Model: ECD232fos

RS-232 to Fiber Optics Converter (Single Mode)

The **ECD232fos** safely and easily connects your panel mounted RS-232 devices to fiber optic cables up to 11 km long, providing the ultimate in isolation, surge, and noise protection. Even the RS-232 port is galvanically isolated from the DC supply ground. ST connector, plus the quality Hewlett Packard components used are guaranteed to work with 9/125 µm fiber sizes.
Isolation, industrial design, small size, DIN rail mount, user indication, and wide range DC supply make the **ECD232fos** a very engineer-friendly device for your industrial data communication system.

Specification

RS-232

Signal Type	: EIA/RS-232 C to F
Voltage Level	: +/- 9 Vdc
Permitted Surge	: +/- 25 Vdc

Fiber Optic

Connector	: ST (bayonet)
Fiber Size	: 9/125 µm
Insertion Loss	: 0.2dB typically
Technology	: 1310 nm wavelength, ELED
Power	: typically -17dBm into 9/125 µm fiber

Power Supply

9 to 36Vdc	: 0.75w normal operation (1.5w test mode)
5Vdc +/- 5%	: 50mA normal operation (125mA test mode)
User Indications	: Green LED for each isolated supply

Isolation

RS-232 to fiber	: complete galvanic isolation
Supply to fiber	: complete galvanic isolation
Supply to RS-232	: 1-port = none; 2-port = 2.5Kv

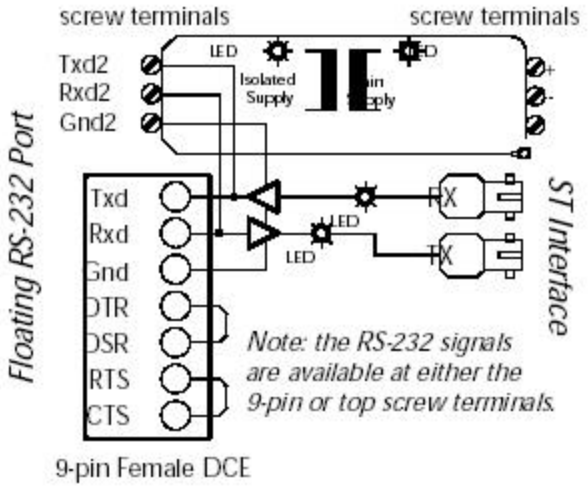
Communication

Max Speed	: at least 115Kbps at standard distances
Character Setting	: transparent, no configuration required
User Indications`	: Txd and Rxd have LED (yellow) indications
Practical Distance	: less than 50m for RS-232, 11km for fiber (requires quality, low-cap cable < 50 pf/m)

Mechanical / Environment

Operating Range	: 0C to +60C
Storage Range	: -40C to +100C
Relative Humidity	: 10 to 90% RH, non-condensing
Terminals	: wire up to 2.5mm (12 AWG)
D-shell connecter	: 9-pin, 30µ gold pins/sockets rated 500 cycles
Case Material	: nylon polymide, fungus and termite resistant self-extinguishing
Weight	: approx 130g
Mounting Rail	: DIN EN 50 022 or DIN EN 50 035

Block Diagram

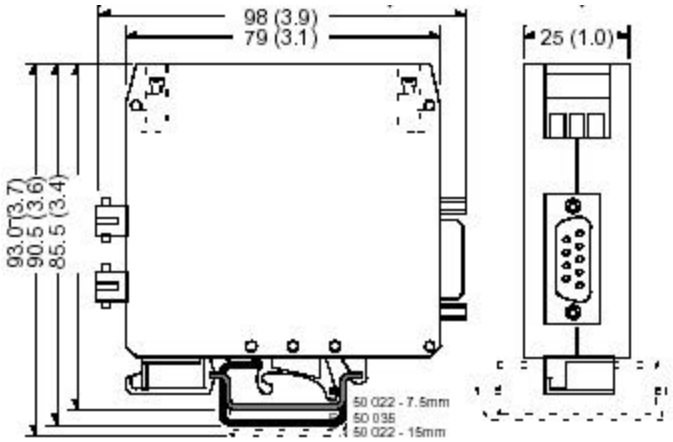


Order Information

ECD232fos				**RS-232 to Fiber Optic (single-mode) Converter**
	-5v			5v +/-5% Regulated DC Power
	-dv			8v to 56v Unregulated DC Power
		-1p		Non-isolated, RS-232 Gnd = Power Gnd
		-2p		2.5Kv isolation between RS-232 and Power
			-st	ST bayonet connector (® of AT&T)

Testing - the top screw-terminal Rxd can also be used to easily test your fiber optics link. Connecting a +5 to +15vdc signal will force the fiber transmitter on, so you can easily see the light at the remote end - even with the naked eye. For example, 9v radio battery could be used to provide this test signal.

Dimensions in mm (and inches)



Specifications subject to change without notice.