

# 9560-16GP4XS

Managed 16 x 10/100/1000 RJ45 PoE+ & 4 x 1G/10G SFP+ Industrial Switch, Aluminum

## Description

9560-16GP4XS Industrial Ethernet Switch is a 16-port 10/100/1000 BASE-T PoE+ RJ45 and 4-slot 1G/10G SFP+. There is one console port in RJ45 type and one USB port for firmware and configuration maintenance. This switch is delivered in a rugged, hardened case and components able to withstand a high degree of vibration and shock and wide operating temperature from -40°C ~70°C.

Not an ordinary industrial switch, the switch is engineered and designed especially for harsh & extreme industrial type applications. With its aluminum case, redundant DC power inputs, and high-performance components, the switch is perfectly suited for your extreme industrial automation environment.

Each port of 9560 series has 2 LEDs to show the link status transmission speed and link/activity status. It also provides a relay output for an event alarm. In the event of a power failure, the built-in LED will activate the alarm to notify administrators. Engineers can simply verify the hardware status by checking the LED, making troubleshooting the device a simple task.

9560-16GP4XS is created specifically to meet the increasing need for network-powered devices (PDs) that require more power. These devices include multi-channel (802.11a/b/g/n) wireless LAN access points, PTZ (pan, tilt, zoom) speed dome network cameras, and other PoE network devices.



**RoHS** **CE** **FC**



## Features Highlight

### SNMP Remote Management

Experience seamless network management with our industrial switch boasting advanced SNMP remote management capabilities! With SNMP support, network administrators gain the power to monitor and manage the switch from anywhere, revolutionizing the way networks are maintained. Enjoy enhanced control and flexibility, effortlessly identifying and troubleshooting issues for optimized network performance. Our SNMP remote management feature allows administrators to remotely monitor switch status, configure settings, and receive real-time alerts, ensuring peak performance around the clock.

### IGMP Snooping

The power of IGMP Snooping with our managed switch designed for factory automation. This advanced feature meticulously monitors IGMP packets, intelligently filtering and forwarding traffic exclusively to intended recipients who have expressed interest. By reducing multicast traffic, our switch ensures a streamlined network, minimizing congestion and enhancing overall performance.

With IGMP Snooping in place, you'll enjoy a more efficient network, delivering higher quality of service to your operations. Unlike switches lacking multicast support, our solution optimizes bandwidth usage by intelligently handling streaming and other high-bandwidth IP applications. Say goodbye to indiscriminate broadcast traffic and hello to a network that operates at its peak efficiency with our managed switch featuring IGMP Snooping.

### ACL

Unlock precise control over traffic flow in factory automation with the L2/L3/L4 Access Control List (ACL) function. Tailor-made filter rules empower network operators to selectively forward or block packets, allowing for meticulous management of network traffic.

With criteria including MAC and IP addresses, port numbers, and beyond, our ACL function offers granular control, ensuring only authorized traffic traverses your network. By restricting access to unwanted devices and thwarting malicious traffic, you'll fortify your network's security posture while optimizing performance.

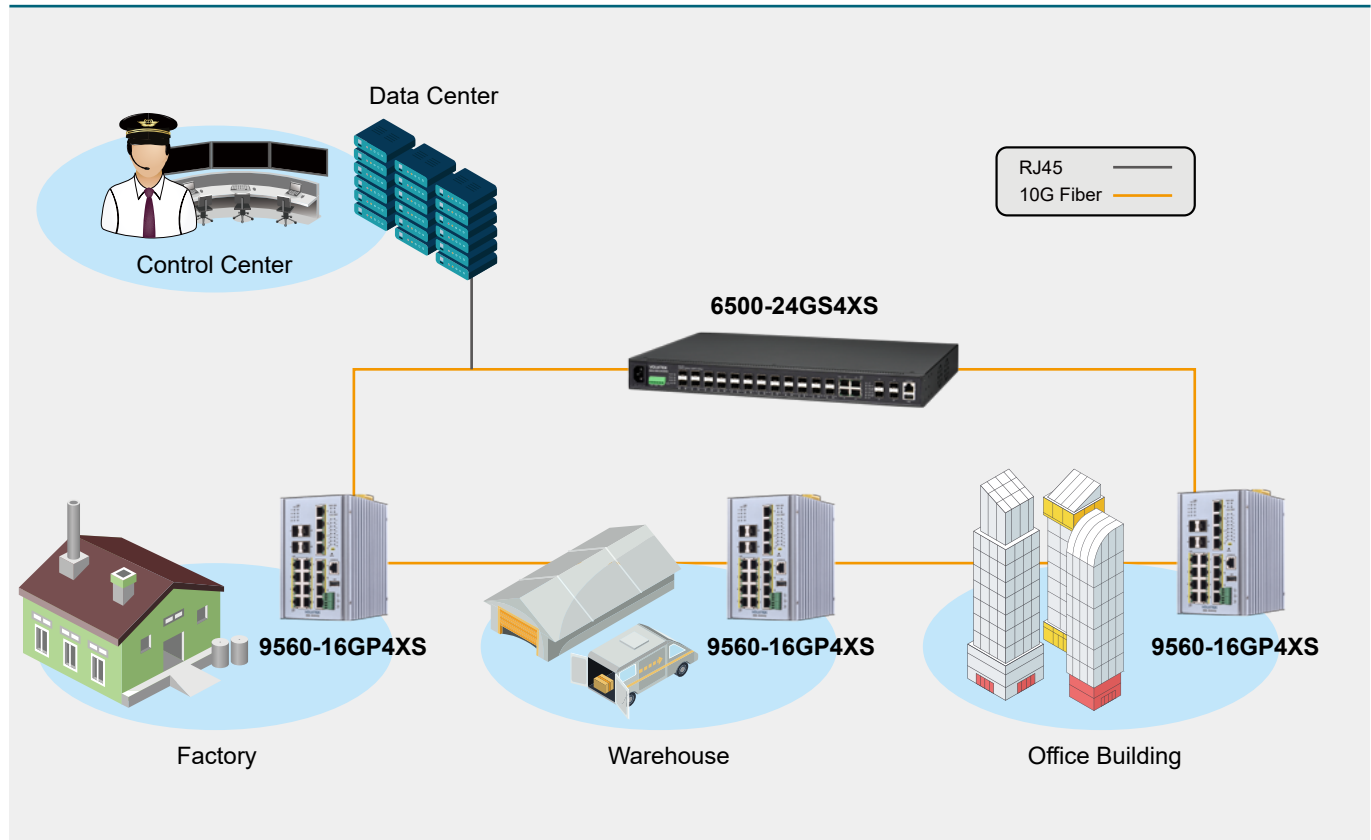
## Features Highlight

### Multiple 10G Fiber Ring Ports

Multiple 10G Fiber Ring Ports, the pinnacle of network redundancy and fault-tolerance in infrastructure environments. This cutting-edge feature establishes redundant fiber rings that seamlessly switch between one another, ensuring uninterrupted communication and minimizing costly downtime.

Experience heightened network availability, reliability, and cost-effectiveness with effortless configuration and deployment. With Multiple Fiber Ring Ports, your network is fortified to manage even the most unexpected disruptions, guaranteeing uninterrupted operations while securely handling massive volumes of data support, network administrators gain the power to monitor and manage the switch from anywhere, revolutionizing the way networks are maintained. Enjoy enhanced control and flexibility, effortlessly identifying and troubleshooting issues for optimized network performance. Our SNMP remote management feature allows administrators to remotely monitor switch status, configure settings, and receive real-time alerts, ensuring peak performance around the clock.

## Applications



## 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 802.3az	EEE, Energy Efficient Ethernet
IEEE 802.1AB	LLDP
IEEE 802.1ad	QinQ
IEEE 802.1Q	VLAN tagging
IEEE 802.1X	Network Access Control
IEEE 802.3af	Power over Ethernet (PoE)
IEEE 802.3af	Power over Ethernet Plus (PoE+)
IEEE 802.1D	Spanning Tree Protocol
IEEE 802.1w	Rapid Spanning Tree Protocol
IEEE 802.1p	Class of Service
Interface	
Ports	16 x 10/100/1000 RJ45
	4 x 1G/10G SFP+
	1 x RS232 Console Port
	1 x USB Port
DIP Switch	Primary/Redundant Power
LED Panel	PWR, RPS, ALM, POST, 1000, 10G, LNK/ACT
Digital Input	2 x pairs, Dry Contact
Digital Output	Alarm Relay output 24VDC, 1A
Features	
Performance	Jumbo Frames Size: 12KBytes
	MAC Table Entries: 16K
	Active VLAN: 4K
	Switching Fabric: 112Gbps
	Forwarding Rate: 83.33Mpps
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
Reliability	STP/RSTP, ERPS v1/v2, Code redundancy, Dual Homing, LACP, Static Trunk
VLAN	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN
Traffic Control	IGMP Snooping, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection
PoE Functions	Scheduling, PD Alive Check, PoE Power On/OFF, Power Delay, Feeding Power Budget Control
Security	ACL, SSH, HTTPs, TACACS+, Port-based 802.1x, Port Security, MAC Search, Static MAC, DHCP Snooping, ARP Inspection, Managed Host

Power	
Input Voltage	Primary inputs: 48~57VDC
	Redundant Inputs: 48~57VDC
Power Consumption	System: 22W
	PoE Power Budget: 240W
Mechanical and Environment	
Housing	Aluminum (IP30 Protection)
Operating Temperature	-40°C~70°C (-40°F~158°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Operating Humidity	5 to 95% RH (non-condensing)
Storage Humidity	5 to 95% RH (non-condensing)
Weight	1,295g
Dimension (WxHxD)	100 x 160 x 140mm (3.93 x 6.29 x 5.51in)
Certifications	
Electromagnetic Compatibility	FCC Part 15 Subpart B Class A
	EN 55032 / UKCA Class A
	EN55035 / UKCA
	CISPR 32 Class A
	EN 55011 / UKCA Class A
	CISPR 11 Class A
	EN 61000-6-4 / UKCA
	ICES-003 Issue 7
	EN 61000-6-2 / UKCA
	EN 61000-4-2 (ESD)
	EN 61000-4-3 (RS)
	EN 61000-4-4 (EFT)
	EN 61000-4-5 (Surge)
	EN 61000-4-6 (CS)
	IEC 61000-4-8 (PFMF)
Freefall	IEC 60068-2-31
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6
Ordering Information	
9560-16GP4XS	Managed 16 x 10/100/1000 RJ45 PoE+ & 4 x 1G/10G SFP+ Industrial Switch, Aluminum
Optional Accessories	
Power Supply	SDR-120-48: 120W DIN-Rail 48VDC Industrial Power Supply, -25°C~70°C (-13°F~158°F)
	GBM-123TS: 1000BASE-LX, Bi-Di SFP TX:1310/RX:1550 Single Mode, 10Km
	GBM-123RS: 1000BASE-LX, Bi-Di SFP TX:1550/RX:1310 Single Mode, 10Km

**Note:**

\* The SFP communication distance upon the request.

\* Industrial SFP with wide operating temperature from -40°C~85°C (-40°F~185°F) is available upon request.

\* Specifications subject to change without notice.

Dimension

