$\checkmark$ Data Rates up to 115.2 kbps
$\checkmark \quad 10$ - 48 VDC Input Power Range
$\checkmark$ Wide Operating Temperature
$\checkmark$ 3-Way 2000V Optical Isolation
$\checkmark$ MODBUS ASCII/RTU Compatible
$\checkmark$ EMI / RFI Protection
$\checkmark$ UL Class 1 DIV 2
$\checkmark$ 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, $\mathrm{B} \& \mathrm{~B}$ Electronics ILinx ${ }^{\text {TM }}$ brand is your number one choice.

FOSTCDRI
Industrial Serial to Multimode Fiber Converter


## Specifications

Serial Technology

|  | Serial Technology |
| :---: | :---: |
| RS-232 | TD, RD, GND |
| RS-485 2-Wire | Data A(-), Data B(+), GND |
| RS-422/485 4-Wire | TDA(-), TDB(+), RDA(-), RDB(+), GND |
| Serial Connector | 5 Position, Removable Terminal Block |
| Data Rate | 9.6 to 115.2 kbps |
| Isolation | 2KV RMS, 1 minute |
| Surge Protection | 600 W Peak Power Dissipation |
|  | Clamping time < 1 pico-second |
| Industrial Bus | MODBUS ASCII/RTU |
| Bias | Built-in, Switchable, 1.2K |
| Termination | Built-in, Switchable, $120 \Omega$ |
| Fiber Optic Technology |  |
| Type / Wavelength | Multimode / 820 nm |
| Output Power | -16dBm min, -12dBm typical, -9dBm max |
| Receive Sensitivity | -24dBm min, -25.4dBm max |
| Cable | 62.5/125 micro-meter |
| Connector | ST |
| Data Rate | 9.6 TO 115.2 kbps |
| Maximum Distance | 2.5 miles ( 4 km ) |
| Idle State | Transmitter Light ON |
| Power |  |
| Source | External |
| Power Connector | 2 Position, Removable Terminal Block |
| Input Voltage | 10 to 48 VDC (56 VDC max) |
| Power Consumption | 0.5 W (Typical), 1.3W (With Termination) |
| Terminal Blocks |  |
| Wire Size Accepted | 28 to 12 AWG |
| Pitch | 5.08 mm |
| Insulation Resistance | $\geq 500 \mathrm{M} \Omega$ @ 500 VDC |
| Maximum Torque | $5 \mathrm{Kg} / \mathrm{cm}$ |
| Indicators |  |
| Power | Red LED |
| FO Receive | Red LED |
| FO Transmit | Red LED |
| Mechanical |  |
| Dimensions | $4.9 \times 4.5 \times 1.3$ in ( $12.3 \times 11.3 \times 3.2 \mathrm{~cm}$ ) |
| Enclosure | IP 20 Plastic, 35 mm DIN Mount |
| Weight | 0.44 lbs (199.6 g) |
| MTBF | 138904 hours |
| MTBF Calc. Method | Parts Count Reliability Prediction |
| Environmental |  |
| Op Temperature | - 40 to $80^{\circ} \mathrm{C}$ (-40 to $176^{\circ} \mathrm{F}$ ) |
| Storage Temp | - 40 to $85^{\circ} \mathrm{C}$ ( -40 to $185^{\circ} \mathrm{F}$ ) |
| Op Humidity | 0 to 95\% Non-condensing |
| Regulatory |  |
| Approvals | FCC, CE, |
| UL File Number | E222870 (HAZLOC E245458) |
| Ordering Information |  |
| FOSTCDRI Serial to Multimode fiber optic converter |  |
| Required but not included |  |
| Power Supply MD | R-20-24 or PS5R-SC24 (C1 D2) |



B B elpetruniss

