

N170

User Manual



Shanghai Orange Box Digital Technology Co., Ltd.

TEL: +86-021-60403356

E-mail: support@orange-box.cn

Contents

1.	Product Overview	3
2.	Product Features	3
3.	Technical Specifications.....	4
4.	User Instructions.....	5
5.	Installations.....	6

1. Product Overview

Product N170 is an Ethernet RJ45-to-Wi-Fi converter device. It enables the conversion of wired network devices into Wi-Fi-enabled devices, thereby enhancing deployment flexibility and reducing wiring complexity.

2. Product Features

2.1. Wireless Connectivity:

N170 supports stable 2.4GHz Wi-Fi 6 wireless data transmission, offering more flexible device deployment options.

2.2. Wired Connectivity:

N170 features an RJ45 interface, supporting 10M/100M speed auto-negotiation.

3. Technical Specifications

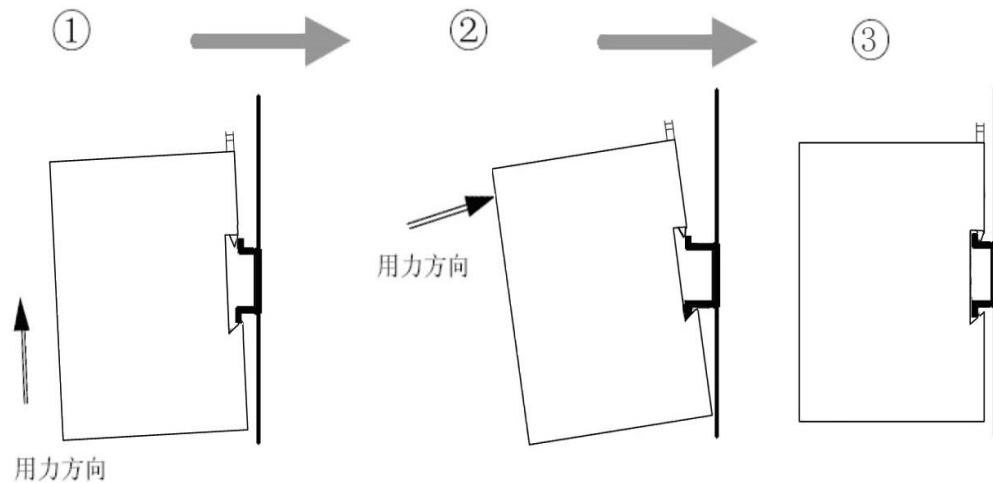
- 3.1. Dimensions: 25mm (Width) x 105mm (Height) x 118mm (Depth)
- 3.2. Weight: 100g
- 3.3. Power Supply: 9~30VDC, Maximum Current 1.0A @ 24VDC
- 3.4. Operating Temperature: -40°C ~ +85°C
- 3.5. Supports 2.4 GHz Wi-Fi 6 (802.11ax) with backward compatibility to IEEE 802.11b/g/n protocols
- 3.6. Testing Standards
 - 3.6.1. Vibration Resistance: Compliant with IEC60068-2-27 (Shock) and IEC60068-2-6 (Sine) standards.
 - 3.6.2. Electromagnetic Interference (EMI): Compliant with EN55032 and EN55035 specifications.
 - 3.6.3. International Certifications: Passed EU CE, Japan TELEC, and US FCC certifications.
Please refer to the appendix for details.
- 3.7. Protection Rating: IP20
- 3.8. Installation: Supports 35mm rail mounting.
- 3.9. Operating Environment
 - 3.9.1. Ambient Humidity: 5% ~ 95% (non-condensing)
 - 3.9.2. Altitude below 2000m

4. User Instructions

- 4.1. Network Configuration
- 4.2. When using the N170 device for the first time, network configuration is required based on site requirements. Follow these steps:
 - 4.3. Power on the N170 device and connect an Ethernet cable to a visualization device (hereinafter referred to as "device").
 - 4.4. Disable the device's Wi-Fi function and set the Ethernet port to a static IP (e.g., 192.168.4.xxx) or the recommended DHCP mode. If DHCP is selected, N170 will automatically assign an IP address of 192.168.4.2 to the device.
 - 4.5. Access <http://192.168.4.1/> in the device's web browser.
 - 4.6. Enter the desired SSID and PASSWORD, and click to configure the network. N170 will automatically configure the network and reboot. After one to two minutes, the device should be able to access the internet.
 - 4.7. The device can now access the internet or check the current IP address to verify that it has successfully received an IP address assigned by the target Wi-Fi network.
 - 4.8. Re-configuration
 - 4.9. Repeat the above steps to re-configure the network.

5. Installations

35mm rail mounting



5.1. Post-Installation Checks



- An independent 24VDC (direct current) power supply with an output power greater than 50W (24VDC@2A) and short-circuit protection should be configured.
- Ensure that the antenna is tightened and in a reliable position for signal reception.
- Check that the wired network connection is reliable and not loose.
- Conduct a remote access test with the device service provider to ensure that remote control functions are working properly.
- Perform a safety check to confirm that all installed components are secure, with no loose or hazardous points.
- Record installation details and parameter configurations for future maintenance and troubleshooting purposes.

FCC Warning

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 the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.