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9505-24GP4XS-D-I

Managed 8 x 10/100/1000 btPoE & 16 x 10/100/1000 PoE+ & 4 x 1G/10G SFP+ Industrial Switch



Description

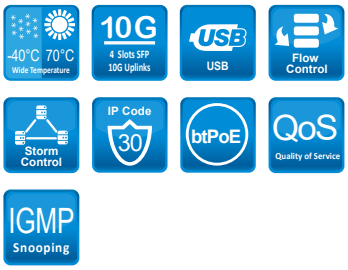
This 9505-24GP4XS-D-I is a high-performance Layer 2 managed PoE switch featuring 24× 10/100/1000 Mbps RJ45 PoE ports with IEEE 802.3bt/at/af compliance and 4× 10G SFP+ uplink fiber slots, providing flexible support for both copper and fiber network architectures. With a robust PoE budget, it can deliver up to 90W on the btPoE ports, enabling reliable power and data transmission for high-power devices such as Wi-Fi 6/7 access points, PTZ cameras, LED displays, and IoT gateways.

Equipped with a comprehensive suite of Layer 2 features – including VLAN segmentation, Link Aggregation, Spanning Tree Protocol, QoS traffic prioritization, IGMP Snooping, and ACL access control – this switch helps optimize bandwidth utilization, enhance data transmission efficiency, and ensure the quality and security of critical applications.

With high switching capacity and wire-speed forwarding architecture, it delivers stable, low-latency performance even under heavy multi-user traffic loads, making it ideal for real-time video streaming, large file transfers, and mission-critical business systems. Offering multiple management interfaces, including a user-friendly Web GUI, command line interface (CLI), and standard SNMP protocol support, the switch allows IT administrators to choose their preferred management method. It also supports remote firmware upgrades, configuration backup, and restore, ensuring rapid deployment and easy maintenance.

The unit features a durable metal housing and efficient thermal design, ensuring reliable 24/7 operation. Its rack-mountable form factor saves valuable cabinet space and simplifies centralized network management. With advanced btPoE capability, it provides a future-proof solution for powering next-generation devices in enterprise, campus, surveillance, and smart city networks.

RoHS CE FC



Features Highlight

10G SFP+ Interface

SFP+ for 10G fiber can deliver wire-speed throughput with low latency for data-intensive application. 10G networking is less expensive than highly specialized Fiber Channel (SAN) and doesn't need a specialized skill set for installation and management. To compare with aggregating multiple Gigabit Ethernet links, it can help reducing the cost and increasing manageability efficiently.

SNMP Remote Management

The industrial switch supports remote management through SNMP, which allows for network administrators to monitor and manage the switch from a remote location. This feature provides enhanced control and flexibility in managing the network, enabling administrators to identify and troubleshoot issues more easily. With SNMP remote management, administrators can remotely monitor the status of the switch, configure settings, and receive alerts in real-time, ensuring optimal network performance at all times.

IGMP Snooping

IGMP Snooping is a powerful feature that monitors IGMP packets on a managed switch in factory automation. It reduces multicast traffic by selectively forwarding traffic only to intended recipients who expressed interest in receiving it. This creates a more efficient, optimized network with reduced congestion and improved performance, resulting in higher quality of service. Unlike switches lacking multicast support that broadcast traffic indiscriminately to all ports within a broadcast domain, IGMP snooping minimizes the volume of multicast traffic generated by streaming and other high-bandwidth IP applications.

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Features Highlight

ACL

The L2/L3/L4 Access Control List (ACL) function enables network operators to control traffic flow in factory automation by selectively forwarding or blocking packets based on customized filter rules. Criteria include MAC and IP addresses, port numbers, and more. This granular control helps manage network traffic by restricting access of unwanted devices and blocking malicious traffic. It ensures efficient, secure, and flexible network operation that can adapt to changing business requirements.

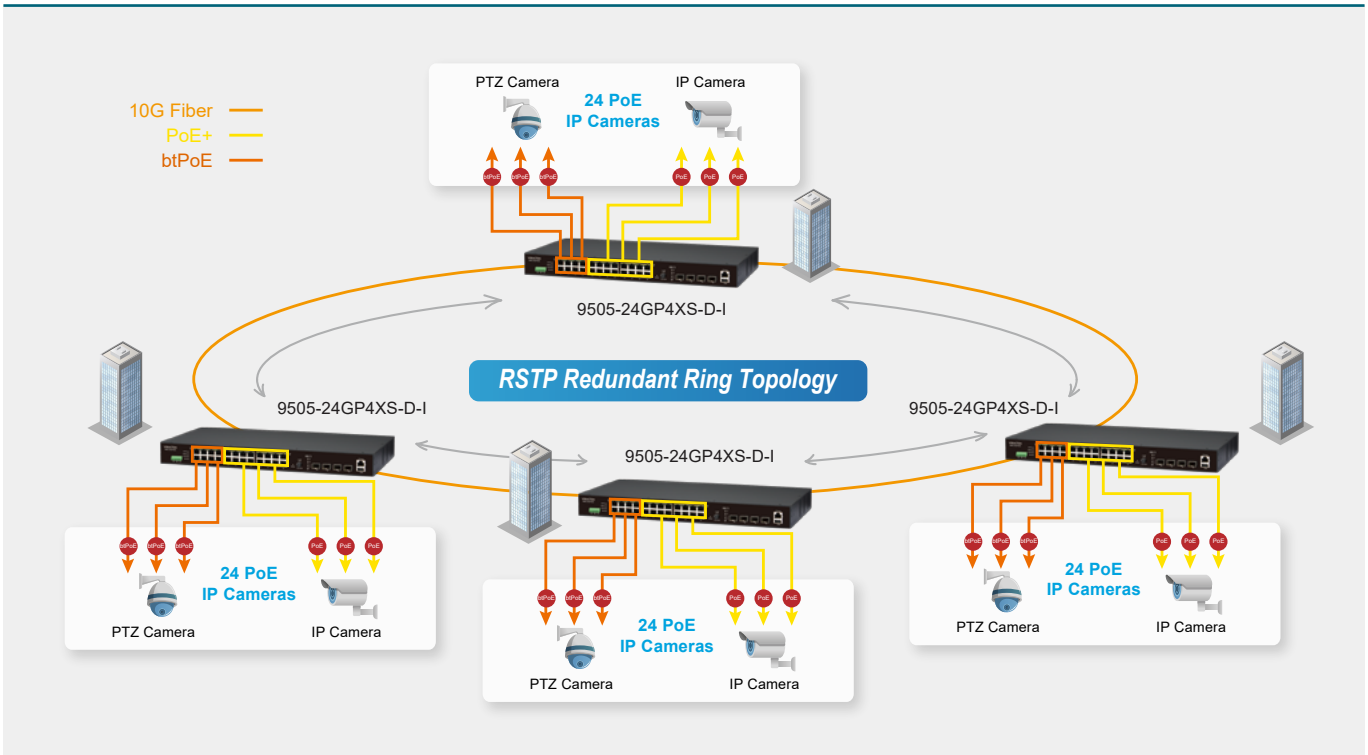
Multiple Fiber Ring Ports

Multiple Fiber Ring Ports provide redundancy and fault-tolerance for network infrastructure. This feature creates redundant fiber rings and automatically switches between them, ensuring continuous communication and minimizing downtime. It improves network availability, reliability, and cost-effectiveness, while being easy to configure and deploy.

IEEE 802.3bt

This feature enables direct powering of high-power devices such as PTZ cameras, wireless access points, LED displays, digital signage, and industrial IoT equipment without requiring separate power supplies. By integrating data and power into a single Ethernet cable, btPoE simplifies network deployment, reduces cabling costs, and improves installation flexibility. With intelligent PoE management, administrators can remotely monitor power consumption, schedule PoE on/off, and prioritize critical devices, ensuring efficient and reliable network operations.

Applications



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Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3ab	1000BASE-T
IEEE 802.3z	1000BASE-SX/LX
IEEE 802.3ae	10GBase-SR/LR/ER
IEEE 802.3 Nway	Auto-negotiation
IEEE 802.3x	Flow Control
IEEE 802.3ad	Link Aggregation
IEEE 802.3af	PoE, Power over Ethernet
IEEE 802.3at	PoE+, PoE Plus
IEEE 802.3bt	Type 3 / Type 4, 4PPoE
IEEE 802.3az	EEE, Energy Efficient Ethernet
IEEE 802.1AB	LLDP
IEEE 802.1ad	QinQ
IEEE 802.1D	Spanning Tree Protocol
IEEE 802.1w	Rapid Spanning Tree Protocol
IEEE 802.1s	Multiple Spanning Tree Protocol
IEEE 802.1p	Class of service, priority protocols
IEEE 802.1Q	VLAN tagging
IEEE 802.1X	Network Access Control
Interface	
Ports	24 x 10/100/1000 PoE RJ45
	4 x 1G/10G SFP+
	1 x RS232 Console Port
	1 x USB Port
Digital Input	2 x pairs, Dry Contact
Digital Output	Relay Output x 1 (1A@24V DC)
LED Panel	POST, PWR1, PWR2, ALM, 1000/PoE, LINK/ACT
Features	
Performance	Jumbo Frames Size: 12Kbytes
	MAC Table Entries: 16K
	Packet Buffer: 12Mbit
	Switching Fabric: 128Gbps
	Forwarding Rate: 95.2Mpps
Management	CLI, Telnet/SSH, HTTP, SNMP v1/v2c/v3, SNMP Trap, MVLAN, Firmware Upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client/ Relay/Option 82, e-mail Alarm, Server Control, Mirroring, DDM, SFP Info, Auto-Provisioning, EEE, RMON Statistics, ModbusTCP, ERPS, ONVIF, Digital Inputs/Digital Output, Dying Gasp, Hardware Monitor, sFlow
Reliability	STP/RSTP/MSTP, ERPS v1/v2, Code redundancy, Dual Homing, LACP, Static Trunk
VLAN	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN, QinQ
Traffic Control	IGMP Snooping/Throttling/Filter/Querier/Group, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection
Security	ACL, SSH, HTTPs, TACACS+, 802.1x, Port Security, MAC Search, Static MAC, DHCP Snooping, DHCP Server Screening, ARP Inspection, BPDU Guard/Filter, Root Guard, Managed Host, Dos Attack Prevention, SFTP Client, SCP

Power		
Input Voltage		48~57V DC
Power Consumption		16W (System Only)
PoE/PoE+/btPoE		PoE Schedulng, PD Alive Check, Power delay, PoE Power on/off, Fast PoE, Perpetual PoE, Power budget control per system, Power budget control per port
btPoE Functions		Port 1~8: IEEE 802.3af/802.3at/802.3bt powered devices
		Port 9~24: IEEE 802.3af/802.3at powered devices
PoE Power Budget		48~57V DC 685Watt @70ºC (167ºF)
Mechanical and Environment		
Housing		Metal (IP30 Protection)
FAN		0
Operating Temperature		-40ºC~70ºC (-40ºF~158ºF)
Storage Temperature		-40ºC~85ºC (-40ºF~185ºF)
Operating Humidity		5 to 95% RH (non-condensing)
Storage Humidity		5 to 95% RH (non-condensing)
Weight		3.74 kg (8.25 lb)
Dimension (W x H x D)		440 x 44 x 284 mm (17.3 x 1.73 x 11.2 in)
Certifications		
CE	EMI	FCC Part 15 Subpart B Class A EN 55011 / BS EN 55011 Class A EN 55032 / BS EN 55032 Class A EN 61000-6-4 / BS EN 61000-6-4 ICES-003 Issue 7
	EMS	EN 55035 / BS EN 55035 EN 61000-6-2 / BS EN 61000-6-2 EN 61000-4-2 (ESD) EN 61000-4-3 (RS) EN 61000-4-4 (Burst) EN 61000-4-5 (Surge) EN 61000-4-6 (CS) EN 61000-4-8 (PFMF)
Freefall		IEC 60068-2-31
Optional Accessories		
GBM-162		10GSR SFP+, MM, 300m, DDM
GBM-162-10		10GLR SFP+, SM, 10Km, DDM
GBM-162-40		10GER SFP+, SM, 40Km, DDM
GBM-162-80		10GZR SFP+, SM, 80Km, DDM
GBM-262TS-10D		10GLR Bi-Di SFP+, SM, 10Km, DDM, TX:1330/ RX:1270
GBM-262RS-10D		10GLR Bi-Di SFP+, SM, 10Km, DDM, TX:1270/ RX:1330

Note:

** The SFP communication distance upon the request.*

** Industrial SFP with wide operating temperature from -40°C~85°C is available upon request.*

** Specifications subject to change without notice.*

Ordering Information

9505-24GP4XS-D-I	Managed 8 x 10/100/1000 btPoE & 16 x 10/100/1000 PoE+ & 4 x 1G/10G SFP+ Industrial Switch, Metal
5510-24GP4XS-A-C	Managed 8 x 10/100/1000 btPoE & 16 x 10/100/1000 PoE+ & 4 x 1G/10G SFP+ Industrial Switch, Single Power Inlet, Metal
5510-24GP4XS-AA-C	Managed 8 x 10/100/1000 btPoE & 16 x 10/100/1000 PoE+ & 4 x 1G/10G SFP+ Industrial Switch, Dual Power Inlet, Metal

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Dimension

D-I

