

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	851762.0050

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)