

ROCKET LINX MC7001

Industrial Ethernet to Fiber Media Converter

KEY FEATURES AND BENEFITS

- One 10/100Base-TX port to One 100Base-FX port Ethernet to fiber 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 extended operating temperature



Part Numbers
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° to 70°C, 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 or 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	



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
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

Control offers a 30-day satisfaction guarantee and 5-year limited warranty.

Sales Support

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Technical Support

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