

## MISCOM7209W-3N25 Series

7/9-port Layer 2 Full Gigabit Dual-band Wi-Fi Rail-mounted Industrial Wireless PoE Switch



- Support 1 or 3 Gigabit optical ports, 6 Gigabit electrical ports or PoE electrical ports, 2 antennas 2.4GHz and 1 antenna 5GHz, providing users with flexible networking methods
- Support AP mode, which can convert wired networks into wireless networks, enabling wireless terminals to access wired networks, and is AC controllable
- Support ring network redundancy protocols such as CS-Ring, EAPS, ERPS, STP/RSTP/MSTP, etc., to improve network reliability
- Comply with IEEE802.3at standard, compatible with IEEE802.3af, single-port PoE maximum output power 30W, whole machine PoE maximum output power 180W
- Support dual-channel DC power input, dual input supports power redundancy, non-PoE models support DC12~48V input, PoE models support DC48~57V input
- High-strength aluminum alloy casing, IP40 protection level, fanless casing heat dissipation, the equipment can reliably work in -40°C~+75°C harsh industrial environment

## Product Description

MISCOM7209W-3N25 series is Layer 2 managed full Gigabit dual-band Wi-Fi rail-mounted industrial wireless PoE switch, supporting 1 or 3 Gigabit slots, 6 Gigabit electrical ports or PoE electrical ports, 2 antennas 2.4GHz interfaces and 1 antenna 5GHz interface; it adopts a store-and-forward mechanism, has powerful bandwidth processing capabilities, automatically checks for packet errors, reduces transmission failures, and easily supports Gigabit networking, ensuring stable, reliable and efficient data transmission. The product selects industrial-grade components, cooperates with high-standard system design and production control, 35mm standard DIN rail installation, high-strength aluminum alloy housing, durable, -40°C~+75°C wide temperature operation, high-standard industrial protection design, can adapt to various harsh working environments, and has stable communication performance.

MISCOM7209W-3N25 series supports WEB network management functions and multiple network protocols, such as AP mode, AC control, fast roaming, RF settings, black and white lists, PoE, MW-RingV2, EAPS, ERPS, STP/RSTP/MSTP, VLAN, GVRP, QoS, LACP, LLDP, SNMPv1/v2c, RMON, IGMP Snooping, GMRP, 802.1X, ACL, static aggregation, port mirroring, static MAC address binding, network diagnosis, loopback detection, SNTP, system log and system online upgrade, etc., which can improve the performance, reliability and security of the network and meet the needs of various complex networks. The products have passed strict functional, high and low temperature, safety regulations and EMC tests to meet the application requirements of complex networks and harsh industrial environments, and can be widely used in integrated energy, smart cities, rail transit, intelligent transportation, smart factories, industrial automation and other fields.

## Product Features

- Support AP mode, which can convert wired network into wireless network, realize wireless terminal access to wired network, AC controllable
- Support 802.11k/v/r fast roaming, reduce the number of information interactions through FT protocol, achieve low latency, and improve user Internet experience
- Support multiple country code switching, suitable for channels in different regions
- Support transmission power adjustment, limit the number of connected users, SSID hiding, user isolation, WDS bridging, etc.
- Support WEP-OPEN/SHARE-AUTH, WPA/WPA2-PSK encryption methods, CCMP, TKIP encryption algorithms
- Support wireless user management, black/white list can filter wireless users, prohibit/allow designated wireless users to access
- Support IPv4/IPv6 Ping, IPv4/IPv6 Traceroute, Nslookup, packet capture, network diagnosis or fault analysis
- Support storm suppression of broadcast, multicast and unknown unicast messages, support broadcast and multicast data packet storm detection, and prevent network storms
- Support static link aggregation and dynamic link aggregation LACP, which can increase transmission bandwidth, improve link reliability and realize network load sharing
- Support 802.1Q VLAN, provides Access, Trunk, and Hybrid interfaces to easily divide multiple broadcast domains and enhance network security
- Support VLAN division based on ports, MAC, protocols, IP subnets, etc., which can be applied to networks in different environments
- Support GVRP protocol to realize dynamic distribution, registration and propagation of VLAN attributes, and maintain dynamic VLAN
- Support MAC address table and aging time limit, static MAC address and interface binding to ensure the use of legitimate users
- Support multicast protocols such as IGMP Snooping and GMRP to reduce the broadcast of multicast data in the network and save network resources
- Support LLDP link layer discovery protocol, obtains LLDP neighbor device information, monitors link status, and facilitates topology management and fault location
- Support ERPS Ethernet multi-ring protection technology, provides multi-ring networking, performs link backup, realizes rapid convergence, and improves network stability
- Support EAPS ring protection protocol and CS-RingV2 private ring network protocol to enhance the reliability of system communication
- Support STP, RSTP, and MSTP spanning tree protocols to eliminate network loops and improve network reliability
- Support loopback detection to prevent network loops from causing network storms
- Support SNMPv1/v2c, and can query, modify, and troubleshoot information through the MIB network management system to achieve centralized management
- Support QoS service quality, so that voice, video, and important data are transmitted first in network devices to solve network congestion

- Support ACL access control lists to filter TCP/ UDP/ ICMP/ IGMP messages based on source/destination IP and MAC addresses
- Support RMON remote network monitoring, statistics and alarms on various types of data frames, which can be used for remote monitoring and management of network management systems
- Support PoE Ethernet power supply, customizable interface power supply priority, and power supply to standard PD devices through network cables to save power wiring costs

## Technical Specifications

Software	
Switching	Support port configuration, port speed limit, storm suppression, storm detection, port aggregation, LACP, port statistics; Support 802.1Q VLAN, VLAN based on port/MAC/protocol/subnet, GVRP, port isolation; Support MAC address aging and learning limit, static MAC address binding and filtering
Wireless AP	Support AC control, SSID hiding, user isolation, WDS, 802.11k/v/r fast roaming Support wireless user list, black and white list Support IPv4/IPv6 Ping, IPv4/IPv6 Traceroute, Nslookup, capture network packets Support time zone, NTP client/server, Crontab scheduled tasks, remote/local logs Support user rights management, SSH access, HTTP/HTTPS port, certificate upload
Redundancy	Support CS-RingV2 private ring network technology Support MSTP, compatible with RSTP/STP Support EAPS Support ERPS
Multicast	Support IGMP Snooping Support GMRP
Security	Support HTTP, HTTPS, TELNET, SSH access methods; Support ACL access control list; Support 802.1X port authentication and MAC address authentication; Support loopback detection, dual power alarm, ring alarm and IP conflict alarm
Management and maintenance	Support PoE management, maximum power, priority configuration Support QoS, SNMP v1/v2c, SNMPv1/v2c TRAP, RMON, LLDP Support port mirroring, Ping, Traceroute Support different privilege user management, system log, local time synchronization, SNTP client Support online restart, factory reset, system upgrade, configuration file upload/download Support CS-NMPv2, CSView management

## Technical Specifications

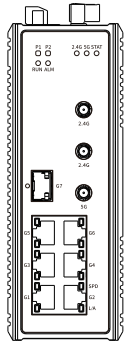
Wi-Fi5	
Wireless standards	2.4GHz 802.11b/g/n, 5GHz 802.11a/n/ac
Frequency range	2.412GHz~2.484GHz, 5.18GHz~5.825GHz
Band bandwidth	20MHz/40MHz/80MHz
Maximum transmit power	IEEE 802.11ac: 12±2dBm @Ht80 MCS9 /5GHz band IEEE 802.11ac: 16±2dBm @Ht80 MCS0 /5GHz band IEEE 802.11n: 13-16dBm @HT20/40 MCS7 IEEE 802.11g: 14-17dBm @54MHz IEEE 802.11b :16-20dBm @11MHz
Receiving sensitivity	VHT80 MCS9: -58dBm@10%PER(MCS9) /5GHz band HT40 MCS7: -69dBm@10% PER(MCS7) HT20 MCS7: -71dBm@10% PER(MCS7) 54M: -75dBm@10% PER 11M: - 88dBm@8% PER
Maximum transmission rate (theoretical value)	The maximum transmission rate of 2T2R in the 2.4GHz band is 300Mbps at a bandwidth of 40MHz. The maximum transmission rate of 1T1R in the 5GHz band is 433Mbps at a bandwidth of 80MHz. The total wireless rate is 733Mbps.
Exchange	
Switching mode	Store and Forward
Backplane bandwidth	24Gbps
Cache size	4Mbit
Jumbo frames	16379byte
MAC address table	8K
Interface	
Gigabit SFP Port	1/3 1000Base-X Gigabit SFP slots optional
Gigabit Copper Port	6 10/100/1000Base-T(X) adaptive Gigabit electrical ports optional, using RJ45, supporting full/half duplex, MDI/MDI-X adaptive
Gigabit PoE Port	6 10/100/1000Base-T(X) adaptive Gigabit PoE electrical ports optional, using RJ45, supporting full/half duplex, MDI/ MDI-X adaptive; PoE power supply complies with IEEE802.3af/at standards, single-port PoE maximum output power is 30W; PoE power supply pins: 1 and 2 are positive, 3 and 6 are negative
Antenna	2 2.4GHz antenna interfaces and 1 5GHz antenna interface, both using SMA-K (external thread inner hole)
Relay	1 relay alarm output, 3-bit 5.08mm pitch with locking terminal
CONSOLE	1 CONSOLE port, RS232 signal RJ45 port, used for device debugging
Button	Restore factory settings button

## Technical Specifications

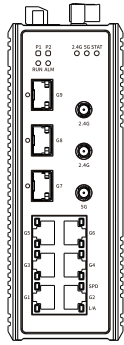
Indicators	Power indicator, operation indicator, alarm indicator, 2.4G indicator, 5G indicator, STAT indicator, PoE indicator (PoE model only), optical port indicator, electrical port rate and connection status indicator
<b>Power</b>	
Power input	Non-PoE models: DC12~48V, dual power supply redundancy, non-polarity PoE models: DC48~57V, dual power supply redundancy, anti-reverse connection
Power consumption	Non-PoE models: <13W@DC12V PoE models: <13W@DC48V (without PD), maximum PoE output power consumption of the whole machine is 180W
Connection method	5-bit 5.08mm spacing with locking terminal
Power protection	Built-in overcurrent protection
<b>Mechanical</b>	
Dimensions	160×58×122(mm) (excluding rail)
Installation method	35mm standard DIN rail installation
IP code	IP40
Weight	About 0.92kg (non-PoE model excluding antenna), about 0.96kg (PoE model excluding antenna)
<b>Working Environment</b>	
Operating temperature	-40°C~+75°C
Storage temperature	-40°C~+85°C
Relative humidity	5%~95% (no condensation)
<b>Industry</b>	
EMC	IEC 61000-4-2 (ESD): Level 4 (contact discharge ±8kV, air discharge ±15kV) IEC 61000-4-5 (Surge): Level 4 (power supply: common mode ±4kV, differential mode ±2kV; network port: common mode ±6kV, differential mode ±2kV) IEC 61000-4-4 (EFT): Level 4 (power supply: ±4kV; network port: ±2kV) *PoE model Surge level is Level 3



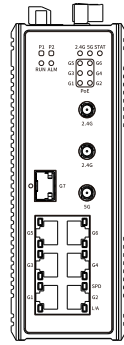
Dimensions



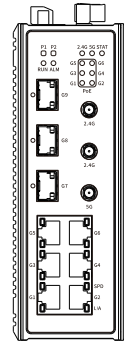
MISCOM7209W-3N25-  
GF-6GT



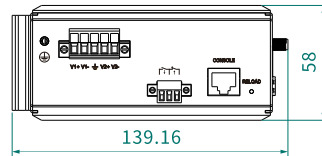
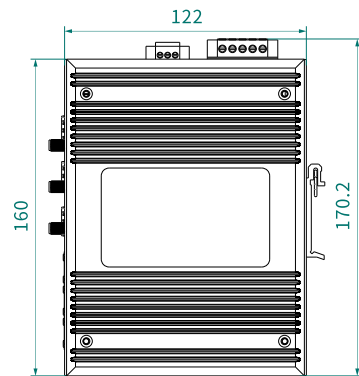
MISCOM7209W-3N25-  
3GF-6GT



MISCOM7209W-3N25-  
GF-6GTPoE



MISCOM7209W-3N25-  
3GF-6GTPoE



## Ordering Information

Standard Model	Gigabit SFP	Gigabit Copper	Gigabit PoE Port	2.4GHz Antenna	5GHz Antenna	Power Input
MISCOM7209W-3N25-GF-6GT	1	6	/	2	1	Dual DC12~48V
MISCOM7209W-3N25-3GF-6GT	3	6	/	2	1	
MISCOM7209W-3N25-GF-6GTPoE	1	/	6	2	1	Dual DC48~57V
MISCOM7209W-3N25-3GF-6GTPoE	3	/	6	2	1	