AVCOMM®

420GX4
Datasheet

Aiming to create better and safer working environments and life experiences through the products we deliver.
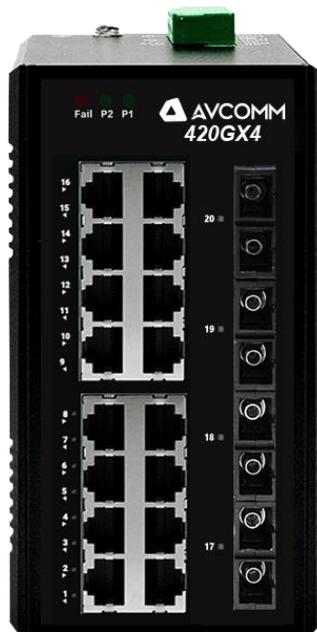
Reliable Plug and Play Industrial Ethernet Switch for Automation and Electrical OEM

420GX4

Industrial Unmanaged Ethernet Switch

AVCOMM 420GX4 is a 20-port plug and play fast unmanaged Ethernet switch with reverse polarity protection of AC or DC input for automation and electrical OEM purpose. It has wide operation temperature range, high EMC performance to ensure stable work in harsh industrial environments and supports DIN Rail-mounted to facilitate in various industrial network applications. AVCOMM 420GX4 is suitable for industrial applications such as industrial automation, intelligent transportation, video surveillance, and electrical OEMs.

FC CE cULus IEC61000-6-2 IEC61000-6-4

Features & Benefits

Fast Ethernet Switching

· Sixteen (16) 10/100BaseT(X) RJ-45 ports and four(4) 1000BaseFX port (SC ST FC optional)

· 8K MAC address table

· Store and forwarding with non-blocking technology

Power protection

· Provide overload protection

· Provide reverse connection protection

Rugged Mechanical Design

· Robust design protects from mechanical deformation

· IP40 industrial rating to withstand harsh environments

· Wide operating temperature range -40°C ~ +85°C

· IEC61000-6-2/IEC61000-6-4 heavy industrial EMS

IEEE 802.3u EEE Power Management

· Ultra power consumption efficiency, 20 W fully loaded

· Energy Efficient Ethernet for low power requirement

· Idle power saving mode for energy efficiency

Ordering Information

Model Name	Description
420GX4	20-Port Industrial Unmanaged Ethernet Switch, 16 RJ45 10/100BaseT(X), 4 1000BaseFX (SFP), Dual Power Input 12-48VDC, -40°C to +85°C, Rack mounted
420GX4-SC	20-Port Industrial Unmanaged Ethernet Switch, 16 RJ45 10/100BaseT(X), 4 1000BaseFX (Multimode, SC style connector) , Dual Power Input 12-48VDC, -40°C to +85°C, Rack mounted
420GX4-ST	20-Port Industrial Unmanaged Ethernet Switch, 16 RJ45 10/100BaseT(X), 4 1000BaseFX (Multimode, ST style connector) , Dual Power Input 12-48VDC, -40°C to +85°C, Rack mounted

Tel: 713-933-4534   Web: www.avcomm.us   Email: info@avcomm.us

## ⚙ Specifications

Technology	
Standard	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX and 100Base FX Fast Ethernet
	IEEE 802.3z
	IEEE 802.3x Flow Control and back-pressure

Performance	
Switch Technology	Store and Forwarding Technology with non-blocking
Number of MAC Address	8K
Packet Buffer Memory	3 MB
Backplane bandwidth	11.2 Gbps
Forwarding rate	148810pps/1488095pps
Maximum frame length	2 KB

Interface	
Ethernet Port	16 x 10/100BasetT(x)RJ-45 , 4 x 1000Base FX, Auto Negotiation
System LED	2 x Power: Green On ; 1 x DO Alarm: Red On
Ethernet Port LED	Link (Green On), Active (Green Blinking)
Power Input	8-Pin Removable Terminal Connector (V-/N, V+/L, V-/N, V+/L)

Power Requirement	
Input Voltage	12/24/48VDC (10~50VDC) or 110/220VAC(90~264VAC) or 110/220VDC(90~264VDC) , Redundant
Reverse Polarity Protect	Yes
Power Consumption	830mA@24V

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	<1700 g
Installation method	Rack-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, 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)

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 DO Alarm

DIN Clip

Fast Ethernet
• 16-port 10/100MBase-TX
• 4-port 1000Base FX
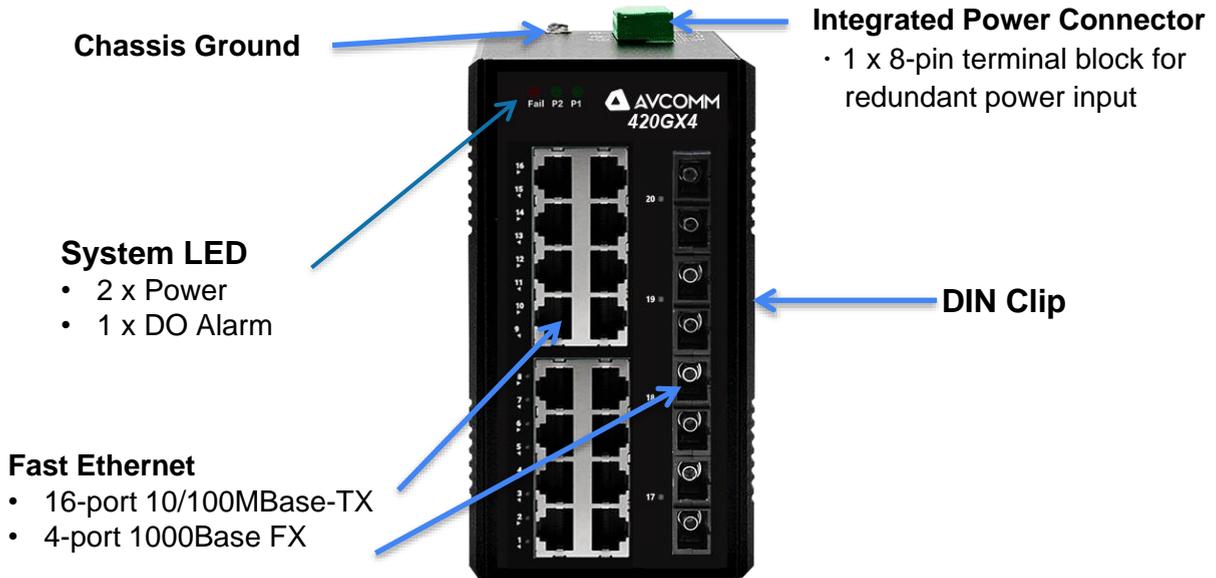
Installation dimensions

Unit: inch ±0.040 / [mm] ±1.00

5.51 [140.00mm]

Top view

2.28 [58.00mm]
1.93 [49.00mm]

Rail piece

4.72 [120.00mm]
5.91 [150.00mm]

Left side view

2.76 [70.00mm]
6.30 [160.00mm]

420GX4-SC

Front view

420GX4-SFP

Right side view

0.79 [20.00mm]
0.79 [20.00mm]

Rear view