FOSTCDRI

Industrial Serial to Multimode Fiber Converter

- Data Rates up to 115.2 kbps
- 10 48 VDC Input Power Range
- **Wide Operating Temperature**
- 3-Way 2000V Optical Isolation
- **MODBUS ASCII/RTU Compatible**
- **EMI / RFI Protection**
- **UL Class 1 DIV 2**
- **Built-in, Switchable Termination & Bias**

The FOSTCDRI is our premium Industrial Serial to Multimode Fiber Optic Converter. Designed for rugged industrial environments, it is UL approved and certified for use in Class 1 Division 2 environments. In addition to direct point-to-point connectivity, it is capable of operating in a multi-drop mode. This allows one serial device to communicate with up to 31 others around a fiber ring. Since it supports mixed standards, you can replace other converters and isolators and add the EMI / RFI protection inherent to fiber optic communications.

In RS-232 mode, the converter supports transmit and receive data. Handshaking signals are not passed through. An Automatic Send Data Control circuit controls the RS-422/485 driver chip, eliminating the requirement for external software.

Easy to install and configure, it has a 12 position DIP Switch on the bottom to configure RS-422/485 parameters. The serial data and power cables connect to removable terminal blocks. ST connectors are used for the fiber.

Remember, when it comes to reliable communications in harsh duty industrial environments, B&B Electronics ILinx™ brand is your number one choice.





Specifications	
Serial Technology	
RS-232 RS-485 2-Wire RS-422/485 4-Wire Serial Connector Data Rate Isolation Surge Protection Industrial Bus Bias	TD, RD, GND Data A(-), Data B(+), GND TDA(-), TDB(+), RDA(-), RDB(+), GND 5 Position, Removable Terminal Block 9.6 to 115.2 kbps 2KV RMS, 1 minute 600 W Peak Power Dissipation Clamping time < 1 pico-second MODBUS ASCII/RTU Built-in, Switchable, 1.2KΩ
Termination	Built-in, Switchable, 120Ω
Fiber Optic Technology	
Type / Wavelength Output Power Receive Sensitivity Cable Connector Data Rate Maximum Distance Idle State	Multimode / 820 nm -16dBm min, -12dBm typical, -9dBm max -24dBm min, -25.4dBm max 62.5/125 micro-meter ST 9.6 TO 115.2 kbps 2.5 miles (4 km) Transmitter Light ON
Power	
Source Power Connector Input Voltage Power Consumption	External 2 Position, Removable Terminal Block 10 to 48 VDC (56 VDC max) 0.5 W (Typical), 1.3W (With Termination)
Terminal Blocks	
Wire Size Accepted Pitch Insulation Resistance Maximum Torque	28 to 12 AWG 5.08 mm ≥ 500 MΩ @ 500 VDC 5 Kg / cm
Indicators	

Power Red LED

FO Receive Red I FD FO Transmit Red LED Mechanical **Dimensions** 4.9 x 4.5 x 1.3 in (12.3 x 11.3 x 3.2 cm)

Enclosure IP 20 Plastic, 35 mm DIN Mount Weight 0.44 lbs (199.6 g) 138904 hours **MTBF** MTBF Calc. Method Parts Count Reliability Prediction

Environmental Op Temperature - 40 to 80°C (-40 to 176°F) Storage Temp - 40 to 85°C (-40 to 185°F) Op Humidity 0 to 95% Non-condensing

Approvals FCC, CE, UL Class 1 DIV 2 Groups A, B, C, D **UL File Number** E222870 (HAZLOC E245458)

Ordering Information

Regulatory

Serial to Multimode fiber optic converter **FOSTCDRI**

Required but not included

MDR-20-24 or PS5R-SC24 (C1 D2) Power Supply





