Very High Speed Ruggedized ST Fiber-to-RS422 Interface Converter

The **Model 4045** is a high speed ruggedized **ST Fiber to RS422** interface converter. Typical operating speeds are up to 12.6 Mbps for RS422 to fiber conversion. When operating in RS422 mode, the converter is configured for 4-wire full duplex operation.

Applications: The converter provides an industrial solution for applications requiring a single point-to-point or a communications link over short and long distances. Applications include: PC to PC long distance communications, factory automation, data collection devices, barcode readers, time clocks, scales, data entry terminals, ATM's and serial communications.

The converter is powered from a +28V power source via the DB9 connector from a customer supplied power supply. Other features TX, RX and Power indicator LEDs.

Model 4045
Glass Fiber/Copper Converter

Glass Fiber, ST MultiMode

Copper, DB9 (F) RS422

FEATURES:
- Model 4045 converts ST Duplex Fiber to Copper RS422 DB9 (F) port.
- Supports constructing an optically isolated high speed communication link between connected devices.
- Typical operating speeds are up to 12.6 Mbps for RS422 to fiber conversion.
- Provides full galvanic isolation (no metallic connection) between connected devices.
- LED Status indicators display Fiber RX, TX activity and power indication.

SPECIFICATIONS:

Fiber Interface:
Connectors: Fiber Optic ST Female, Multimode
TX Power: -14 dBm with 62.5/125µm Fiber
RX Sensitivity: -24 dBm with 62.5/125µm Fiber
Optical Budget: 10 dB
Max. Link Distance with 62.5/125 µm fiber:
    2 kM at up to 12.6 Mbps
Wavelength: 850 nm, multimode
Fiber Size: 50/125 µm, 62.5/125 µm, 100/140 µm

Copper Interface:
Connectors: DB9, Female
Type: RS422 (4-wire)

Bit Rate (nom.):
RS422   0 to 12.6 Mbps

Network Configurations:
RS422   Point-to-Point

Indicators LED's:
(1) Red: Fiber RCV (RX Data)
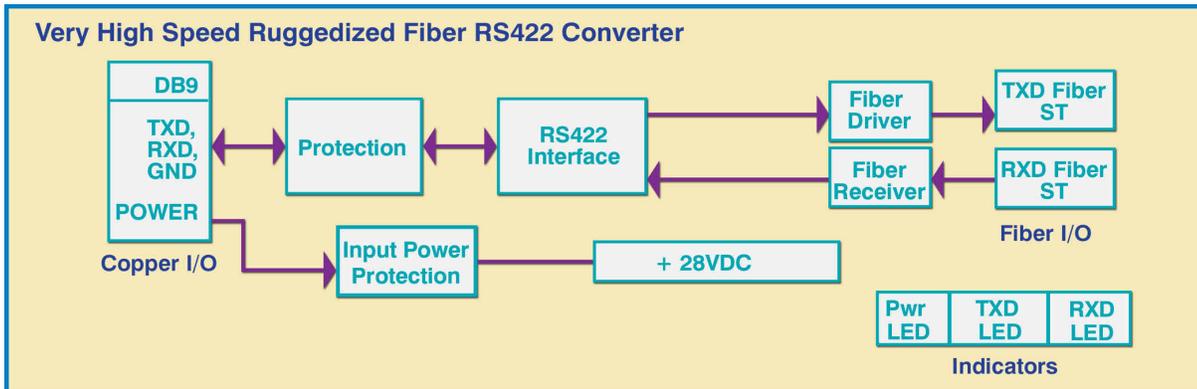(1) Yellow: Fiber XMT (TX Data)
(1) Green: Power Indicator

Power:
Input Power: (8-32 VDC) +28VDC (Nominal)
Connectors: DB9F, Pin 1 (+28V), Pin 5 (GND)
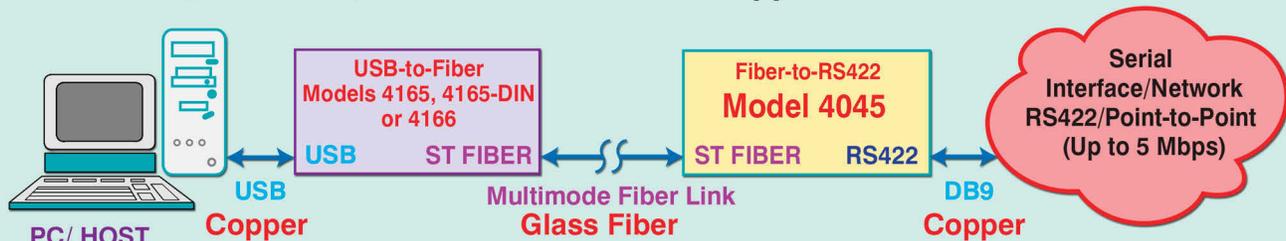Customer Supplied power to unit via DB9(F) connector.

Model 4045 Mechanical (Desktop Unit):
Model 4045, Cat No: 304045
Size: 3.14" x 1.77" x 1.08" [8.0 cm x 4.5 cm x 2.8 cm]
Weight: 0.2 lb (74g)

Electro Standards Laboratories
ADVANCED SYSTEMS DESIGN & SERVICES

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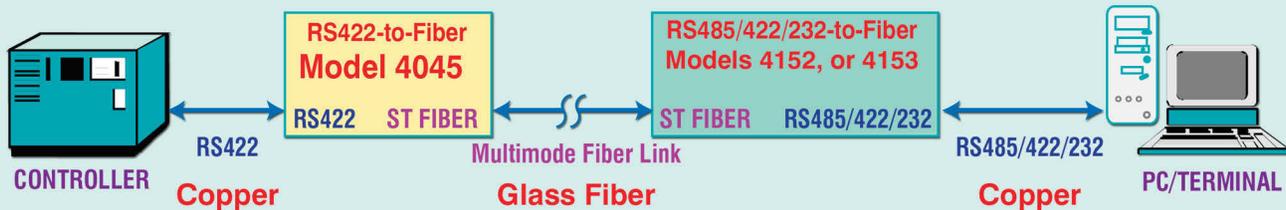## Very High Speed Ruggedized Fiber RS422 Converter

Models 4165, 4165-DIN, or 4166 to Model 4045 Application

Isolated PC/HOST USB to RS422 communications serial interface/network.

Model 4045 to Models 4152, 4153 Application

Point-to-Point Isolated RS422 Communications.

MODEL 4045 APPLICATION: RS422 to Multimode Fiber to (POF) Fiber