

N3-2608G-2GE/-PWR Series Switches

The N3-2608G-2GE/-PWR switches are the new-generation, environmental-friendly, and energy-saving Ethernet switches independently developed by *RAISECOM*, which can provide 8*GE RJ-45(POE) access and 2*GE SFP uplink interfaces. Based on the high-performance hardware platform and N3COM new-generation switching software platform, the N3-2608G-2GE/-PWR switches provide multiple features, such as flexible networking, various security control, and easy management and meanwhile support mature IPv6 and intelligent PoE management. This series can be widely applied to multiple scenarios, such as enterprise park access and GE to desktop.



Играем по новым
правилам



N3-2608G-2GE



N3-2608G-2GE-PWR

Highlights

Flexible Ethernet networking

In addition to traditional STP/RSTP/MSTP spanning tree protocol, also support the latest Ethernet Ring Protection Switching (ERPS) standard in the industry, which applies to various ring network topologies, such as single ring, tangent ring, and intersecting ring, and can provide sub-50ms protection switching to achieve carrier-grade reliability.

Support interface backup dual-homed protection, manual and static LACP to implement uplink backup, greatly improving reliability of access-side devices.

Support loop detection, automatic loop detection and loop elimination, to ensure stable operation of the network.

Various security control

Directly discard the illegal packets which mismatch the binding entries by establishing and maintaining the DHCP Snooping table. Ensure legality of DHCP server based on the feature of DHCP Snooping trusting interface.

Support multiple access control and user authentication technologies, such as dynamic ARP inspection, dot1x, RADIUS, TACACS+, IP Source Guard, and secure MAC, improving security of the network and devices.

Support abundant ACL security strategies based on source MAC address and destination MAC address, source IP address and destination IP address, source interface and destination interface, or protocol.

Support broadcast storm control, enhancing network security.

Easy maintenance and management

Support various management modes, such as SNMPv1/v2c/v3, N3COM NMS, CLI, Web network management, Telnet, in-band management, which facilitate maintenance; support multiple encryption methods, such as SSH2.0, which make management more secure; support RMON and interface traffic statistics which, which facilitate network optimization and reconstruction.

Support MAC-based VLAN partitions, which is a good solution to the smart and flexible management of mobile offices.

Support IPv6 management and authentication function, thus applicable to management in the IPv6 network management environment.

Support local port mirroring, and traffic mirroring, thus facilitating extraction and analysis of network traffic and taking measures accordingly.

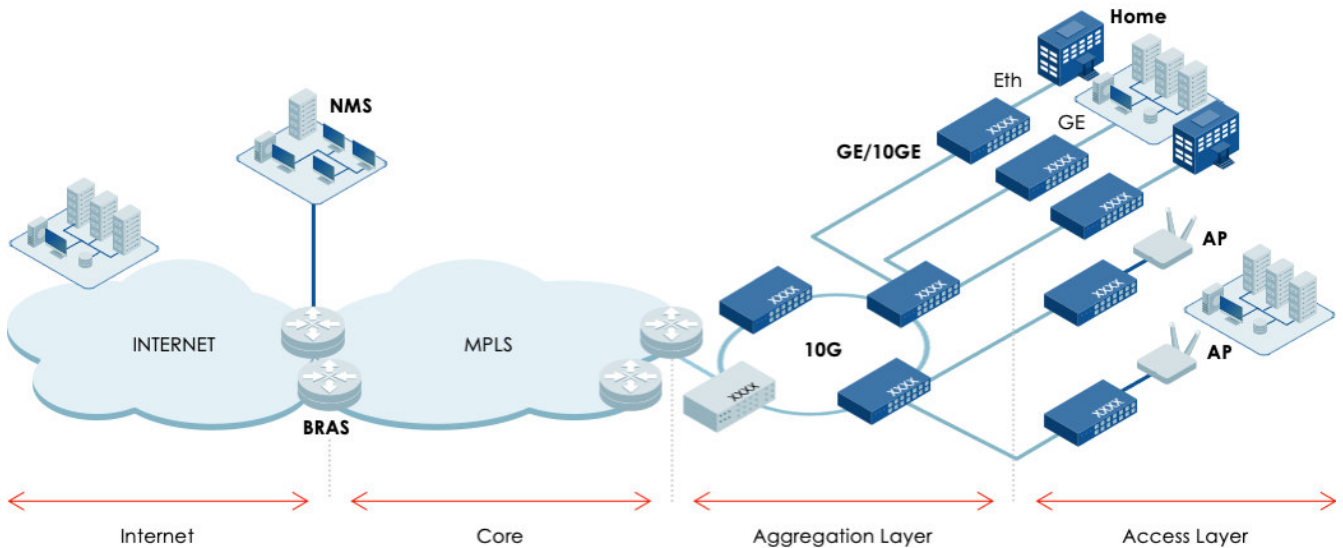
Powerful and flexible PoE (for PoE models only)

Comply with IEEE 802.3af and IEEE 802.3at standards. The interface can supply up to 30 W power. Be compatible to PDs and provide forcible power supply mode for non-standard PDs.

Support intelligent PoE management, including enabling/disabling power supply to interfaces, configuring output power of interfaces, configuring priority of power supply, power overloading protection, overtemperature protection.

Support intelligent PoE power supply, including periodic power supply, periodically restarting PDs, monitoring connection status of PDs, and restarting PDs upon disconnection.

Application scenarios



Enterprise park network access

In enterprise park access scenario, the N3-2608G-2GE series switches serve as the access devices and are connected upstream to the data devices in the enterprise/campus/residency and upstream to the L3 aggregation devices, accessing and transmitting the bandwidth, voice, Wi-Fi, and video services, thus meeting the users' requirements for high bandwidth and multi-service access.

Key features

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| Item | <ul style="list-style-type: none"> N3-2608G-2GE N3-2608G-2GE-PWR |
| Interface | <ul style="list-style-type: none"> 8* 10/100/1000Base-TX GE electrical interfaces + 2*100/1000M SFP optical interfaces |
| Switching capacity | <ul style="list-style-type: none"> 20 Gbit/s |
| Packet forwarding rate | <ul style="list-style-type: none"> 15 Mpps |
| Dimensions (mm) (Width × Depth × Height) | <ul style="list-style-type: none"> N3-2608G-2GE: 260 x 130 x 43.6 N3-2608G-2GE-PWR: 300 x 220 x 43.6 |
| Management interface | <ul style="list-style-type: none"> 1 RJ45 Console interface |
| MAC address table | <ul style="list-style-type: none"> 8K MAC addresses Automatic MAC address learning, MAC address aging, and static MAC address Static, dynamic, and blackhole MAC address entries MAC address limit based on interface or VLAN Managing MAC address flapping |
| VLAN | <ul style="list-style-type: none"> 4K VLANs MAC/Protocol/IP subnet/Interface-based VLAN Basic QinQ VLAN mapping |

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| Jumbo frame | <ul style="list-style-type: none"> Supported, 10 Kbytes |
| Ring network protection | <ul style="list-style-type: none"> ERPS (G.8032) STP/RSTP/MSTP BPDU Guard and root Guard Loop detection |
| Reliability | <ul style="list-style-type: none"> Manual aggregation, static LACP Interface backup Ethernet OAM 802.3ah |
| IP route | <ul style="list-style-type: none"> Static route Route management |
| IPv6 | <ul style="list-style-type: none"> IPv6 Ping, IPv6 Tracert, IPv6 Telnet, and IPv6 FTP/TFTP/SFTP IPv6 SNMP and N3COM NView NNM IPv6 network management IPv6 RADIUS, IPv6 TACACS+, IPv6 NTP and SNTP IPv6 ACL ND IPv6 IP Source Guard DHCPv6 Snooping, and DHCPv6 Client |
| Multicast | <ul style="list-style-type: none"> IGMPv1/v2/v3 Snooping and immediate leave Interface/user-based immediate leave Static multicast group IGMP MVR MLDv1/v2 Snooping IGMP filter IGMP Proxy |
| DHCP | <ul style="list-style-type: none"> DHCP Client DHCP Server DHCP Relay DHCP Snooping DHCP Option82/DHCP Option61/IPv6 DHCP Option18 Zero-configuration |
| Mirroring | <ul style="list-style-type: none"> Local port mirroring |
| QoS/ACL | <ul style="list-style-type: none"> Rate limiting in the ingress direction and egress direction of the interface 8 queues for each interface SP, WRR, DRR, SP+WRR, and SP+DRR Packet redirection 802.1p and DSCP priority remarking for packets Interface-based traffic monitoring and dual-rate three-color CAR L2-L4 packet filtering based on source MAC address and destination MAC address, source IP address, destination IP address, TCP/UDP source/destination interface ID, protocol, and VLAN |
| Security | <ul style="list-style-type: none"> Hierarchical user management and password protection 802.1x authentication based on interface and MAC address CPU protection and anti-ARP attack Binding combinations of the IP address, MAC address, interface, and VLAN Blackhole MAC address MAC address limit AAA, RADIUS, and TACACS+ Interface isolation Port security MAC SSHv2.0 SFTP HTTPS DHCP Snooping Dynamic ARP inspection, preventing MITM attacks and ARP DoS attacks BPDU Guard and root Guard |

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| Management and maintenance | <ul style="list-style-type: none"> Management through the Console interface SNMPv1/v2c/v3 and various management modes, such as CLI, Web, Telnet, and SSHv2.0 N3COM NView NNM system RMON LLDP/LLDP-MED Syslog and hierarchical alarms Ping and Tracert Dying Gasp alarm NTP and SNTP Virtual cable test Interface loop detection Optical module DDM Link-state tracking Dual systems |
| PoE (for PoE models only) | <ul style="list-style-type: none"> IEEE 802.3af and IEEE 802.3at-compliant, up to 30 W power for the interface Forcible power supply mode for non-standard PDs PoE power management, such as enabling/disabling power supply to interfaces, interface output power configuration, priority of power supply configuration, power overloading protection, and overtemperature protection PoE timed power supply, periodical restart of PDs, PD connection monitoring, and restarting PDs upon disconnection |
| Lightning protection | <ul style="list-style-type: none"> Interface lightning protection: 6 kV |
| Input voltage | <ul style="list-style-type: none"> AC power: 220 VAC, 100–240 VAC, 50–60 Hz DC power: -48 VDC, -36 to -72 VDC |
| Maximum power consumption | <ul style="list-style-type: none"> N3-2608G-2GE: 7 W N3-2608G-2GE-PWR: 124 W for PoE |
| Energy saving and environmental protection | <ul style="list-style-type: none"> Support IEEE802.3az energy conservation N3-2608G-2GE adopts a fanless and silent design The N3-2608G-2GE-PWR (A) support smart adjustment of fan speed by temperature |
| Environment requirements | <ul style="list-style-type: none"> Operating temperature: 0–50°C Relative humidity: 5%–90% (non-condensing) |

Application scenarios

| Product model | Description |
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| N3-2608G-2GE-AC/DC | Eight 10/100/1000 Mbit/s Ethernet electrical interfaces, 2 100/1000 Mbit/s SFP optical interfaces |
| N3-2608G-2GE-PWR-AC/DC | Eight 10/100/1000 Mbit/s electrical interfaces (IEEE 802.3af/802.3at-compliant), 2 100/1000 Mbit/s SFP optical interfaces |