

# 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](http://www.etherwan.com/support/warranty-policy)

## + What's Included

### Device

Ethernet switch

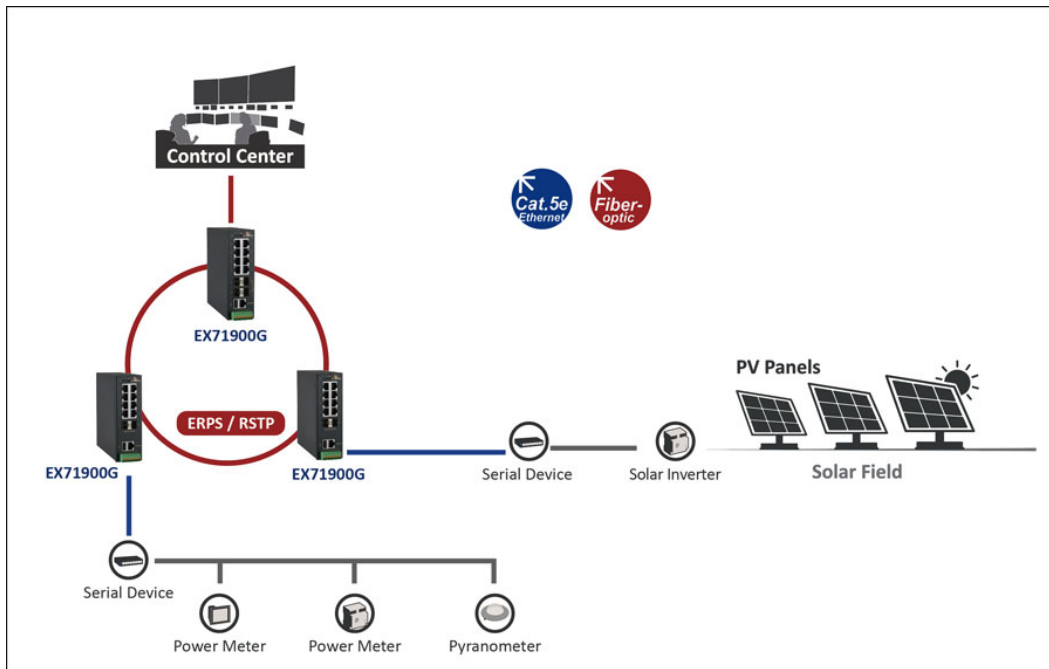
### Cables

1 Console cable

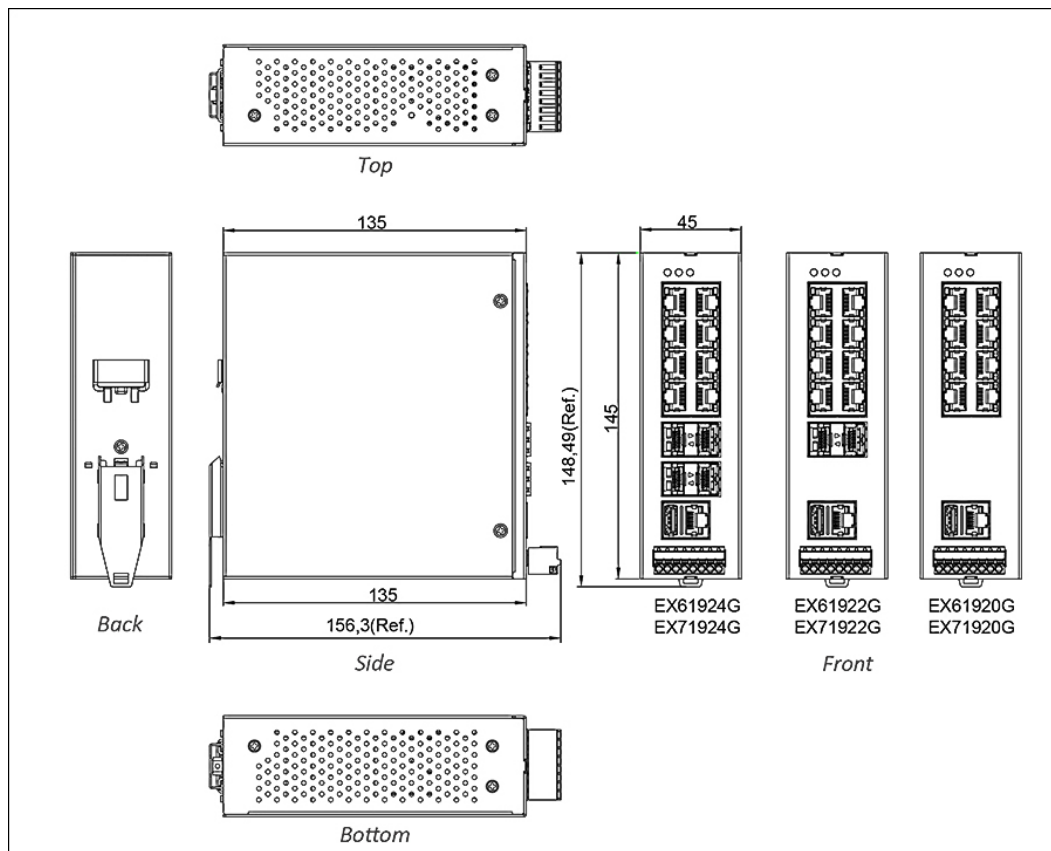
### Installation

DIN-Rail mounting kit

## Application

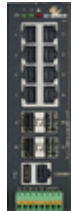


## Dimensions



## Ordering Info

### + Model


**EX71924G-1NT**
**EX71922G-1NT**
**EX71920G-1NT**

|                      |                       |                       |                       |
|----------------------|-----------------------|-----------------------|-----------------------|
| 10/100/1000BASE TX   | 8                     | 8                     | 8                     |
| 100/1G/2.5G Base-SFP | 4                     | 2                     | -                     |
| Operating Temp.      | -40 to 75°C           |                       |                       |
|                      | <a href="#">Quote</a> | <a href="#">Quote</a> | <a href="#">Quote</a> |

### + 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<br>(DDM) | 100Mbps | Single-<br>mode | 20km | -40 to 85°C | 1310nm | Duplex LC | ✓ |
|--------------------|---------|-----------------|------|-------------|--------|-----------|---|

For more SFP, please visit website: [www.etherwan.com/products/sfp-fiber-transceiver](http://www.etherwan.com/products/sfp-fiber-transceiver)

### Industrial DIN-Rail Power Supplies

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

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

### + Mounting Kits

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

