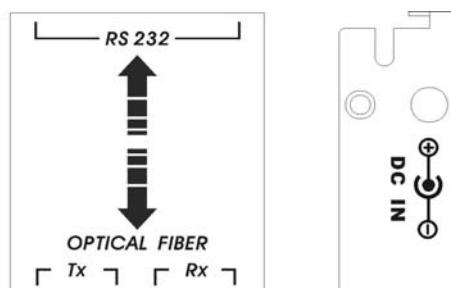# *FIB-232Ip/ST*

User Guide

The **FIB-232Ip/ST** is a low cost, compact, fiber converter designed to extend RS-232 transmissions up to 2Km without any repeaters. The transmissions run in fibers which provide for excellent data security as well as being immune to EMI/RFI, variations in ground potentials, and lightning strikes.

The **FIB-232Ip/ST** operates at the physical layer (OSI Layer 1) and is completely transparent to the RS-232 transmissions and protocols. The **FIB-232Ip/ST** may operate off the RS-232 interface power, or may use an external power adapter. Utilizing an ST fiber cable, the **FIB-232Ip/ST** operates in Full Duplex mode for bi-directional transmissions.
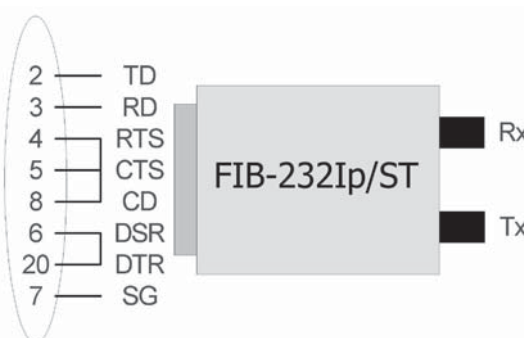
Specifications

Signal Format	EIA RS-232C, ITU V.24, V.28
Mode	Asynchronous
Connector	DB25 Female
Fiber Port	ST
Fiber Type	Multi-Mode
Light Source	VCSEL
Wavelength	850nm
Power Budget	10dB @ 62.5/125mm
Distance	2Km
Speed	DC ~ 115.2Kbps
BER	10^{-9}
Power Adapter	110 or 220 VAC to 9 VDC, 300mA

Physical

Dimensions:	75(l) * 53(w) * 21(d)mm
Weight:	85g

Environment

Operation:	$0 \sim 50^{\circ}C$, $20 \sim 95\%$ RH
Storage:	$-20 \sim 80^{\circ}C$, $< 95\%$ RH

The **FIB-232Ip/ST** RS-232 interface operates in DCE mode for direct connection to DTE devices such as the PC COM ports. The handshaking lines, RTS, CTS and CD are all internally connected. DRS and DTR are also internally connected. When utilizing interface power, the **FIB-232Ip/ST** will operate at full 115.2Kbps speed even with only RD, TD and SG connected (3-wire). Some operating environmnets may not support operation with interface power alone. In these cases, the option to use external 9VDC power is provided.