

EX71900G Series

Hardened Managed 8-Port Gigabit and 4-Port 100/1G/2.5G SFP Ethernet Switch



Overview

The EX71900G Series represents an advancement in 2.5G Ethernet switch technology for industrial networking, featuring a compact, fan-less design and advanced management capabilities. With up to 8 Gigabit RJ-45 ports and 4 SFP uplink ports, this switch offers triple-speed flexibility (100Mbps, 1Gbps, 2.5Gbps) to meet evolving bandwidth demands. Its space-saving form factor and support for multiple mounting kits make installation easier and more versatile, even in constrained environments—without sacrificing capability. Built for mission-critical applications, the EX71900G combines Layer 2 and Layer 3 functionalities with robust reliability, ensuring seamless performance in urban infrastructure, transportation, and automation networks.

EtherWAN — "When Connectivity is Crucial."

Highlight

+ 2.5GbE High Bandwidth and Scalability

- 8 x 10/100/1000BASE-T(X) ports for high bandwidth connections
- Up to 4 tri-speed 100/1000/2500BASE SFP uplink ports for fiber connections
- Full capacity switching running at full duplex

+ Compact Design but Gigantic Capability

- Optimized for Space-Constrained Installations
- All interfaces positioned at the front simplify cable management in tight spaces
- Compact size to fit in small cabinets without compromising performance

+ Hardened-Grade for Non-Ventilated & Harsh Environments

- Wide operating temperature range -40 to 75°C (-40 to 167°F)
- Fanless operation
- High impact, thermal shock, and electrical noise resistance

+ Support

- Complimentary technical support
- Free firmware upgrades and notifications
- Limited lifetime warranty

Features

+ Interface

CLI console, SSH, Web GUI

+ Management

Firmware Upgrade
Configuration Backup
DHCP Server/Client/Snooping/Relay
RMON (Remote Monitoring)
Port Mirroring
NTP (Network Time Protocol) Synchronization
LLDP (Link Layer Discovery Protocol)
IPv4/IPv6
SNMP v1/v2c/v3
RESTful API

+ Security

MAC Address Filtering
Enable/Disable Port
Storm Control
System logging
Remote Authentication through RADIUS and TACACS+
Complex Password Support
Multi-User Login and Privileged Access Management
SSH for CLI and Telnet Security
SSL and HTTPS for Web Security
ACL (Access Control List)

+ Layer 2 Features

Auto-Negotiation for Port Speed and Duplex
Flow Control
IEEE 802.3x full duplex mode
Back-pressure half duplex mode

Redundant Protocols

IEEE 802.1D STP
IEEE 802.1w RSTP
IEEE 802.1s MSTP
ITU-T G.8032 Ethernet Ring Protection Switch (ERPS)

VLANs

IEEE 802.1Q Tag VLANs
GVRP
GMRP

Link Aggregation

Static Trunk (8 groups)
IEEE 802.3ad LACP

IGMP Snooping v1/v2/v3

+ Layer 3 Features

IP Packet Routing

Maximum 512 hosts
Maximum 64 routes
Static routing
RIP v1/v2
OSPF v2

Routing Redundancy

VRRP v2

+ Quality of Service (QoS)

Priority Queues: 8 Queues per Port

Traffic Classification Based on IEEE 802.1p CoS (Cost of Service), DSCP (Differentiated Services Code Point), WRR (Weighted Round Robin), and Strict Mode

Rate Limiting (Ingress/Egress)

+ Software Properties and Performance

Switching Fabric

36Gbps

Forwarding Rate

26.78Mpps

Max VLANs

256 groups (4096 VID)

Jumbo Frame Size

9KB

MAC Table Size

16K

Packet Buffer Memory

512KB (4M bits)

Specifications

+ Interface

Ethernet

8 x 10/100/1000BASE-T(X)

4 x 100/1000/2500BASE SFP

Console

1 x RJ45

Config Backup

1 x USB (Type A Connector)

Alarm Contact

Relay output, current capacity 0.6A/30VDC

LED Indicators

Per Unit: Power 1 (Green), Power 2 (Green), Fault (Red)

Per Port: Link/Activity (Green)

+ Physical

Casing Material

Metal (Aluminum)

IP Rating

IP30

Dimensions

45 x 135 x 145mm (W x D x H)

Weight

0.43kg (0.95 lbs)

Installation Type

DIN-rail mounting

Rack mounting (Optional)

Panel mounting (Optional)

+ Technology

Standards

IEEE 802.3 10BASE-T
IEEE 802.3u 100BASE-TX/100BASE-FX
IEEE 802.3ab 1000BASE-T
IEEE 802.3ad link aggregation control
IEEE 802.3z 1000BASE-SX/1000BASE-LX
IEEE 802.3x full duplex and flow control
IEEE 802.1D STP
IEEE 802.1p QoS
IEEE 802.1Q Tag VLANs
IEEE 802.1s MSTP
IEEE 802.1w RSTP
IEEE 802.1x Radius
IEEE 802.1ab LLDP
IEEE 802.3az Energy-Efficient Ethernet (EEE)

Forward/Filtering Rate

14,880pps for 10Mbps
148,809pps for 100Mbps
1,488,095pps for 1000Mbps
3,720,238pps for 2500Mbps

Processing Type

Store-and-forward
Auto-negotiation
Half-duplex back-pressure and full-duplex flow control
Auto MDI/MDIX

System Memory

1GB DDR3 SDRAM

Flash Storage

128MB

+ Regulatory

ISO

Manufactured in ISO-9001 facility

EMI

FCC Part 15B Class A

VCCI Class A

EN 61000-6-4

EN 61000-3-2

EN 61000-3-3

EN 55032

BSMI

EMS

EN 61000-6-2

- IEC 61000-4-2 (ESD)

- IEC 61000-4-3 (Radiated RFI)

- IEC 61000-4-4 (Burst)

- IEC 61000-4-5 (Surge)

- IEC 61000-4-6 (Induced RFI)

- IEC 61000-4-8 (Magnetic field)

Safety

UL 62368

Traffic

NEMA TS2

Railway

EN 50121-4

Vibration

IEC 60068-2-6

Shock

IEC 60068-2-27

Free Fall

IEC 60068-2-31

+ Environmental

Operating Temp.

-40 to 75°C (-40 to 167°F)

Storage Temp.

-45 to 85°C (-49 to 185°F)

Relative Humidity

5% to 95% (non-condensing)

MTBF

3,330,902 hours

+ Power

Input

12-48VDC Redundant (Terminal block)

Power Consumption

System only: 6.3W

Full load: 13.2W

Protection

Reverse Polarity Protection

+ Warranty

Length

Limited Lifetime

Details

www.etherwan.com/support/warranty-policy

+ What's Included

Device

Ethernet switch

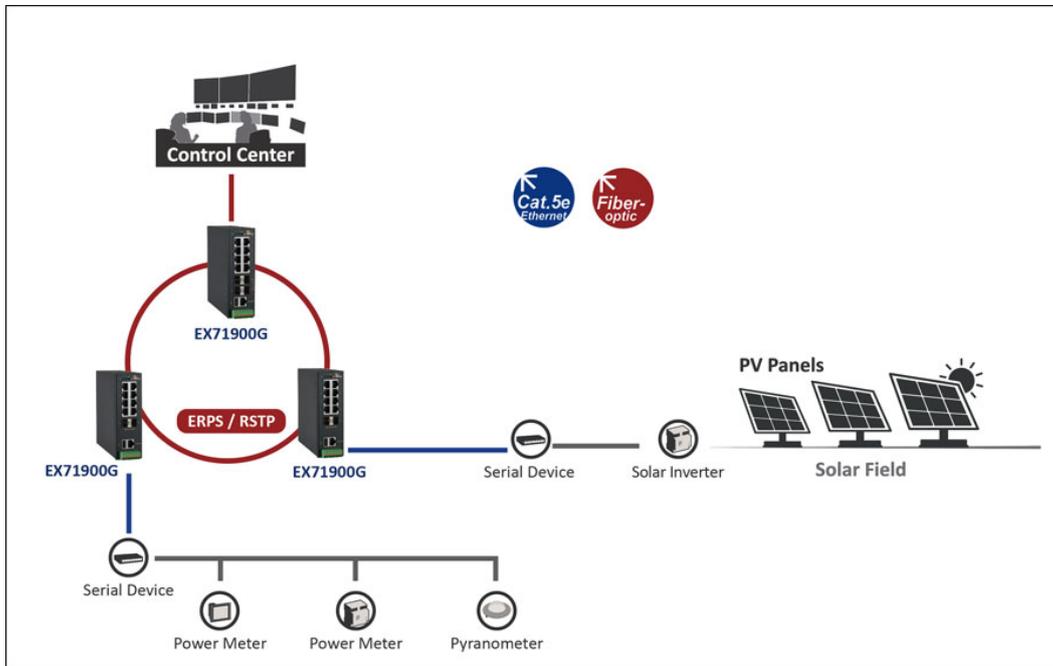
Cables

1 Console cable

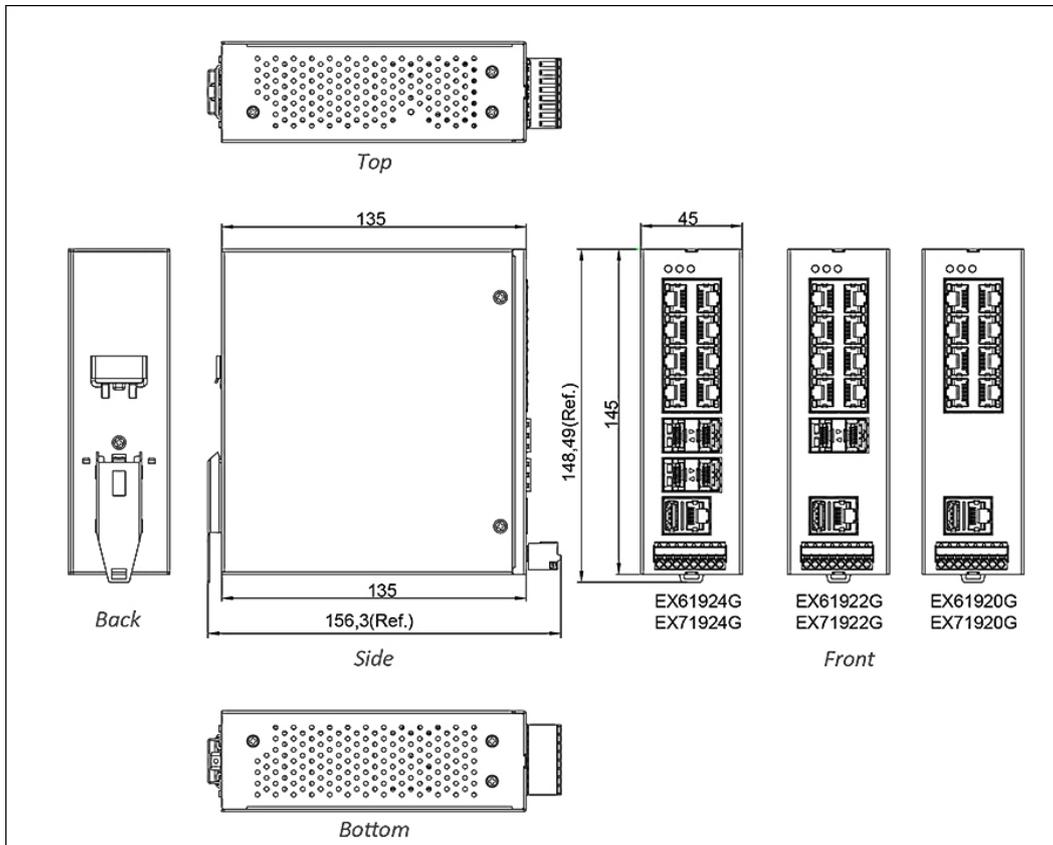
Installation

DIN-Rail mounting kit

Application



Dimensions



Ordering Info

+ Model

EX71924G-1NT	8-port 10/100/1000BASE-T(X) + 4-port 100/1000/2500BASE SFP
EX71922G-1NT	8-port 10/100/1000BASE-T(X) + 2-port 100/1000/2500BASE SFP
EX71920G-1NT	8-port 10/100/1000BASE-T(X)

+ Accessories

SFP Modules

Model Number	Transmission Speed	Mode	Distance	Operating Temperature	Wavelength	Connector Type	DDM
SFP2IS20M	2500Mbps	Single-mode	20km	-40 to 85°C	1310nm	Duplex LC	✓
SFP2IM2AM	2500Mbps	Multi-mode	160m	-40 to 85°C	850nm	Duplex LC	✓
SFP2XT1AM	2500Mbps	-	100m	-40 to 85°C	-	RJ-45	-
SFPGIM5AM	1000Mbps	Multi-mode	275/550m	-40 to 85°C	850nm	Duplex LC	✓
SFPGIM02M	1000Mbps	Multi-mode	2km	-40 to 85°C	1310nm	Duplex LC	✓
SFPGIS10M	1000Mbps	Single-mode	10km	-40 to 85°C	1310nm	Duplex LC	✓
SFPGIS20M	1000Mbps	Single-mode	20km	-40 to 85°C	1310nm	Duplex LC	✓
SFPGXT1AM	1000Mbps	-	100m	-40 to 85°C	-	RJ-45	-
EX-0155NSP-MB2L-A	100Mbps	Multi-mode	2km	-40 to 85°C	1310nm	Duplex LC	-
SFPMIS20M (DDM)	100Mbps	Single-mode	20km	-40 to 85°C	1310nm	Duplex LC	✓

For more SFP, please visit website: www.etherwan.com/products/sfp-fiber-transceiver

Industrial DIN-Rail Power Supplies

Model Number	Input Voltage	Output Voltage	Description	Operating Temperature
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HDR-30-12	85 - 264VAC	12VDC	30W/ 2A DIN Rail 12VDC Industrial Power Supply	-30 to 70°C
HDR-30-24	85 - 264VAC	24VDC	30W/1.5A DIN-Rail 24VDC Industrial Power Supply	-30 to 70°C
EDR-75-48	90 - 264VAC	48VDC	75W/1.6A DIN-Rail 48VDC Industrial Power Supply	-20 to 70°C

For more Power Supplies, please visit website: www.etherwan.com/products/din-rail-power-supply.

+ Mounting Kits

Part Name	Description	Image
KP-BK78900G	Panel Mounting Bracket	
KR-BK71900G	Rack Mounting Bracket	

