

FMCI Series Ethernet Optical Fiber Media Converters

10/100 MBPS ETHERNET TO OPTICAL MEDIA CONVERTER

Product Features

- 10/100 Mbps Ethernet
 - 10Base-T/100Base-TX Electrical Port
 - 100Base-FX Optical Port
- Electrical Port Supports Autonegotiation for 10 Mbps or 100 Mbps, Full-Duplex or Half-Duplex Data
- Optical Port Supports 100 Mbps Full-Duplex Data
- Automatic MDI/MDI-X (medium dependent interface/medium dependent interface crossover) Operation
- Multimode Fiber Support for Distances up to 3 km (2 mi)
- Single-Mode Fiber Support for Distances up to 20 km (12 mi)
- Transparent to Data Encoding/Compatible with Major Data Protocols
- Designed to Meet NEMA TS 1/TS 2, and Caltrans Traffic Signal Control Equipment Environmental Standards
- ST Optical Connectors
- 1-Fiber Design
- Flexible Option for Operating AC/DC Power
- Voltage Transient Protection on All Power and Signal Input/Output Lines Provides Protection from Power Surges and Other Voltage Transient Events
- No Performance Adjustments Required
- LED Status Indicators for Monitoring All Critical and Normal Operating Parameters
- Standard Size is Hot-Swappable in the Card Cage
- Compliant with IEEE 802.3 Standards



FMCI Series Ethernet media converters are designed to transmit and receive 10/100 Mbps data over multimode or single-mode optical fiber. The electrical interface will autonegotiate to a 10 Mbps or 100 Mbps Ethernet rate without any adjustments. The optical interface operates at a 100 Mbps Ethernet rate.

Standard size **FMCI Series** units can be either surface- or rack-mounted; mini units are surface-mount only. Either type can be DIN-rail mounted by the addition of an adapter plate.

FMCI Series media converters are environmentally hardened to operate in extreme temperatures. LED indicators are provided for rapidly ascertaining equipment operating status and monitoring critical operating parameters.



by Schneider Electric



International Standards Organization Registered Firm; ISO 9001 Quality System

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TECHNICAL SPECIFICATIONS

MODELS

| Converter Type | Transmitter | Compatible Receiver | Fiber Optical Connector Type | Number of Fibers | Wavelength | Number of Rack Slots | Optical Power Budget | Maximum Transmission Distance |
|---------------------------------|--------------------------------|---------------------|------------------------------|------------------|--------------|----------------------|----------------------|-------------------------------|
| Standard Mount DC-Only Media | Multimode (62.5/125 μm) | | | | | | | |
| | FMCI-AF1MM1ST | FMCI-BF1MM1ST | ST | 1 | 1310/1550 nm | 1 | 10 dB | 3 km (2 mi) |
| | FMCI-AF1SM1ST | FMCI-BF1SM1ST | ST | 1 | 1310/1550 nm | 1 | 15 dB | 20 km (12 mi) |
| Mini AC/DC Media | Multimode (62.5/125 μm) | | | | | | | |
| | FMCI-AF1MM1STM | FMCI-BF1MM1STM | ST | 1 | 1310/1550 nm | NA | 10 dB | 3 km (2 mi) |
| | Single Mode (9/125 μm) | | | | | | | |
| | FMCI-AF1SM1STM | FMCI-BF1SM1STM | ST | 1 | 1310/1550 nm | NA | 15 dB | 20 km (12 mi) |

ELECTRICAL

| | |
|--------------------|--|
| Power Input | |
| Standard Size | 8 to 24 VDC |
| Mini AC/DC | 22 to 27 VAC or 8 to 24 VDC |
| Current Protection | Automatic resettable (solid state current limiter) |
| MTBF | >100,000 hours |
| LED Indicators | Optical Link, Data; Electrical Link, Data; Power |

DATA

| | |
|--------------------|--|
| Number of Channels | 1 |
| Data Interface | Ethernet |
| Data Rate | 10/100 Mbps |
| Operating Mode | Electrical port, full duplex or half duplex Optical port, full duplex |

MECHANICAL

| | |
|----------------------|----------------|
| Connectors | |
| Optical | ST, 1 fiber |
| Power | Terminal block |
| TCP/IP | Port RJ-45 |
| Number of Rack Slots | 1 |

GENERAL

| | |
|-----------------------|--|
| Dimensions | |
| Standard | 15.5 × 13.5 × 2.8 cm (6.1" D × 5.3" W × 1.1" H) |
| Mini | 8.4 × 6.4 × 2.8 cm (3.3" D × 2.5" W × 1.1" H) |
| Operating Temperature | -40° to 75°C (-40° to 167°F) |
| Storage Temperature | -40° to 85°C (-40° to 185°F) |
| Relative Humidity | 0 to 95%, noncondensing |
| Weight | |
| Unit | 0.45 kg (1.00 lb) |
| Shipping | 0.90 kg (2.00 lb) |

CERTIFICATIONS/RATINGS*

- CE, Class A
- FCC, Class A
- UL/cUL Listed
- C-Tick
- RoHS
- IEEE 802.3
- Designed to meet NEMA TS 1/TS 2 and Caltrans traffic signal control equipment environmental standards

*At the time of this printing, certifications are pending. Please consult the factory, our Web site (www.pelco.com), or the most recent B.O.S.S.® update for the current status of certifications.

RECOMMENDED ACCESSORIES

| | |
|--------|---|
| EURACK | Rack-mount chassis for up to 14 fiber optic modules, internal power supply, European power cord |
| USRACK | Rack-mount chassis for up to 14 fiber optic modules, internal power supply, North American power cord |
| FEXTPS | Fiber external power supply with multiple plug adaptors (North American, Australian, United Kingdom, and European); 100 to 240 VAC, 50 to 60 Hz input, 9 VDC output |

Pelco by Schneider Electric

3500 Pelco Way, Clovis, California 93612-5699 United States

USA & Canada Tel (800) 289-9100 Fax (800) 289-9150

International Tel +1 (559) 292-1981 Fax +1 (559) 348-1120

www.pelco.com www.pelco.com/community

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