



AVCOMM®

4012GX4

Datasheet

Aiming to create better and safer working environments and life experiences through the products we deliver.



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Reliable Plug and Play Industrial Ethernet Switch for Automation and Electrical OEM

4012GX4

Industrial Unmanaged Ethernet Switch

AVCOMM 4012GX4 is 8-port 10/100/1000Base-TX RJ-45 and 4-port 1000Base-X unmanaged Ethernet switch with reverse polarity protection of AC or DC input. It is highly scalable and can transmit data over long distances through fiber-optic ports. It has wide operation temperature range, high anti-EMI capability to ensure stable work in harsh industrial environments and supports DIN Rail-mounted to facilitate in various industrial network applications.



Features & Benefits

Fast Ethernet Switching

- Eight (8) 10/100/1000BaseT(X) RJ-45 ports and four (4) 1000BaseFX port (SC ST FC optional)
- 8 K MAC address table
- Store and forwarding with non-blocking technology

IEEE 802.3u EEE Power Management

- Ultra power consumption efficiency, 15 W fully loaded
- Energy Efficient Ethernet for low power requirement
- Idle power saving mode for energy efficiency

Rugged Mechanical Design

- Robust design protects from mechanical deformation
- IP40 industrial rating to withstand harsh environments
- Wide operating temperature range -40°C ~ +85°C

Power protection

- Provide overload protection
- Provide reverse connection protection
- Provide multiple power input options, AC or DC or HV



Ordering Information

Model Name	Description
4012GX4	12-Port Industrial Unmanaged Ethernet Switch, 8 RJ45 10/100/1000BaseT(X), 4 SFP Slots 1000BaseSFP+, DIN-Rail, Dual Power Input 12-48VDC, -40°C to +85°C
4012GX4-AC	12-Port Industrial Unmanaged Ethernet Switch, 8 RJ45 10/100/1000BaseT(X), 4 SFP Slots 1000BaseSFP+, DIN-Rail, Dual Power Input 88-264VAC, -40°C to +85°C
4012GX4-HV	12-Port Industrial Unmanaged Ethernet Switch, 8 RJ45 10/100/1000BaseT(X), 4 SFP Slots 1000BaseSFP+, DIN-Rail, Dual Power Input 88-264VDC, -40°C to +85°C

 Specifications

Technology	
Standard	IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE802.3ab
Performance	
Switch Technology	Store and Forwarding Technology with non-blocking
Number of MAC Address	8K
Packet Buffer Memory	2 MB
Backplane bandwidth	24 Gbps
Forwarding rate	1488095pps
Interface	
Ethernet Port	8 x 10/100/1000BaseT(x)RJ-45 , 4 x 1000Base FX, auto-MDI/MDI-X
System LED	2 x Power: Green On ; 1 x DO Alarm: Red On ; 1 x RUN: Green On
Ethernet Port LED	Link (Green On), Active (Green Blinking)
Power Input	8-Pin Removable Terminal Connector
Power Requirement	
Input Voltage	12/24/48VDC (10~50VDC) or 110/220VAC(88~264VAC) or 110/220VDC(88~264VDC) , Redundant
Reverse Polarity Protect	Yes
Power Consumption	15W
Mechanical	
Enclosure Material	Metal
Dimension	70 mm x 150 mm x 120 mm (W x H x D) without DIN Rail Clip
Ingress Protection	IP40
Weight	1600g
Installation method	DIN Rail-mounted
Environmental	
Operating Temperature & Humidity	-40°C ~ +85°C , 0%~95% Non- Condensing
Storage Temperature	-40°C ~ +85°C
MTBF	>2,000,000 hours
Warranty	5 years
Standard	
EMI	FCC Part 15 Subpart B class A, EN55022 class A
EMS	IEC(EN)61000-4-2(ESD) IEC(EN)61000-4-3(RS) IEC(EN)61000-4-4(EFT) IEC(EN)61000-4-5(Surge) IEC(EN)61000-4-6(CS) IEC(EN)61000-4-8 IEC 60068-2-27(Shock) IEC 60068-2-32(Freefall)



Specifications

100Base FX

Multi Mode	AVC-SFP-FX-SX (550m)	Wavelength: 850 nm
	AVC-SFP-FX-S (2km)	Wavelength: 1310 nm
Single Mode	AVC-SFP-FX-10 (10km)	Wavelength: 1310 nm

1000Base FX

Multi Mode	AVC-SFP-SX (550m)	Wavelength: 850 nm
	AVC-SFP-LX-S (2km)	Wavelength: 1310 nm
Single Mode	AVC-SFP-LX-10 (10km)	Wavelength: 1310 nm

Function interface

Chassis Ground

Integrated Power Connector

- 1 x 8-pin terminal block for redundant power input

System LED

- 2 x Power
- 1 x Alarm
- 1 x RUN

Fast Ethernet

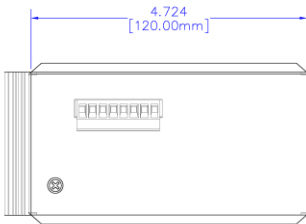
- 8-port 10/100/1000Base-TX
- 4-port 1000Base FX



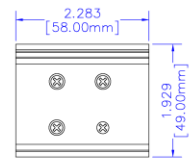
DIN Clip

Installation dimensions

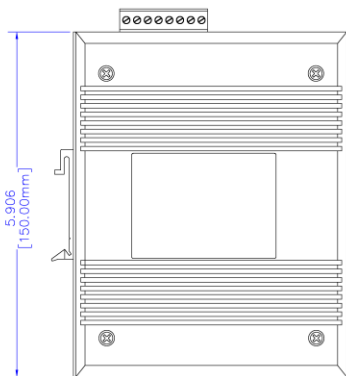
Unit: $\frac{\text{inch} \pm 0.040}{[\text{mm}] \pm 1.00}$



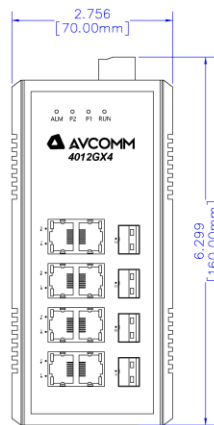
Top view



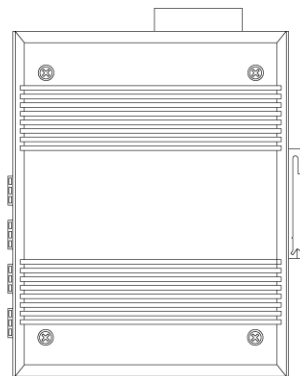
Rail piece



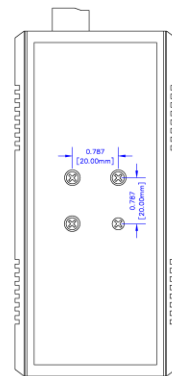
Left side view



Front view



Right side view



Rear view