

Metal IP67 Outdoor Wireless-N Access Point - 300Mbps

R300WN22MOD / R300WN22ODG / R300WN22ODE /
R300WN22MOD5 / R300WN22MO5G / R300WN22MO5E



*actual product may vary from photos

DE: Bedienungsanleitung - de.startech.com

FR: Guide de l'utilisateur - fr.startech.com

ES: Guía del usuario - es.startech.com

IT: Guida per l'uso - it.startech.com

NL: Gebruiksaanwijzing - nl.startech.com

PT: Guia do usuário - pt.startech.com

For the most up-to-date information, please visit: www.startech.com

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by StarTech.com could void the user's authority to operate the equipment.

Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limit set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Déclaration d'exposition à la radiation:

Cet équipement respecte les limites d'exposition aux rayonnements IC définies pour un environnement non contrôlé. Cet équipement doit être installé et mis en marche à une distance minimale de 20 cm qui sépare l'élément rayonnant de votre corps. L'émetteur ne doit ni être utilisé avec une autre antenne ou un autre émetteur ni se trouver à leur proximité.

FCC ID: SC DOW141000001

IC: 11232A-R300WN22MOD

FCC ID: SC DOW161000001

IC: 11232A-300WN22MOD5

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Important Notice

This product **MUST** be installed by a professional installer who is familiar with local building and safety regulations, where appropriate, and is licensed by applicable authorities. The professional installer is responsible for making sure grounding is available and that it meets the relevant local and national electrical codes. Failure to employ a professional installer may render the product warranty void and it may also expose the end user or service provider to legal and financial liabilities. StarTech.com expressly disclaims any and all liabilities for injury, damage, or violation of regulations due to improper installation of outdoor units or antennas.

Always remember to protect the AP by installing grounding lines as it is necessary to protect your outdoor installations from lightning strikes and the build-up of static electricity. The AP must be grounded properly before powering up, as direct grounding of an outdoor AP is critical and must be done correctly to protect your networks from harsh outdoor environments and destructive ESD surge.

CAUTION: Be sure that earth grounding is available and that it meets local and national electrical codes. If in doubt always consult with a qualified electrician to make sure the outdoor installation is properly grounded. For additional lightning protection, lightning rods, lightning arrestors or RJ45 surge protectors may be used to compliment the installation.

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Introduction

Packaging Contents

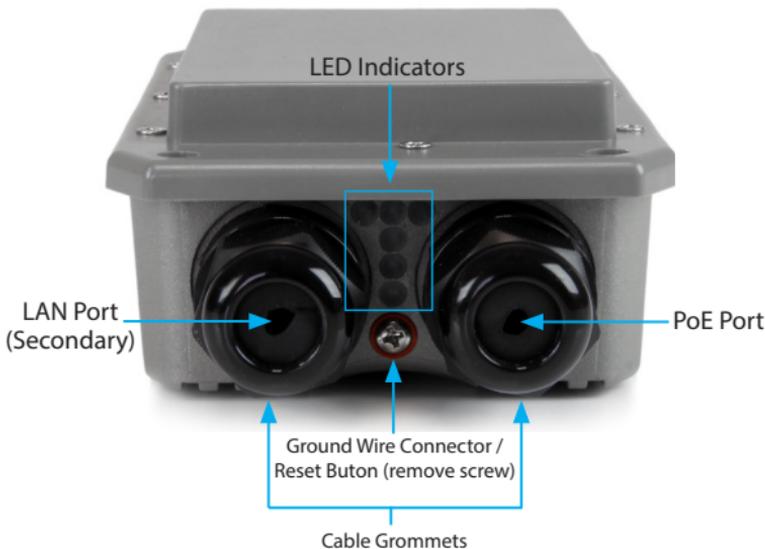
- 1 x Outdoor Wireless Access Point
- 1 x PoE Injector
- 1 x Pole Mounting Kit
- 1 x Power Adapter
- 1 x Quick Start Guide

System Requirements

- A networked computer system with a Java-enabled web browser (for configuration)
- Cat 5 (or better) network cabling from PoE Injector to Wireless AP and PoE Injector to LAN Switch/router (no more than 100m total)

Product Diagram

Front View



LED Indicators



- | | |
|---|--|
| 1 Wireless Signal Strengths LEDs | Shows different signal strength levels. (Only supported in WDS, Client Bridge + Repeater AP, CPE + Repeater AP Mode) |
| 2 Power LED | A solid green light indicates the device is powered and ready. |
| 3 LAN LED | A solid green light indicates the LAN port connection is OK. A blinking green light indicates that the unit is transmitting data over that port. |
| 4 LAN LED (PoE) | A solid green light indicates the LAN port (PoE) connection is OK. A blinking green light indicates that the unit is transmitting data over that port. |

Installation

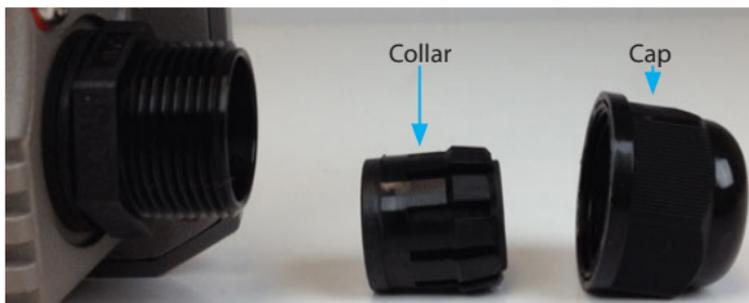
Preparing Your Site

1. Determine the location for the included PoE injector and mount using the appropriate screws/anchors for the material you are mounting to (not included).
2. Determine the location for the Wireless AP. If you are pole-mounting the AP, use the included Pole Mounting Kit to secure the device. If you are wall mounting the AP, use the appropriate screws/anchors for the material you are mounting to (not included).
3. Prepare/purchase the required length of Ethernet cabling to go from the PoE Injector to your LAN Switch or router, and from PoE Injector to the AP. The total length of Ethernet cabling from the Wireless AP to your LAN switch or router should not exceed 100m.

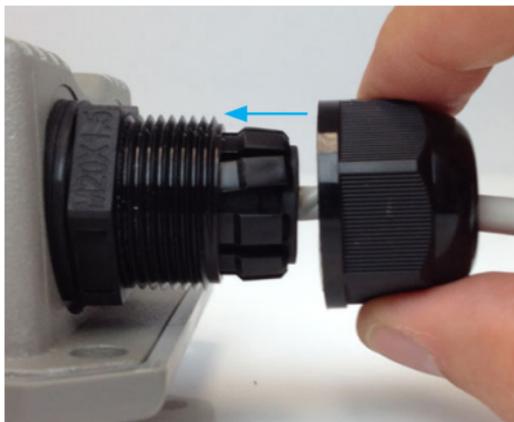
Note: Molded / Snagless Ethernet cables are not advised for this product, as the added bulk on the connector end makes it difficult to fit within the included Cable Grommets.

Hardware Installation

1. Connect the included power adapter to an available wall outlet and the DC jack to the PoE injector.
2. Connect an Ethernet cable from the LAN port of the PoE Injector to your LAN switch or router.
3. Connect a second, longer Ethernet cable from the PoE port of the PoE Injector. The other end of this cable will connect to the AP as instructed in the following steps.
4. Unscrew the Cap portion of the Cable Grommet and remove the Collar.



5. Slide the Cap onto the cable first, then split the Collar and wrap it around the cable.
6. Connect the cable to the PoE port on the AP, then slide the Collar into the Grommet.
7. Thread the Cap over the assembly.



Note: The AP may take up to 2 mins to complete the power on sequence.

8. Connect an Ethernet cable from the LAN port of the PoE Injector to your LAN switch or router.

Operation

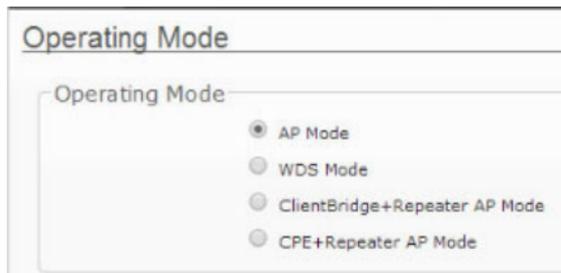
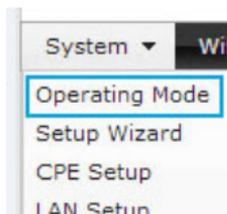
For complete operating instructions / specifications, please visit www.startech.com/R300WN22MOD

Default Settings

Default IP Address: **192.168.2.254**

Username / Password: **root / default**

1. Configure a system to be on the same subnet as the AP (e.g. 192.168.2.2 – 253).
2. Open your preferred web browser and enter the IP address **192.168.2.254** into the address bar, then press Enter.
3. Enter your Username / Password to login to the web interface (Default: **root / default**).
4. From the menu at the top, select *System* -> *Operating Mode*, to select your preferred mode from the available options, then click **Save & Reboot**.



Router AP Mode
(R300WN22MOD /
ODx only)

In Router AP Mode, 802.11n/g/b compliant devices can connect to the wireless network, with NAT to bridge LAN / WAN connections.

AP Mode

In access point (AP) mode, 802.11n/g/b compliant devices can connect to the wireless network.

WDS Mode

Wireless distribution system (WDS) mode expands current wireless coverage from other Wireless AP devices that are in WDS mode.

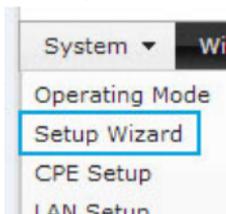
Client Bridge +
Repeater AP Mode

WISP Client Bridge + Repeater mode acts as a bridge between two LAN segments over a wireless link, extending network coverage.

CPE + Repeater AP
Mode

WISP CPE + Repeater mode acts as a bridge between two LAN segments over a wireless link, extending network coverage, with NAT to bridge LAN / WAN connections

- Once the AP reboots into your desired mode, re-connect to the web interface.
- Select *System -> Setup Wizard* to go through the basic configuration for that mode. Available screens and settings will vary, depending on the mode selected.



AP Mode Setup

LAN Setup – Configure your desired IP Address settings for the LAN interface of the AP, then click **Next**.

A screenshot of the 'Setup Wizard' web interface, specifically the 'LAN Setup' page. The page title is 'Setup Wizard'. Below the title, there is a section for 'LAN Setup' with a descriptive paragraph: 'This page is used to configure the parameters for local area network which connects to the LAN port of your Access Point. Here you may change the setting for IP Address, Netmask, etc.' Below this, there are two radio buttons for 'Mode': 'Static IP' (selected) and 'Dynamic IP'. Underneath, there are three input fields: 'IP Address' with the value '192.168.2.254', 'IP Netmask' with the value '255.255.255.0', and 'IP Gateway' with the value '192.168.2.1'. At the bottom of the form are three buttons: 'Cancel', 'Back', and 'Next'.

Note: If you change the default IP address, use the new address to connect to the web interface going forward.

DNS – Configure a primary and secondary DNS server, if desired, then click **Next**.

A screenshot of the 'Setup Wizard' web interface, specifically the 'DNS' page. The page title is 'Setup Wizard'. Below the title, there is a section for 'DNS' with a descriptive paragraph: 'This page allows you assign DNS Server IP address.' Below this, there are two radio buttons for 'DNS': 'No Default DNS Server' (selected) and 'Specify DNS Server IP'. Underneath, there are two input fields: 'Primary DNS' and 'Secondary DNS'. At the bottom of the form are three buttons: 'Cancel', 'Back', and 'Next'.

Wireless Setup – Configure your desired wireless settings including SSID, wireless mode and transmit power, then click **Next**.

The screenshot shows the 'Wireless Setup' page within a 'Setup Wizard' interface. At the top, there are navigation tabs: System, Wireless, Advance, Utilities, and Status. The page title is 'Setup Wizard' and the sub-section is 'Wireless Setup'. A descriptive text states: 'This page is used to configure the parameters for wireless LAN clients which may connect to your Access Point.' Below this, there are several configuration options: 'Band Mode' is set to '802.11b/g/n'; 'Country' is 'US'; 'Channel' is 'Auto'; 'Tx Power' is 'Level 9'. There are two radio button options for 'Channel BandWidth': '20' (selected) and '20/40'. For 'Extension Channel', there are two radio button options: 'Upper' and 'Lower' (selected). An 'ESSID' field contains the text 'R300WN22MOD0'. At the bottom, there are three buttons: 'Cancel', 'Back', and 'Next'.

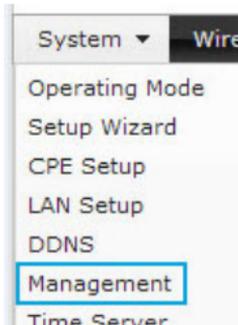
Wireless Security Setup – Select your desired wireless security type and configure a key, then click **Finish** to apply your settings and restart the AP.

Note: It is strongly recommended to configure security, to avoid unwanted access to your wireless network.

The screenshot shows the 'Wireless Security Setup' page within a 'Setup Wizard' interface. At the top, there are navigation tabs: System, Wireless, Advance, Utilities, and Status. The page title is 'Setup Wizard' and the sub-section is 'Wireless Security Setup'. A descriptive text states: 'This page allows you setup the wireless security to prevent any unauthorized access to your wireless network.' Below this, there is a 'Security Type' dropdown menu set to 'WPA2-PSK'. Underneath is the 'WPA General' section with two rows of radio button options: 'Cipher Suite' with 'AES' (selected) and 'TKIP'; 'Key Type' with 'ASCII' (selected) and 'HEX'. A 'Pre-shared Key' text field is empty. At the bottom, there are three buttons: 'Cancel', 'Back', and 'Finish'.

To restrict access to the web interface of your AP, it is also recommended to configure a password, which can be done by selecting *System -> Management* from the menu. Click **Save** to apply the changes.

Note: The **root** account allows read / write access to the AP interface, while the **admin** account allows read only.



System ▾ Wireless ▾ Advance ▾ Utilities ▾ Status ▾

Management Setup

System Information

System Name:

Description:

Location:

root Password

New root Password:

Check root Password:

admin Password

New admin Password:

Check admin Password:

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For the latest drivers/software, please visit www.startech.com/downloads

Warranty Information

This product is backed by a two year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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