

E-SER-2FOSMST/SC

Industrial RS-232/RS-485/RS-422 To Fiber Optic Single-Mode Converter



General Features:

- Point to Point Fiber 20KM SM Configuration
- Plug-and-Play (hot-pluggable)
- Externally Powered
- Fiber optic range of up to 12.4 miles (20 KM)
- RS-232/RS-485/RS-422 can be mixed or matched
- Data direction auto-turnaround- no flow control necessary
- Built-in surge and static protection
- CE,FCC, RoHS and REACH certified

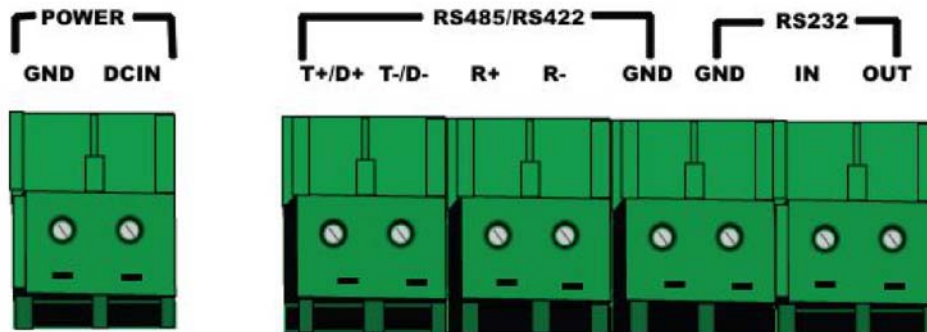
Description

The E-SER-2FOSMST/SC is a industrial grade bi-directional externally powered multi-functional RS-232/RS-485/RS-422 to Single Mode Fiber Optic Converter which converts either full-duplex RS-232, half-duplex RS-485 or full-duplex RS-422 to a Single Mode ST or SC connector type fiber optic link. A data direction auto-turnaround feature automatically enables the serial transmit and receive data signals when data is present, avoiding the need for software drivers, and making the device fully plug-and-play. The E-SER-2FOSMST has a 8-position terminal block for the serial port, and an ST type connector for the fiber optic link. (The E-SER-2FOSMSC is the same but with an SC type connector.) The unit extends the maximum distance of any RS-232/RS-485/RS-422 signal up to 12.4 miles (20 KM) using SM fiber optic cable. The unit is enclosed in a rugged steel housing. An external power supply is included.

Flexible Serial Conversion

This serial converter is versatile. Not only can you extend RS-232, RS-485 or RS-422 data but convert from one serial protocol to another. For instance, on one end of the fiber optic you can connect RS-232 and the other RS-485 or RS-485 to RS-422 or any other combination.

Connectors



Applications

RS232-FIBER-SM

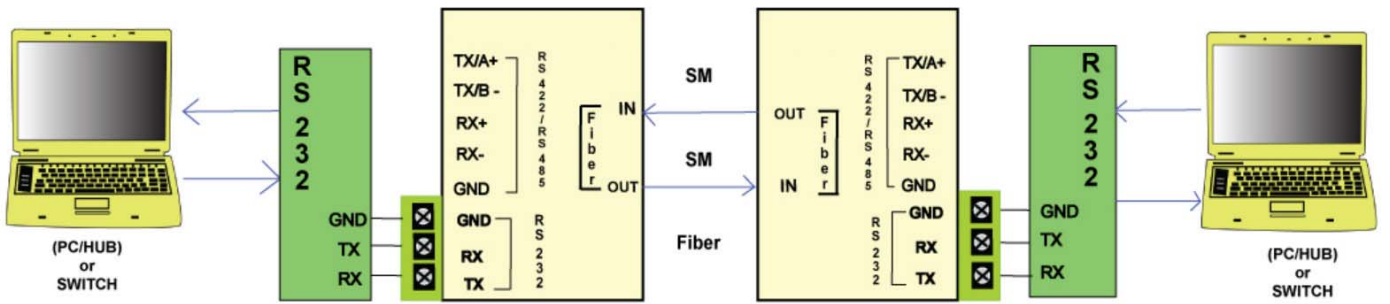


FIGURE 1: EXTENDING RS-232 DATA DISTANCE

RS485-FIBER-SM

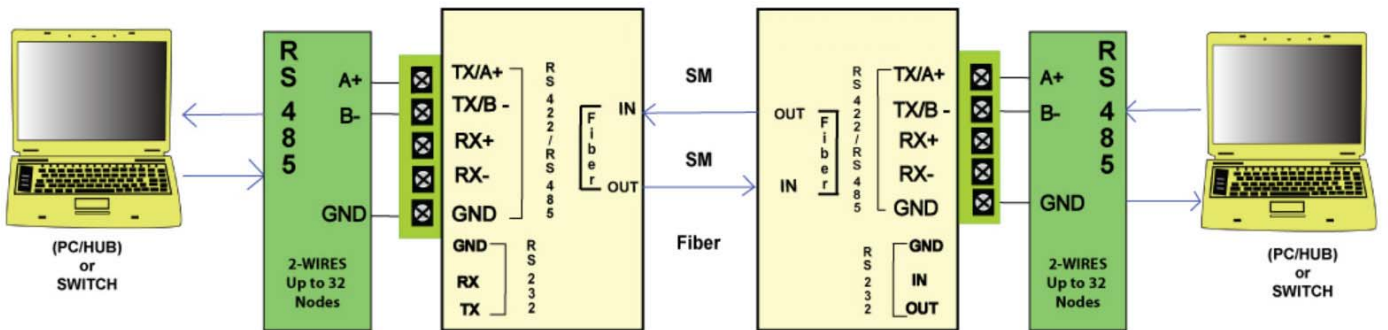


FIGURE 2: EXTENDING RS-485 DATA DISTANCE

RS422-FIBER-SM

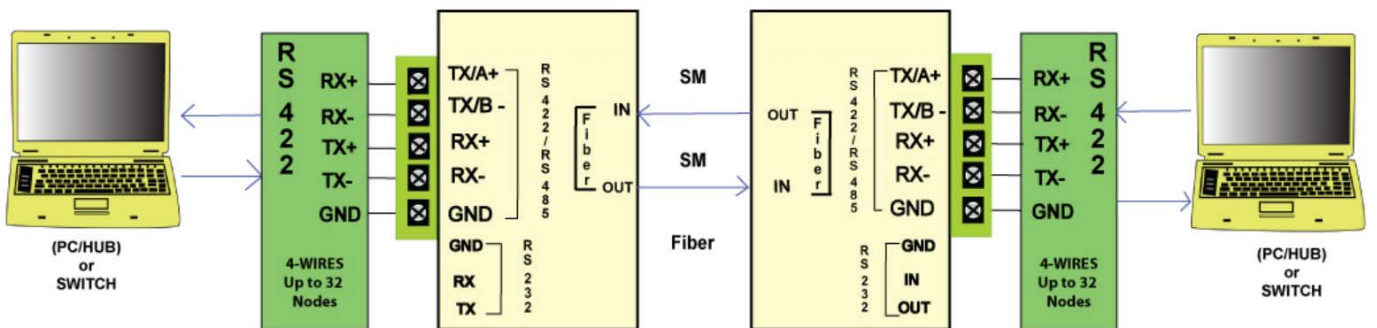


FIGURE 3: EXTENDING RS-422 DATA DISTANCE

Specifications

COMMUNICATION	
STANDARDS:	EIA/TIA RS-232C, RS-485 and RS-422 Standards
BAUD RATES:	From 300 bps to 460,000 bps
CONNECTOR TYPES:	DC Input: 2-way Terminal Block, Serial Side: 8 Position Terminal Block and Fiber Side: 2 X SC or ST Connectors
DISTANCE:	RS-232 Side: 16ft (5m), RS-485/RS-422 Side: 4000 ft (1.2KM) and Single Mode Side: 12.4 miles (20KM)
ELECTRICAL	
POWER SOURCE:	9VDC to 36VDC
POWER ADAPTERS:	Included 2 X 12VDC,500 mA / 5VDC,3A (100 - 240VAC 50/60hz US Type A Plugs)
POWER CONSUMPTION:	4 Watts
STATIC PROTECTION:	15KV Electric Static Discharge (ESD) Protection
SURGE PROTECTION:	600W Surge Protection
FIBER OPTIC	
FIBER OPTIC OPERATION:	Point to Point Fiber 20KM Single Mode Configuration
FIBER OPTIC CABLING:	8.3/12 μ m, 8.7/125 μ m, 9/125 μ m or 10/125 μ m SM Cable
WAVELENGTH:	1310 nm
OUTPUT LEVEL (MIN):	-14 dBm
OUTPUT LEVEL(MAX):	-7 dBm
FIBER SENSITIVITY:	-34 dBm
MECHANICAL	
HOUSING:	Heavy Duty Steel Housing
WEIGHT:	8.73oz (245.3 grams)
DIMENSIONS:	4.65" X 3.58" X 0.87" (118.0 mm X 91.0 mm X 22.0 mm)
ENVIRONMENTAL	
OPERATING TEMP:	-40° F to 185° F (-40°C to 85° C)
STORAGE TEMP:	-40° F to 185° F (-40°C to 85° C)
OPERATING HUMIDITY:	5% To 95% - No Condensation
QUALITY	
PRODUCT SAFETY:	CE, FCC, RoHS, REACH Third-party Certified
RELIABILITY:	Low Failure Rate – 99+% Reliability Since Inception
WARRANTY:	2 Year Replacement Warranty

Sensors Compatible with E-SER-2FOSMST/SC

MODEL
E-ST5
E-STHSB
E-STHS-LCDW
E-STHSM-E7
E-STSM-E7
E-ST5-PRC
E-STSP-x
E-STSP-SL7
E-ST5-O
E-DI16DO16
E-DI16DOR16

MODEL
E-S60VDC
E-ACDCLM
E-DCLM-6
E-AV-LC-7
E-ACLM-P18
E-ACLM-P12
E-ACLM-P8
E-ACLM-V
E-ACLM-3P480

MODEL	ADAPTER REQUIRED
E-CO2	E-S5VDC
E-AVK	E-S5VDC
E-STHS-WLM	E-S420MA-24V
E-ULT	E-S420MA-24V
E-BPT	E-S420MA-24V

WIRING DIAGRAM FOR INSTALLATION OF E-SER-2FOSMST/SC

