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HARDENED



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The ComNet™ FDX50M2 data transceivers provide point-to-point transmission of simplex or duplex EIA RS232/RS422 data signals over two multimode optical fibers. The transceivers are transparent to data encoding allowing for broad-range compatibility. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. Each transceiver incorporates a bi-color (Red/Green) indicating LED for monitoring proper system operation. The FDX50 has a small footprint and is designed for surface mounting.

FEATURES

- › Meets EIA RS232/422 specifications
- › Distances up to 6 km (3.7 miles)
- › Transparent to data encoding/compatible with major data protocols
- › Point-to-Point topology
- › Data rates up to 115 Kbps (NRZ)
- › Designed to meet full compliance with the environmental requirements (ambient operating temperature, mechanical shock, vibration, humidity with condensation, high-line/low-line voltage conditions and transient voltage protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
- › Voltage transient protection on all power and signal input/output lines provides protection from power surges and other voltage transient events.

- › Bi-Color (Red/Green) Transmit and Receive LEDs
- › NTCIP compatible
- › Automatic resettable solid-state current limiters
- › Compact size module for surface mounting
- › Lifetime Warranty

APPLICATIONS

- › Access Control Systems
- › Building Automation and Environmental Control Systems
- › Computer/Data Equipment
- › Fire and Alarm Systems
- › Traffic Signal Control Equipment

SPECIFICATIONS

Data

Data Format	RS232 (data lines only), RS422, Manchester, bi-phase
Data Rate	DC-115 kbps (NRZ)
Operating Mode	Asynchronous, simplex or full duplex
Bit Error Rate	<1 in 10 ⁶

Wavelength 1310 nm, Multimode

Number Of Fibers 2

Indicating LEDs
- Transmit Data
- Receive Data

Connectors

Optical	ST
Power	Terminal Block
Data	Terminal Block

Power

Operating Range	8 to 15 VDC
Power Consumption	2 W

Electrical & Mechanical

Current Protection	Automatic Resettable Solid-State Current Limiters
Circuit Board	Meets IPC Standard
Size	4.1 × 3.7 × 1.1 in (10.4 × 9.4 × 2.8 cm)
Shipping Weight	<2 lbs./0.9 kg

Environmental

MTBF	>100,000 hours
Operating Temp	-40° C to +75° C
Storage Temp	-40° C to +85° C
Relative Humidity	0% to 95% (non-condensing) ¹



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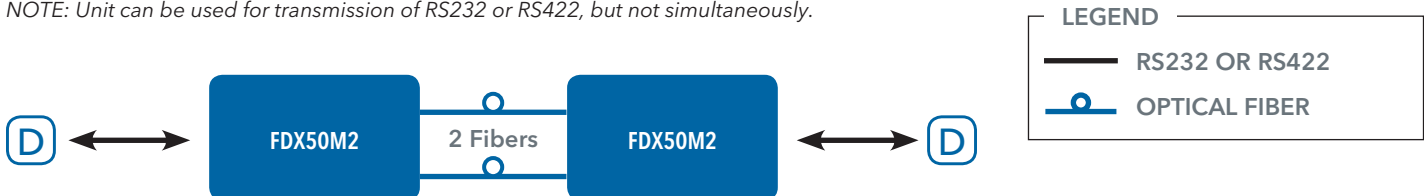
Part Number	Wavelength	Connector	Fibers Required	Fiber	Optical Power Budget	Max. Distance ³
2 × FDX50M2	Mini Video Transceiver	ST	2	Multimode ² 62.5/125µm	16 dB	6 km (3.7 miles)
Accessories	2 × DC Plug in Power Supply, 90-264VAC, 50/60Hz (Included)					
Options	[1] Add suffix 'IC' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory)					

[2] For 50/125µm fiber, subtract 4 dB from the optical power budget.
[3] Distance may be limited by optical dispersion.

This product requires a fiber installation with a minimum 30dB connector return loss. The use of Super Polish Connectors is recommended. Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J. In a continuing effort to improve and advance technology, product specifications are subject to change without notice.

TYPICAL APPLICATION

NOTE: Unit can be used for transmission of RS232 or RS422, but not simultaneously.



Low Power Consumption