

MWF - CAN - F

CAN Bus to Fiber Converter

Product description

The MWF-CAN series of products is a protocol-based industrial-grade optical fiber communication relay product designed by Wuhan Maiwe for CAN fieldbus long-distance data communication, which converts the cable communication of the bus into optical fiber communication. The signal is electrically isolated between the bus segments, completely isolates the electrical interference between the bus segments, and has the functions of bus signal regeneration, extended transmission distance, increased number of nodes, and changing the topology of the network.



Features:

- Support CAN bus speed 0 ~ 500K, rate adaptive full transparent transmission;
- The electrical interface is powered by an independent power supply module and completely isolates the ground loop;
- Internal communication and bus data signals are optically isolated;
- Supports a rich optical network structure, such as point-to-point, star, and chain type;
- Industrial-grade design supports independent dual power redundancy, low power consumption and anti-jamming.

Product specifications

Electrical interface

Interface Type	Industrial Terminal
Communication rate	Support 32 common rates (0~1Mbit/s), dial switch settings
Signal delay (Electrical interface)	1 frame+100ns
Protection	1500W Lightning Surge Protection, 15KV Electrostatic protection and prevention of co-channel interference, self-recovery overcurrent protection
Terminator	Built-in termination resistor

Optical Interface

Optical type	Single multi-mode optional
Optical connector	SC/ST/FC optional, standard SC
Optical fiber wavelength	Multi-mode 850nm/1310nm, single mode 1310nm
Transmission fiber	Multi-mode 50/125um, 62.5/125um, 100/140um
	Single-mode 9/125um, 10/125um
Transmission distance	Multi-mode 2Km, single mode 20/40/60/80km, more distance optional
Optical line error rate	<10 ⁻⁹

Power

Power Supply	Dual power redundant input, D10 ~36VC
Operating current	100mA@24VDC
Power	<3W
Access terminal	Industrial terminal block
Voltage Protection	Provides L1+/M/L2+ Reverse Protection
Current Protection	1A (Signal Short Protection)
Relay alarm output	electrical port fault / optical fiber link fault alarm output, Contact capacity: DC30V@1A, AC120V@1A

Physical Characteristics

Shell	DB9 plastic casing
Dimension	136mm×105mm×52mm
Installation	Standard 35mm DIN rail mounting

Working Environment

Operating Temperature	0°C~70°C
Relative Humidity	5%~95%

Industry Standard

EMI	EN550221998, Class A
EMS	EN61000-4-2(ESD), Criteria B, Level 4 EN61000-4-3(RS), Criteria B, Level 2 EN61000-4-4(EFT), Criteria B, Level 4 EN61000-4-5(Surge), Criteria B, Level 2 EN61000-4-2(CS), Criteria B, Level 2 EN61000-4-8(PFMF), Criteria A, Level 3
Certification	CE, FCC

Ordering information

MWF-CAN-F(M/S)	CanBus level fiber converter, support point-to-point communication, external DC5 ~ 30V, standard DC5V / 1A line power adapter, DB9 plastic shell din-rail mounted installation.
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