

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

Package 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