR...

lang:en score:19 filesize: 913.29 K page_count: 27 document date: 2021-11-03

[pdf]

ATC   CERTIFICATE vonets NTEKTestingTechnologyCo Ltd Address No 345 BaimaBlock GuantaiRoad NanchengDistrict Dongguan Guangdong China Tel 86 769 23301666 Fax 23301600 Email VAP11N 300 Rohs Certificate |||

…

lang:en score:14 filesize: 1.36 M page_count: 1 document date: 2017-09-28