

EX61900G Series

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



Overview

The EX61900G 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 EX61900G 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

- Industrial grade operating temperature range -10 to 60°C (14 to 140°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

Railway

- EN 50121-4

Vibration

- IEC 60068-2-6

Shock

- IEC 60068-2-27

Free Fall

- IEC 60068-2-31

+ Environmental

Operating Temp.

- -10 to 60°C (-14 to 140°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

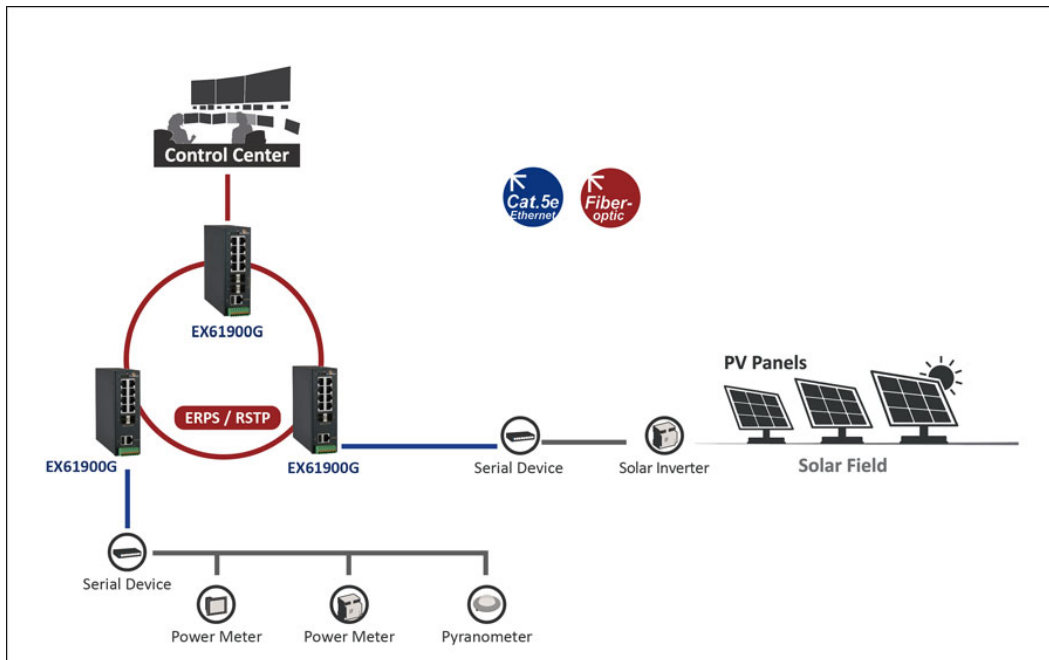
Cables

- 1 Console cable

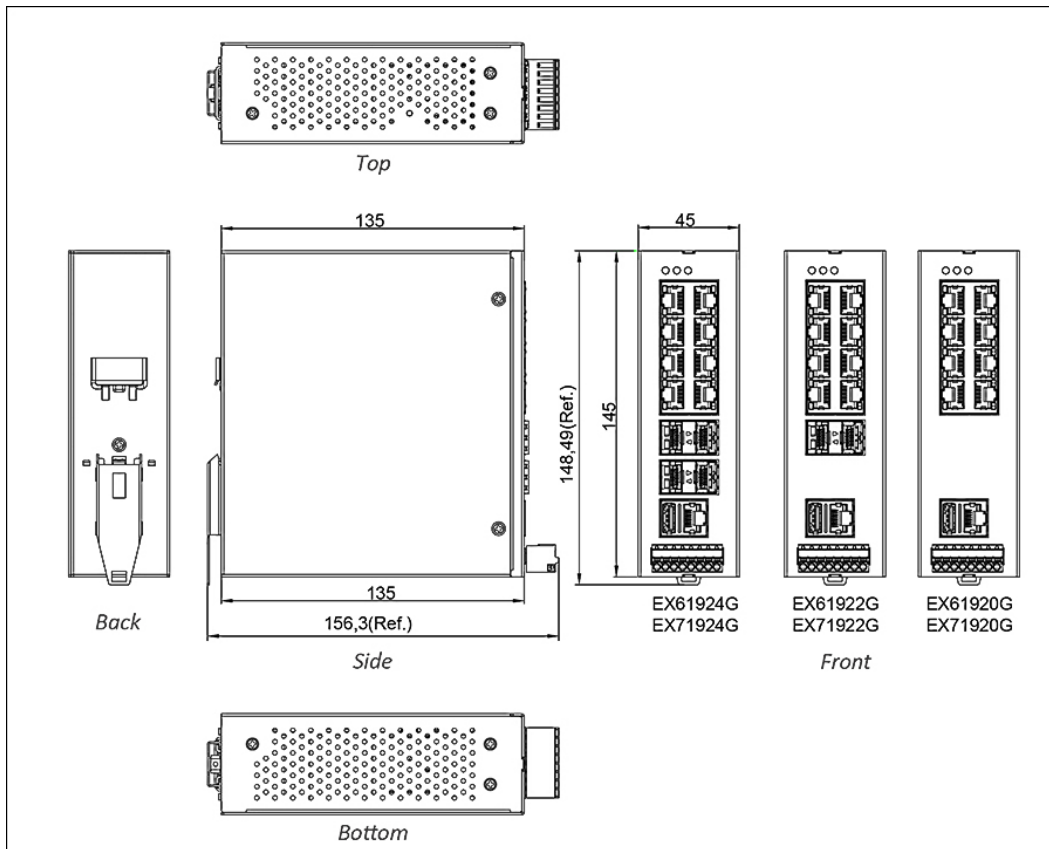
Installation

- DIN-Rail mounting kit

Application



Dimensions



Ordering Info

+ Model

EX61924G-1NT	8-port 10/100/1000BASE-T(X) + 4-port 100/1000/2500BASE SFP
EX61922G-1NT	8-port 10/100/1000BASE-T(X) + 2-port 100/1000/2500BASE SFP
EX61920G-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	-
EX-1250TSP-MB5LS	1000Mbps	Single-mode	20km	0 to 70°C	1310nm	Duplex LC	✓
SFPGIS10C (DDM)	1000Mbps	Single-mode	10km	0 to 70°C	1310nm	Duplex LC	✓
SFPGIM02C (DDM)	1000Mbps	Multi-mode	1Km, 2Km	0 to 70°C	1310nm	Duplex LC	✓
SFPGIM5AC (DDM)	1000Mbps	Multi-mode	275m, 550m	0 to 70°C	850nm	Duplex LC	✓
SFPGXT1AM	1000Mbps	-	100m	-40 to 85°C	-	RJ-45	-
SFPMSS15C	100Mbps	Single-mode	15km	0 to 70°C	1310nm	Duplex LC	-
SFPMIM02C (DDM)	100Mbps	Multi-mode	2km	0 to 70°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	

