

MDC 1001G

1x GbE RJ45 to 1x 100/1000Base SFP Industrial Media Converter

- Supports LFPT (Link Fault Pass Through) and FEF (Far End Fault)
- Provides a DIP-Switch to set functions
- 12/24/48VDC (9.6~60VDC) Redundant input power
- CE and FCC certified



This compact model is unmanaged industrial grade gigabit Ethernet media converter that support conversion between electrical 10/100/1000Base-T and optical 1000Base-X Ethernet. Housed in rugged DIN rail or wall mountable enclosures, this converter is designed for harsh environments, such as industrial networking and intelligent transportation systems (ITS) and are also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications.

Features

- IP30 rugged metal housing and fanless
- Wide operating temperature -20 ~ 70° C
- Store-and-Forward mode and Pass through mode (set by DIP SW)
- Conversion between 10/100/1000Base-T and 1000Base-X Fiber cable interface

Ordering Information

1x GbE RJ45 to 1x 100/1000Base SFP Industrial Media Converter

Model Name	RJ45	Fiber	Power Input	Certification	Operating Temperature
	MDC 1001G	10/100/1000Base-T	Dual Speed 100/1000Base-X	Redundant Power	CE, FCC

Optional Accessories

Wall Mount Kit

WMK01	Wall Mount kit for MDC1001G (Compact, 150 x 30mm)
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Industrial SFP Transceiver

SFPFM2	SFP, 100Mbps, LC, multi-mode, 2KM, 0~70°C
SFPFS30	SFP, 100Mbps, LC, single-mode, 30KM, 0~70°C
SFPGM05	SFP, 1000Mbps, LC, multi, DDM, 550M, 0~70°C
SFPGM2	SFP, 1000Mbps, LC, multi, DDM, 2KM, 0~70°C
SFPGS10	SFP, 1000Mbps, LC, single, DDM, 10KM, 0~70°C

Industrial DIN Power Supply

DRC-24V30W1AZ	30W Industrial DIN-Rail Power Supply, 24VDC (metal case)
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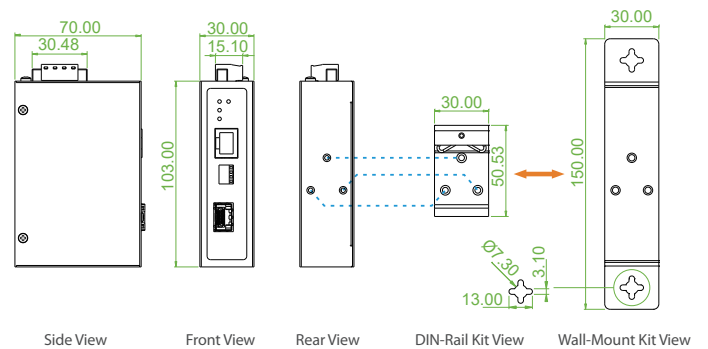
Specifications

Standard	IEEE 802.3	10Base-T 10Mbit/s Ethernet								
	IEEE 802.3u	100Base-TX, 100Base-FX, Fast Ethernet								
	IEEE 802.3ab	1000Base-T Gbit/s Ethernet over twisted pair								
	IEEE 802.3z	1000Base-X Gbit/s Ethernet over Fiber-Optic								
	IEEE 802.3x	Flow Control and Back pressure								
RJ45 Ports	10/100/1000Base-T Auto MDI/MDI-X and Auto negotiation Function									
Fiber Ports	100/1000Base-X SFP Slot									
Data Process Architecture	Store and Forward Switch mode or Pass through mode set by DIP SW									
Jumbo Frame	16K Bytes (For Store and Forward Switch mode)									
Fiber Parameters	Fiber Cable (Multi-mode): 50/125um, 62.5/125um Fiber Cable (Single-mode): 9/125um Wavelength: 1310nm (Multi-mode/Single-mode) Distance depend on SFP Fiber Transceiver									
Link Fault Pass Through (LFPT)	TX-Fiber: If TX port link down, the media converter will force Fiber port to link down Fiber-TX: If Fiber port link down, the media converter will force TX port to link down									
Far-End Fault (FEF)	Work with LFPT to prevents data loss									
DIP Switch	Data Process Architecture OFF: Store and forward switch mode, ON: Pass through mode LFPT OFF: LFPT Disable, ON: LFPT Enable SFP Fiber Speed OFF: 1000Base-X, ON: 100Base-FX									
Connector	Fiber SFP Slot	RJ-45 Socket Auto MDI/MDI-X and Auto negotiation Function								
LED	Per Unit: Power 1 (Green), Power 2 (Green) SFP Fiber port: Speed & Link/Act 100Base-X (Green), 1000Base-X (Amber) RJ-45 port: Speed & Link/Act 10/100 (Green), 1000 (Yellow)									
Reverse Polarity Protection	Supported for power input									
Overload Current Protection	Supported									
Power Supply	12/24/48VDC (9.6~60VDC) Redundant input power with polarity reverse protect function and removable terminal block									
Power Consumption	<table border="1"> <thead> <tr> <th>Input Voltage</th> <th>12V</th> <th>24V</th> <th>48V</th> </tr> </thead> <tbody> <tr> <td>MDC1001G</td> <td>1.8W</td> <td>2W</td> <td>2.4W</td> </tr> </tbody> </table>		Input Voltage	12V	24V	48V	MDC1001G	1.8W	2W	2.4W
Input Voltage	12V	24V	48V							
MDC1001G	1.8W	2W	2.4W							
Removable Terminal Block	Provides for dual input power, 4 Pin									
Operating Humidity	5% ~ 95% (Non-condensing)									
Operating Temperature	-20~70°C									
Storage Temperature	-40 ~ 85°C									
Housing	Rugged Metal, IP30 Protection and fanless									
Dimensions	70x 30x 103 mm (D x W x H)									
Weight	225g									
Installation	DIN Rail, or wall mounting (Optional)									
MTBF	1,940,623 Hours (MIL-HDBK-217)									
Warranty	5 years									

Certifications

EMC	CE (EN55032, EN55035)
EMI	FCC Part 15 Subpart B Class A, CE
Electromagnetic Interference	
EMS	EN61000-4-2 (ESD) Level 3, Criteria B
Electromagnetic Susceptibility	EN61000-4-3 (RS) Level 3, Criteria A
Protection Level	EN61000-4-4 (Burst) Level 3, Criteria A EN61000-4-5 (Surge) Level 3, Criteria B EN61000-4-6 (CS) Level 3, Criteria A EN61000-4-8 (PFMF, Magnetic Field) Field Strength: 300A/m, Criteria A
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

Dimensions



In a continuing effort of improvement and updated technology, product specifications are subject to change without notice.

