

## 4002MC Datasheet

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



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## 4002MC



## Reliable Plug and Play Industrial Media Converter for Automation and Electrical OEM

### 4002MC

### Industrial Unmanaged Media Converter

AVCOMM 4002MC is 2-port plug and play industrial media converter 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 such as industrial automation, intelligent transportation, video surveillance, and electrical OEMs..



### Features & Benefits

#### Industrial Media Converter

- One (1) 10/100/1000BaseT(X) RJ-45 ports and one (1)
  1000BaseFX port (SC ST FC optional)
- · 1K MAC address table
- $\cdot$  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**

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

#### **Power protection**

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

Model Name	Description
4002MC	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX , DIN-Rail, Single Power Input 12-48VDC, -40°C to +85°C
4002MC-SC	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, SC style connector) , DIN-Rail, Singler Power Input 12-48VDC, -40°C to +85°C
4002MC-ST	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, ST style connector) , DIN-Rail, Single Power Input 12-48VDC, -40°C to +85°C

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## Ordering Information







4002MCE-SC-15	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 15Km), DIN-Rail, Singlel Power Input 12-48VDC, -40°C to +85°C		
4002MCE-ST-15	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 15Km), DIN-Rail, Single Power Input 12-48VDC, - 40°C to +85°C		
4002MCE-SC-40	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 40Km), DIN-Rail, Single Power Input 12-48VDC, -40°C to +85°C		
4002MCE-ST-40	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 40Km), DIN-Rail, Single Power Input 12-48VDC, - 40°C to +85°C		
4002MCE-SC-80	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 80Km), DIN-Rail, Single Power Input 12-48VDC, - 40°C to +85°C		
4002MCE-ST-80	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 80Km), DIN-Rail, Single Power Input 12-48VDC, - 40°C to +85°C		
4002MC-SC-AC	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, SC style connector) , DIN-Rail, Dual Power Input 88-264VAC, -40°C to +85°C		
4002MC-ST-AC	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, ST style connector), DIN-Rail, Dual Power Input 88-264VAC, -40°C to +85°C		
4002MCE-SC-15-AC	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 15Km), DIN-Rail, Dual Power Input 88-264VAC, - 40°C to +85°C		
4002MCE-ST-15-AC	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 15Km), DIN-Rail, Dual Power Input 88-264VAC, - 40°C to +85°C		
4002MCE-SC-40-AC	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 40Km), DIN-Rail, Dual Power Input 88-264VAC, - 40°C to +85°C		
4002MCE-ST-40-AC	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 40Km), DIN-Rail, Dual Power Input 88-264VAC, - 40°C to +85°C		
4002MCE-SC-80-AC	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 80Km), DIN-Rail, Dual Power Input 88-264VAC, - 40°C to +85°C		
4002MCE-ST-80-AC	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 80Km), DIN-Rail, Dual Power Input 88-264VAC, - 40°C to +85°C		
4002MC-SC-HV	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, SC style connector) , DIN-Rail, Dual Power Input 88-264VDC, -40°C to +85°C		
4002MC-ST-HV	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Multimode, ST style connector) , DIN-Rail, Dual Power Input 88-264VDC, -40°C to +85°C		
4002MCE-SC-15-HV	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 15Km), DIN-Rail, Dual Power Input 88-264VDC, - 40°C to +85°C		





4002MCE-ST-15-HV	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 15Km) , DIN-Rail, Dual Power Input 88-264VDC, - 40°C to +85°C
4002MCE-SC-40-HV	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 40Km) , DIN-Rail, Dual Power Input 88-264VDC, - 40°C to +85°C
4002MCE-ST-40-HV	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 40Km) , DIN-Rail, Dual Power Input 88-264VDC, - 40°C to +85°C
4002MCE-SC-80-HV	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, SC style connector, 80Km) , DIN-Rail, Dual Power Input 88-264VDC, - 40°C to +85°C
4002MCE-ST-80-HV	2-Port Industrial Media Converter, 1 RJ45 10/100/1000BaseT(X), 1 1000BaseFX (Singlemode, ST style connector, 80Km) , DIN-Rail, Dual Power Input 88-264VDC, - 40°C to +85°C

## 4002MC



# 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	1К	
Packet Buffer Memory	1 MB	
Backplane bandwidth	12 Gbps	
Forwarding rate	1488095pps	
Interface		
Ethernet Port	1 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	450g for DC version 560g for AC & HVDC version	
Installation method	DIN Rail	
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)	

## 4002MC



## O 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		











