4003GX
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

4003GX

Industrial Unmanaged Ethernet Switch

AVCOMM 4003GX is 2-port 10/100/1000Base-TX RJ-45 and 1-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.

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

Features & Benefits

Fast Ethernet Switching

· Two (2) 10/100/1000BaseT(X) RJ-45 ports and one (1) 1000BaseFX port (SC ST FC optional)
· 1K MAC address table
· Store and forwarding with non-blocking technology

IEEE 802.3u EEE Power Management

· Ultra power consumption efficiency, 2.4 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
4003GX	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX , DIN-Rail, Single Power Input 12-48VDC, -40°C to +85°C
4003GX-SC	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, SC style connector) , DIN-Rail, Singler Power Input 12-48VDC, -40°C to +85°C
4003GX-ST	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, ST style connector) , DIN-Rail, Single Power Input 12-48VDC, -40°C to +85°C

Part Number	Description
4003GXE-SC-15	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 15Km) , DIN-Rail, Singlel Power Input 12-48VDC, -40°C to +85°C
4003GXE-ST-15	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 15Km) , DIN-Rail, Single Power Input 12-48VDC, -40°C to +85°C
4003GXE-SC-40	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 40Km) , DIN-Rail, Single Power Input 12-48VDC, -40°C to +85°C
4003GXE-ST-40	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 40Km) , DIN-Rail, Single Power Input 12-48VDC, -40°C to +85°C
4003GXE-SC-80	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 80Km) , DIN-Rail, Single Power Input 12-48VDC, -40°C to +85°C
4003GXE-ST-80	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 80Km) , DIN-Rail, Single Power Input 12-48VDC, -40°C to +85°C
4003GX-SC-AC	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, SC style connector) , DIN-Rail, Dual Power Input 88-264VAC, -40°C to +85°C
4003GX-ST-AC	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, ST style connector) , DIN-Rail, Dual Power Input 88-264VAC, -40°C to +85°C
4003GXE-SC-15-AC	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 15Km) , DIN-Rail, Dual Power Input 88-264VAC, -40°C to +85°C
4003GXE-ST-15-AC	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 15Km) , DIN-Rail, Dual Power Input 88-264VAC, -40°C to +85°C
4003GXE-SC-40-AC	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 40Km) , DIN-Rail, Dual Power Input 88-264VAC, -40°C to +85°C
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4003GXE-ST-80-AC	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 80Km) , DIN-Rail, Dual Power Input 88-264VAC, -40°C to +85°C
4003GX-SC-HV	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, SC style connector) , DIN-Rail, Dual Power Input 88-264VDC, -40°C to +85°C
4003GX-ST-HV	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, ST style connector) , DIN-Rail, Dual Power Input 88-264VDC, -40°C to +85°C
4003GXE-SC-15-HV	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 15Km) , DIN-Rail, Dual Power Input 88-264VDC, -40°C to +85°C

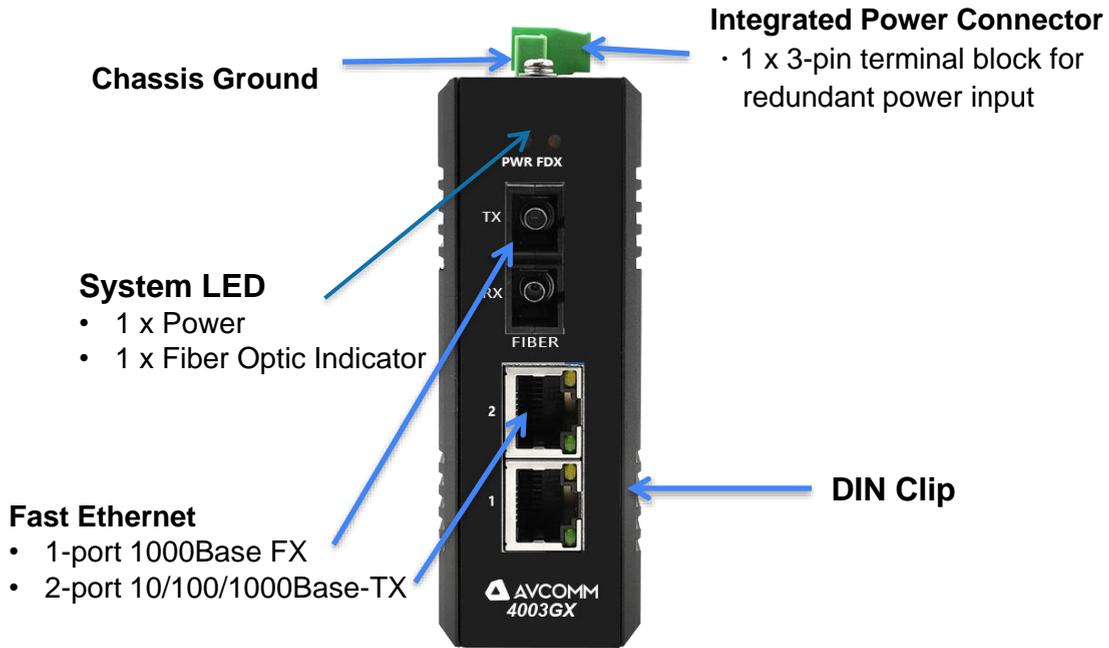|	
4003GXE-ST-15-HV	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 15Km) , DIN-Rail, Dual Power Input 88-264VDC, -40°C to +85°C
4003GXE-SC-40-HV	3-Port Industrial Unmanaged Ethernet Switch, 2 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 40Km) , DIN-Rail, Dual Power Input 88-264VDC, -40°C to +85°C
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⚙ Specifications

Technology	
Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.3ab, IEEE 802.3x

Performance	
Switch Technology	Store and Forwarding Technology with non-blocking
Number of MAC Address	1K
Packet Buffer Memory	1 MB
Backplane bandwidth	12 Gbps
Forwarding rate	1488095pps

Interface	
Ethernet Port	2 x 10/100/1000BasetT(x)RJ-45 , 1 x 1000Base FX, auto-MDI/MDI-X
System LED	1 x Power: Green On ; 1 x Fiber Optic Indicator: Green On
Ethernet Port LED	Link (Green On), Active (Green Blinking)
Power Input	3-Pin Removable Terminal Connector

Power Requirement	
Input Voltage	12/24/48VDC (10~50VDC) 110/220VAC(88~264VAC) or 110/220VDC(88~264VDC) , Redundant
Reverse Polarity Protect	Yes
Power Consumption	100mA@24V 5 W

Mechanical	
Enclosure Material	Metal
Dimension	35 mm x 100 mm x 80 mm (W x H x D) without DIN Rail Clip for DC version 47.2 mm×100 mm×85 mm (W x H x D) without DIN Rail Clip for AC & HVDC version
Ingress Protection	IP40
Weight	470g for DC version 560g for AC & HVDC version
Installation method	DIN Rail-mounted for DC version DIN Rail-mounted/wall-mounted for AC & HVDC version

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)

⚙ 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

4003GX

Function interface

Chassis Ground

Integrated Power Connector
· 1 x 3-pin terminal block for redundant power input

System LED
• 1 x Power
• 1 x Fiber Optic Indicator

DIN Clip

Fast Ethernet
• 1-port 1000Base FX
• 2-port 10/100/1000Base-TX

PWR FDX
TX
RX
FIBER
2
1
AVCOMM
4003GX

Installation dimensions

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

1.063 [27.00mm]

2.047 [52.00mm]

3.937 [100.00mm]

Top view

Rail piece

3.150 [80.00mm]

1.378 [35.00mm]

0.433 [11.00mm]

0.599 [15.21mm]

1.112 [28.25mm]

1.004 [25.50mm]

0.394 [10.00mm]

3.937 [100.00mm]

4.330 [109.98mm]

0.590 [14.99mm]

PWR FDX
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Left side view

Front view

Right side view

Rear view

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