



Model: ECD232fo

RS-232 to Fiber Optics (Multi-Mode) Converter

The **ECD232fo** safely and easily connects your panel mounted RS-232 devices to fiber optic cables up to 4 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 or SMA connectors can be selected, plus the quality Hewlett Packard components used are guaranteed to work with 62.5/125, 100/140, and 50/125 μm fiber sizes.

Isolation, industrial design, small size, DIN rail mount, user indication, and wide range DC supply make the **ECD232fo** 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) or SMA (threaded)
Fiber Size : 62.5/125, 100/140, and 50/125 μm
Insertion Loss : for ST, is a repeatable 0.2dB typically
Technology : 820 nm wavelength, GaAIAs emitters
Power : typically -12dBm into 62.5/125 μm fiber

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

Power Supply

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

Communication

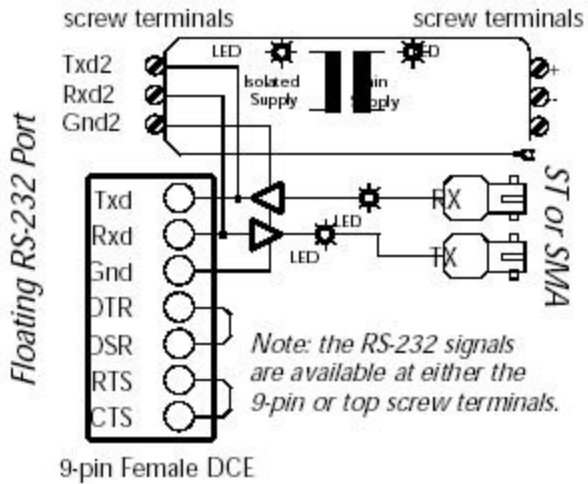
Max Speed : at least 115Kbps at standard distances
Character Setting : transparent, no configuration required
User Indications : Txd and Rxd have LED (yellow) indications
Standard Distance : 15m for EIA/RS-232; 2 Km 62.5/125 μm fiber
Practical Distance : less than 50m for RS-232, 4000m for fiber (requires quality, low-cap cable < 50 pf/m)



Mechanical / Environment

- Operating Range : -40C to +65C
- 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



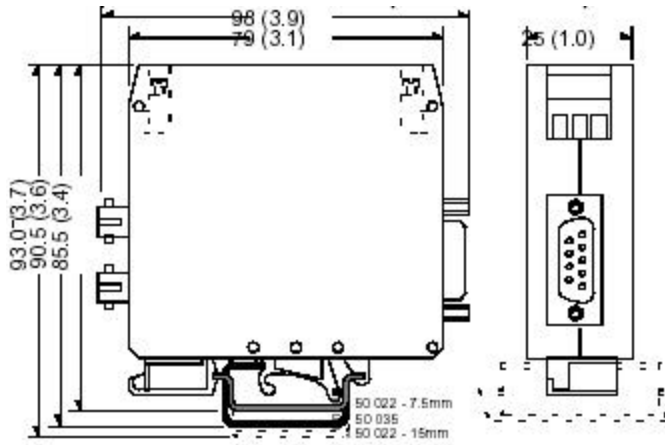
Order Information

ECD232fo		RS-232 to Fiber Optic (Multi-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)
		-sma	SMA threaded connector

Note: 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.



Dimensions in mm (and inches)



Specifications subject to change without notice