# RS232/RS485/RS422 Serial To Media Converter

# **MWF201**



- ◆RS-232/RS-485/RS-422 interface available;
- ◆Signal flow is automatically identified and transparently transmitted;
- ◆Imported optical transceiver module to ensure the transmission distance;
- ◆The baud rate adapts without changing the user protocol;
- ◆Industrial design, all surface mount technology.

#### **Product Description**

MWF201 fiber converter: The main function is realizing photoelectric conversion of RS-232/RS-485/RS-422 signals. This series of products realizes long-distance transmission of RS-232 or RS-485 or RS-422 through optical fiber. Fiber optic converters use optical fiber as the transmission medium, it has the advantages of isolation high voltage, anti-electromagnetic interference, anti-lightning and so on. They are widely used in various industrial control, distributed data acquisition and other occasions, especially in power system automation, traffic control and other departments.

## **Technical Specification**

Interface  Serial Port: Electrical characteristics, Meet RS-232/RS-422/RS-485	Technical parameters		
Interface form  Serial Port: Electrical characteristics, Meet RS-232/RS-422/RS-485	Standard	Compliant with EIA RS-232, RS-485, RS-422	
Interface form Physical characteristics, Industrial terminal block Optical interface: Single multi-mode optional, SC/ST/FC optional  Communication rate  Baud Rate 300bps~115.2Kbps, rate adaptive signal  LEDS  Power indicator POW Data transmission indicator light TX, RX  Power  Power Supply DC5~30V, AC85~265V/DC110~370V  Interface BNC coaxial input, industrial terminal block  Power <1W  Overload protection Support  Lightning protection 500W/ms anti-lightning strike  Static protection 15kv antistatic  Physical Characteristics  Shell Aluminum housing 90mm×30mm×70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply) 108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) (Desktop AC power)  Weight 0.4kg	Interface		
Baud Rate 300bps~115.2Kbps, rate adaptive signal  LEDs  Power indicator POW  Data transmission indicator light TX, RX  Power  Power Supply DC5~30V, AC85~265V/DC110~370V  Interface BNC coaxial input, industrial terminal block  Power < <1W  Overload protection Support  Lightning protection 50w/ms anti-lightning strike  Static protection 15kv antistatic  Physical Characteristics  Shell Aluminum housing 90mmx30mmx70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mmx26mmx72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight 0.4kg	Interface form	Physical characteristics, Industrial terminal block	
Power indicator POW  Data transmission indicator light  Power  Power  Power Supply DC5 ~ 30V, AC85 ~ 265V/DC110 ~ 370V  Interface BNC coaxial input, industrial terminal block  Power  Coverload protection Support  Lightning protection 560W/ms anti-lightning strike  Static protection 15kv antistatic  Physical Characteristics  Shell Aluminum housing  90mm×30mm×70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight 0.4kg	Communication rate		
Power indicator   POW   Data transmission indicator light   TX, RX    Power   Power   Power Supply   DC5 ~ 30V, AC85 ~ 265V/DC110 ~ 370V   Interface   BNC coaxial input, industrial terminal block   Power   <1W   Overload protection   Support   Lightning protection   600W/ms anti-lightning strike   Static protection   15kv antistatic   Physical Characteristics   Shell   Aluminum housing   90mm×30mm×70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16)   110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted)   78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply)   108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted)   100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)	Baud Rate	300bps~115.2Kbps, rate adaptive signal	
Data transmission indicator light  Power  Power Supply DC5 ~ 30V, AC85 ~ 265V/DC110 ~ 370V  Interface BNC coaxial input, industrial terminal block  Power <1W  Overload protection Support  Lightning protection 600W/ms anti-lightning strike  Static protection 15kv antistatic  Physical Characteristics  Shell Aluminum housing 90mmx30mmx70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mmx26mmx72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply) 108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight 0.4kg	LEDs		
Power Supply DC5 ~ 30V, AC85 ~ 265V/DC110 ~ 370V  Interface BNC coaxial input, industrial terminal block  Power < 1W  Overload protection Support  Lightning protection 600W/ms anti-lightning strike  Static protection 15kv antistatic  Physical Characteristics  Shell Aluminum housing 90mmx30mmx70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mmx26mmx72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm × 25mm × 85mm (Length × height × width) (MWF-201) (Desktop DC power supply) 108mm × 34mm × 126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm × 36mm × 105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight 0.4kg	Power indicator	POW	
Power Supply  Interface  BNC coaxial input, industrial terminal block  Power  <1W  Overload protection  Support  Lightning protection  Static protection  15kv antistatic  Physical Characteristics  Shell  Aluminum housing  90mm×30mm×70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply) 108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight  0.4kg	Data transmission indicator light	TX, RX	
Interface BNC coaxial input, industrial terminal block  Power <1W  Overload protection Support  Lightning protection 600W/ms anti-lightning strike  Static protection 15kv antistatic  Physical Characteristics  Shell Aluminum housing  90mm×30mm×70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply) 108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight 0.4kg	Power		
Power <1W  Overload protection Support  Lightning protection 600W/ms anti-lightning strike  Static protection 15kv antistatic  Physical Characteristics  Shell Aluminum housing  90mm×30mm×70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply) 108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight 0.4kg	Power Supply	DC5 ~ 30V, AC85 ~ 265V/DC110 ~ 370V	
Overload protection  Lightning protection  600W/ms anti-lightning strike  Static protection  15kv antistatic  Physical Characteristics  Shell  Aluminum housing  90mm×30mm×70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16)  110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted)  78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply)  108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted)  100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight  0.4kg	Interface	BNC coaxial input, industrial terminal block	
Lightning protection 600W/ms anti-lightning strike  Static protection 15kv antistatic  Physical Characteristics  Shell Aluminum housing 90mm×30mm×70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply) 108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight 0.4kg	Power	<1W	
Static protection 15kv antistatic  Physical Characteristics  Shell Aluminum housing 90mm×30mm×70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply) 108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight 0.4kg	Overload protection	Support	
Physical Characteristics  Shell Aluminum housing  90mm×30mm×70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply) 108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight 0.4kg	Lightning protection	600W/ms anti-lightning strike	
Shell  Aluminum housing  90mm×30mm×70mm (Length × height × width) (MWF-201-K) ( Bare board plug-in type, used with MR16) 110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply) 108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight  0.4kg	Static protection	15kv antistatic	
90mm×30mm×70mm (Length × height × width) (MWF-201-K) (Bare board plug-in type, used with MR16) 110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted) 78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply) 108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted) 100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight  0.4kg	Physical Characteristics		
board plug-in type, used with MR16)  110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted)  78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply)  108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted)  100mm×36mm×105mm (Length × height × width) (MWF-201-A220) (Desktop AC power)  Weight  0.4kg	Shell	Aluminum housing	
	Dimension	board plug-in type, used with MR16)  110mm×26mm×72mm (Length × height × width) (MWF-201-G) (Shell: Din rail mounted)  78mm×25mm×85mm (Length × height × width) (MWF-201) (Desktop DC power supply)  108mm×34mm×126mm (Length × height × width) (MWF-201-KG) (Metal din rail mounted)  100mm×36mm×105mm (Length × height × width) (MWF-201-A220)	
Transmission distance	Weight	0.4kg	
	Transmission distance	ce	

Serial port line	RS-232,15m@9600bps	
	RS-422/RS-485, 1.2km@9600bps	
Multimode fiber	1310nm, 5km	
Single mode fiber	1310nm, 20km/40km	
Olligie mode liber	1310nm, 60km/80km	
Working Environment		
Operating	-40°C~85°C	
Temperature	-40 C~00 C	
Storage temperature	-40°C~85°C	
Ambient Humidity	5%~95%	
Warranty		
Warranty	5 Years	
Certification		
Certification	CE, FCC	

## **Product Ordering Information**

	Ordering Information		
MWF201 Types	MWF201 Types1: (RS232/485/422 three-in-one terminal block interface fiber converter)		
MWF201-M	RS232/485/422 three-in-one terminal block interface fiber converter:  1) Multi-mode: 2Km; 2) External supply DC5V or 9~30V; 3) Standard PWR5-5 (DC5V/1A) power adapter, aluminum alloy case desktop		
MWF201-S	installation.  RS232/485/422 three-in-one terminal block interface fiber converter:  1) Single-mode: 20Km;  2) External supply DC5V or 9~30V;		
MWF201-M-G	<ol> <li>Standard PWR5-5 (DC5V/1A) power adapter, aluminum alloy case desktop installation.</li> <li>RS232/485/422 three-in-one terminal block interface fiber converter:</li> <li>Multi-mode: 2Km;</li> <li>External supply DC5V ~30V;</li> <li>Standard PWR5-5 (DC5V/1A) power adapter, DB9 plastic case.</li> </ol>		
MWF201-S-G	RS232/485/422 three-in-one terminal block interface fiber converter:  1) Single-mode: 20Km;  2) External supply DC5V ~30V;  3) Standard PWR5-5 (DC5V/1A) power adapter, DB9 plastic case.		
MWF201-M-K G	RS232/485/422 three-in-one terminal block interface fiber converter:  1) Multi-mode: 2Km;  2) External supply DC5V ~30V;  3) Standard PWR5-5 (DC5V/1A) power adapter, aluminum alloy case desktop installation.		
MWF201-S-KG	RS232/485/422 three-in-one terminal block interface fiber converter:  1) Single-mode: 20Km;  2) External supply DC5V ~30V;  3) Standard PWR5-5 (DC5V/1A) power adapter, aluminum alloy case desktop installation.		
MWF201-M-K G-AD220	<ul> <li>RS232/485/422 three-in-one terminal block interface fiber converter:</li> <li>1) Multi-mode: 2Km;</li> <li>2) Support built-in AC220V isolated power supply, aluminum alloy case desktop installation.</li> </ul>		
MWF201-S-KG -AD220	<ul><li>RS232/485/422 three-in-one terminal block interface fiber converter:</li><li>1) Single-mode: 20Km;</li><li>2) Support built-in AC220V isolated power supply, aluminum alloy case desktop installation.</li></ul>		

MWF201 Types2:			
RS232/485/422	RS232/485/422 Three-in-one serial port (DB9 pin) rack-mount fiber optic MODEN series		
MWF201-M-K	RS232/485/422 three-in-one DB9M interface:		
	1) Multi-mode: 2Km;		
	2) Plug-in type.		
MWF201-S-K	RS232/485/422 three-in-one DB9M interface:		
	1) Single-mode: 20Km;		
	2) Plug-in type.		
MTR-16-2U	16-slot unmanaged 19-inch rack-mount fiber optic transceiver rack (including main and		
	backup power supplies).		