

NH03 Product Manual



SD-WAN Internet, Internet Security

Remarks:

This is a Class A product. In the living environment, changing the product may cause radio interference. In this case, the user may be required to take practicable measures for interference; all information in this article is used as a guide and does not constitute any form of guarantee; if there are product changes, upgrades, etc., without prior notice.

1 Interface description



LED display area: Define the status of the machine module function, which can be customized according to the needs of the LED display.



Gigabit Ethernet port: electrical port, used to connect to the peripheral network port, using a network cable to connect.



Gigabit Ethernet port: Optical port, used to connect the peripheral network port, using optical module and optical fiber cable to connect.



USB interface: support USB2.0 standard, used to connect USB devices, such as U disk.



Button interface: used to reset the whole machine by pressing the button, and the function can also be customized.



Serial port: The standard RJ45 serial port is used for debugging the connection between the machine and the PC.



Power interface: 12V/2.5A power adapter input port.



SIM card interface: used to install the SIM card, self-elastic, inserted according to the silk screen of the corresponding module card.



Antenna interface: used to connect the network signal antenna, the interface is a female connector.

Note: The above introduction is the standard of NH03 general interface and indicator light. For some products with special function interface and indicator light, please refer to the actual product or detailed manual. In addition, the design of new products will be changed without prior notice.

2 Application scenarios

With the continuous emergence of the Internet of Everything and a large number of new business scenarios, the network is facing challenges such as openness, integration, intelligence, and personalization. The combination of the mobile Internet and the Internet of Things makes the generation and collection of big data possible. It will meet the needs of users for ultra-high traffic, ultra-large number of connections, and ultra-fast mobility, and can provide users with extreme experiences such as 4K high-definition video, VR\AR, etc. It will also greatly improve the cost of network construction and operation, and comprehensively enhance operators' service innovation. ability. Technological changes will extend from wireless to the network side. New network technologies represented by SDN/NFV will drive the innovation of 4G network architecture. Cloud-based services and industry digitization will bring users a better experience, and will also promote traditional CPE. Continuous evolution to vCPE. vCPE uses NFV technology to support a variety of security applications, including firewall, NAT, path performance monitoring, application detection, IPS, content filtering, antivirus, and unified threat

management. vCPE effectively utilizes WAN links of the enterprise WAN type, combines traditional MPLS with other connections, can support full OAM, L2/L3 VPN functions, MPLS support, routing and security, and can be easily integrated into any existing network Environment.

3 Features

- Provides uninterrupted access to multiple networks

Provide fast 4G WAN and wired links to achieve business continuity and WAN diversity.

Support 802.11b/g/n/ac standard communication, meet the needs of users for WLAN wireless access, the rate can reach up to 150Mbps, easily build a wireless local area network, support WEP/WPA/WPA2 and other encryption, ensure the security of the wireless local area network, support 4G, Wi-Fi, and wired multi-channel backup each other, providing users with redundant communication links, which is another strong guarantee for uninterrupted data transmission.

- Powerful security features

Data transmission security: support IPsec VPN, L2TP, PPTP, OPEN VPN, GRE, CA certificate to ensure data security transmission Network protection security: support SPI full state detection, Secure Shell (SSH), intrusion protection (Ping), DDoS defense, attack defense , IP-MAC binding and other wall functions to ensure the network is not attacked by the outside world, the device management security.

- High reliability design

Link detection design, link layer detection, detection of link conditions, automatic disconnection, maintenance of long link connection, PPP layer detection, maintenance of the

connection with the operator's network side, prevention of forced dormancy, and maintenance of the smoothness of the network . VPN tunnel detection, maintain the connection stability of VPN tunnel, ensure the continuity of data transmission, equipment failure self-healing design, built-in hardware watchdog, equipment operation fault self-healing, ensure equipment maintains high availability.

- Link redundancy design

It has multiple link redundancy designs to ensure uninterrupted field communication.

Support 4G, Wi-Fi and wired backup for each other.

- Support network management platform to achieve centralized management and large-scale deployment

Support SDN control management platform, which is convenient for users to monitor and centrally manage the status of a large number of devices through the management platform. It can manage and configure batches of devices remotely at the same time, improving the work efficiency of network deployment and maintenance.

4 Environmental Instructions

Part Name	harmful materials					
	Pb	Hg	Cd	Cr(VI)	PBB	PBDE
Chassis/Clapboard/Other Metal Parts	×	○	○	○	○	○
printed circuit board assembly (PCAs)	×	○	○	○	○	○
Cable/Wire	×	○	○	○	○	○
Battery	○	○	○	○	○	○
Power/Power Adapter	×	○	×	○	○	○
antenna	×	○	○	○	○	○
Connectors / Fasteners / Heatsinks	×	○	○	○	○	○
Connector/Circuit Breaker Contacts	×	○	×	○	○	○

This form is prepared according to the provisions of SJ/T 11364.

○: Indicates that the content of this hazardous substance in all homogeneous materials of this part is below the limit requirement specified in GB/T 26572.

×: Indicates that the content of the hazardous substance in at least one homogeneous material of the part exceeds the limit requirement specified in GB/T 26572.

Note 1: The applications marked by × in the table all meet the exception requirements for the application of restricted substances in the Joint Announcement No. 18 [2011] of the CNCA and the Ministry of Industry and Information Technology.

Note 2: The referenced Environmentally Friendly Use Period markings are based on the product's normal operating use conditions (eg temperature and humidity).

5 Packing list

Item	Name	Quantity	Unit
1	NH03 host	1	Pcs
2	adapter	1	Pcs
3	Mounting ears and screws	1	Set
4	serial line	1	Pcs
5	Ground wire	1	Pcs
6	Product Manual	1	Book
7	Product certification	1	Book
8	4G antenna	1	Pcs

6 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.

Any 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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator and your body: Use only the supplied antenna.