



Compact Media Converters

FR-2701-XX Series

Microtype 10/100Base-TX to 100Base-FX Ethernet Media Converter

Product Data Sheet



# FR-2701-XX Series



## Main Features

- Converts 10/100Base-TX to 100Base-FX
- Full/Half duplex, Auto-Negotiation
- Single-mode or Multimode fiber operation
- Single or Dual-core fiber with SC (ST as an option)
- MDI/MDI-X Auto-Crossover supported
- Supports DIP-switch: Link Fault Pass Through
- Plug-and-Play
- Supports 12VDC/24VDC/24VAC Terminal Block Power inputs
- -10° C to 60° C (14° F to 140° F) operating temperature

## Product Specifications

Hardware Specifications	
Model	FR-2701-XX
Ports	1x10/100Base-TX RJ45 1x100Base-FX
Port Mode(Tx)	Auto Negotiation Speed Full/Half Duplex Mode Auto MDI/MDI-X Connection
Maximum Packet Length	Up to 10K
Forward Filter Rate	14,880pps(10Mbps) 148,800pps(100Mbps)
Transmission Mode	Store and Forward (full/half duplex mode)
Optical	
Cabling	62.5/125µm (Multimode) 9/125µm (Singlemode)
Maximum Distance	2Km (Multimode) 20Km (Singlemode)
Wavelength	1310nm 1310/1550nm
Connector	SC (ST as an option)
Power	
Input Power	DC12V; DC24V; AC24V (Terminal Block)
Power Consumption	2.4W Max. 0.2A@12VDC
Physical Characteristics	
Housing	Aluminum case
IP Rating	IP40
Dimensions	38.5 * 95 * 24.5 mm; (with screw 42 * 95 * 24.5 mm)

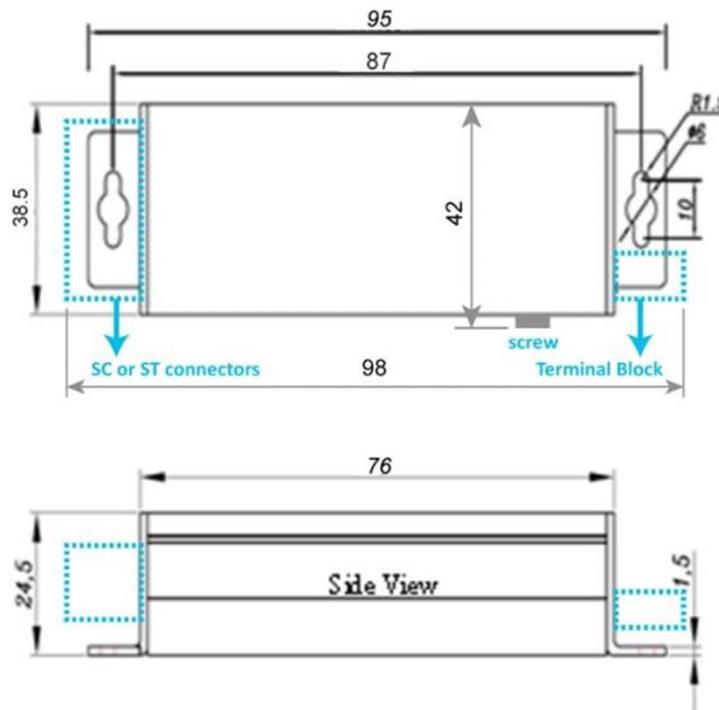
<b>Hardware Specifications</b>	
Weight	120g(Bare weight), 250g(With package)
Installation	Wall Mount
<b>Environmental</b>	
Operating Temperature	-10°C to +60°C
Operating Humidity	5%~90% (non-condensing)
Storage Temperature	-40°C to +85°C
MTBF	>500,000 hours @MIL-HDBK-217F GF 25°C
Heat Dissipation	7 BTU/h
Cooling	Passive Cooling
Noise Level	0 dBA
<b>Package Contents</b>	
Device	1x Media Converter
Power adapter	1.25A 12VDC power adapter with open wire for terminal block
Documentation	1x Quick installation guide,1x Warranty card,1x Product notice
<b>Regulatory &amp; Warranty</b>	
Standard Compliance	IEEE802.3 10Base-TX IEEE802.3u 100Base-TX/FX IEEE802.3x Flow Control
ISO	Manufactured in ISO-9001 facility
Safety	IEC62368-1:2020+A11:2020
EMI	FCC Part 15B Class A, IEC 61000-3-2
EMS	IEC61000-4-2 ESD: Contact:±8kV, Air:±15kV IEC61000-4-5 Surge: Power: ±4kV; RJ45:±2kV
Shock	IEC 60068-2-27
Free Fall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Environmental	RoHS 2011/65/EU Annex II(EU)
Warranty	3 Years, Details See: <a href="https://fiberroad.com/warranty">https://fiberroad.com/warranty</a>

<b>DIP Switch</b>			
No.	Function	State	Description
1	LFP	OFF	Disable
		ON	Enable

Note: 1. LFP: Link Fault Pass Through will shut down. A few seconds later, the power will restart automatically.

LEDs	States	Description
PWR	On	The device is powered on
LINK/ACT	Steady	A valid network connection established
	Flashing	Transmitting or receiving data. ACT Stands for Activity
SPD	Yellow	100Base-TX
	Off	10Base-TX
FX/SPD	Green	100Base-FX
	Off	10Base-FX
FX/LNK	Steady	A valid network connection established
	Flashing	Transmitting or receiving data. ACT Stands for Activity.

## Dimensions Unit: mm



## Ordering Information

Available Model	Description	Input Voltage	Operating Temp.
FR-2701-AA	Microtype 10/100Base-TX to 100Base-FX Ethernet Media Converter, Multimode / 2-fiber / SC / 1310nm / 2km	DC12V; DC24V; AC24V	-10 to +60°C
FR-2701-BB	Microtype 10/100Base-TX to 100Base-FX Ethernet Media Converter, Singlemode / 2-fiber / SC / 1310nm / 20km		-10 to +60°C
FR-2701-CD	Microtype 10/100Base-TX to 100Base-FX Ethernet Media Converter, Multimode / 1-fiber / SC / TX: 1310 / RX: 1550nm / 2km		-10 to +60°C
FR-2701-DC	Microtype 10/100Base-TX to 100Base-FX Ethernet Media Converter, Multimode / 1-fiber / SC / TX: 1550 / RX: 1310nm / 2km		-10 to +60°C
FR-2701-EF	Microtype 10/100Base-TX to 100Base-FX Ethernet Media Converter, Singlemode / 1-fiber / SC / TX: 1310 / RX: 1550nm / 20km		-10 to +60°C
FR-2701-FE	Microtype 10/100Base-TX to 100Base-FX Ethernet Media Converter, Singlemode / 1-fiber / SC / TX: 1550 / RX: 1310nm / 20km		-10 to +60°C

## Optional Accessories (to be purchased separately)

Armored Fiber Patch Cable / LAN Cable	
FRPC-A-LC	Armored LSZH LC UPC to LC UPC Duplex OS2 single mode 7.0mm for Outdoor Application, 1-50m
FRLC-A-CAT6	Armored Cat6 Snagless shielded(SFTP) Ethernet Network Patch Cable, 26AWG, 1000Base-T, 0.5m – 3m

## Shipping

Model No.	FR-2701-XX Series
Classification Codes	HS Code: 851762
	HTS: 8517.62.00
NDA Compliant	Yes
Individual Gross Weight	250g
Individual Package Dimension	165x150x50mm
Package Quantity	60Units
Package Gross Weight	16kg
Package Dimension	535x345x470mm

## Precautions

To prevent equipment damage or personal injury caused by improper operation, please observe the following precautions:

- ❖ Turn off the power before installation. Wear an anti-static wrist strap and ensure proper skin contact to prevent electrostatic discharge (ESD) damage.
- ❖ Ensure the power supply voltage matches the voltage specified on the switch.
- ❖ Before powering on the switch, verify that the power circuit is not overloaded to avoid abnormal operation or equipment damage.
- ❖ Do not open the chassis while the switch is operating. To avoid the risk of electric shock, do not disassemble the device.
- ❖ Disconnect the power before cleaning. Do not use a wet cloth or liquid cleaners.
- ❖ When installing in a rack, mount equipment from bottom to top to prevent overloading.
- ❖ Do not place heavy objects on the switch.

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