

ROCKETLINX MC7001

Industrial Ethernet to Fiber Media Converter

FEATURES & BENEFITS

- One 10/100Base-TX port to One 100Base-FX port media converter
- Dual Forwarding modes -- Switching and Pure converter
- Supports 1.5KV Hi-PoT isolation protection
- Supports Auto MDI/MDI-X, Auto Negotiation
- Supports Multi-mode 2KM, Single-mode 30KM link distance
- Auto Link Loss Forwarding (LLF) for fault detection
- Extreme Low Data Forwarding Latency -- 1.6×10^{-6} Sec
- Wide range DC or AC Power input with DC polarity correction
- Compact aluminum case with IP-31 grade protection
- -10 to 70°C operating temperature for hazardous environment applications



Part Number
Single-Mode: 32020-3
Multi-Mode: 32021-0

Product Description

The RocketLinx MC7001 is an Ethernet to Fiber media converter designed to excel in harsh industrial environments requiring a rugged, full-featured DIN rail mount converter in a small form factor IP31-rated housing. The MC7001 converts 10/100Base-TX Ethernet to 100Base-FX fiber with models available supporting single-mode and multi-mode fiber connections.

Simple DIP switch configuration, low latency performance, a wide operating temperature range of -10^o to 70^oC, and advanced features including pure converter and switch modes combine to make the RocketLinx MC7001 a superior choice for applications requiring Ethernet to fiber conversion.

SPECIFICATIONS



HARDWARE

• Bus Interface	10/100BASE-TX, 100BASE-FX
• Enclosure	IP-31 Grade Aluminum Metal Case
• Installation Method	DIN Rail
• LED Indicators	POWER, RJ45 Port Link/Activity, Fiber Port Link/Activity
• Dimensions	4.0" x 1.2" x 2.8"
• Product Weight	0.36 lb

ELECTRICAL SPECIFICATIONS

• Device	
DC Input Voltage	18-32 VDC
AC Input Voltage	18-27 VAC, 47-63Hz
Current Consumption	
+24VDC	145 mA
Power Consumption (max)	3.5W
Power Connector Type	(1) 2-Pin Screw Terminal Block
Reverse Polarity Protection	Protection against power input reversal

ENVIRONMENTAL SPECIFICATIONS

• Air temperature	
System On	-10 to 70° C
System Off	-40 to 80° C
• Operating Humidity (non-condensing)	
	0% to 95%
• Heat Output	11.9 BTU/Hr
• Mean Time Between Failures	57.9 years

ETHERNET SPECIFICATIONS

• Connector Type	(1) RJ45
• Ethernet Cable Type	CAT-3, CAT-4, CAT-5 (UTP or STP)
• Standard	10/100BASE-TX Auto MDI/MDI-X, Auto negotiation
• Link Distance	100 Meters
• Forwarding Modes	
Pure Converter Mode	Directly transfers Ethernet packets without frame- checking
Switch Transfer Mode	
Forwards Ethernet packets after received completely and after frame-checking. 64 to 1522 Bytes supported	
• Link Loss Forward	
Link loss forward capable for fault detection	

OPTICAL FIBER SPECIFICATIONS

• Fiber Mode	Single-mode or Multi-mode
• Connector Type	(1) Duplex SC
• Standard	IEEE802.3 100BASE-FX
• Fiber Cable Type	
Single-mode	8/125um, 9/125um, or 10/125um
Multi-mode	50/125um, 62.5/125um
• Link Distance (Max)	
Single-mode	30KM
Multi-mode	2KM

• Wavelength	1310nm
• Transmit Power (Min)	
Single-mode	-15 dBm
Multi-mode	-20 dBm
• Transmit Power (Max)	
Single-mode	-8 dBm
Multi-mode	-14 dBm
• Receive Sensitivity (Min)	0 dBm
• Receive Sensitivity (Max)	
Single-mode	-34 dBm
Multi-mode	-31 dBm
• Link Budget	
Single-mode	19 dBm
Multi-mode	11 dBm
• Supported Communication	100Base-FX Full- Duplex or Half-Duplex

REGULATORY APPROVALS

• Emissions	
European Standard EN55022	
CISPR 22	
FCC Part 15 Subpart B	
Class A limit	
• Immunity	
European Standard EN55024:	
IEC 1000-4-2/EN61000-4-2: ESD	
IEC 1000-4-3/EN61000-4-3: RF	
IEC 1000-4-4/EN61000-4-4: Fast Transient	
IEC 1000-4-5/EN61000-4-5: Surge	
IEC 1000-4-6/EN61000-4-6: Conducted Disturbance	
IEC 1000-4-8/EN61000-4-8: Magnetic field	
IEC 1000-4-11/EN61000-4-11: Dips and Voltage Variations	
• Other	
European Standard: 2002/95/EC Directive (RoHS)	
• Regulatory Approvals	
CE Mark, FCC, RoHS Compliant	

EXPORT INFORMATION

• Packaged Shipping Weight	0.60 lb
• Package Dimensions	6.00" x 2.50" x 5.00"
• UPC Code	
Single-mode	7-56727-32020-3
Multi-mode	7-56727-32021-0
• Country of Origin	Taiwan
• ECCN	5A991
• Schedule B Number	8517.62.0050

APPLICATIONS

- Traffic and Transportation
- Industrial Automation
- Building Automation
- Power Generation
- Material Handling
- Military

ORDERING INFORMATION

32020-3 RocketLinx MC7001 Single-Mode
32021-0 RocketLinx MC7001 Multi-Mode

RECOMMENDED ACCESSORIES

32100-2 Power Supply PS1020 Universal
(24V, 24W, Din Rail)
32101-9 Power Supply PS1060 Universal
(24V, 60W, Din Rail)
32102-6 Power Supply PS1100 Universal
(24V, 100W, Din Rail)

PRODUCT SUPPORT & SERVICE INFORMATION

Warranty Information
Comtrol offers a 30-day satisfaction
guarantee and 5-year limited warranty.

Sales Support
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