



Model: ECD485fo

RS-485/422 to Fiber Optics (Multi-mode) Converter

The ECD485fo safely and easily connects your panel mounted RS-422/485 devices to fiber optic cables up to 4 km long, providing the ultimate in isolation, surge, and noise protection. Even the RS-485 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 ECD485fo a very engineer-friendly device for your industrial data communication system.

Specification

RS-485 (compatible with EIA-422)

Signal Type : EIA/RS-422A & RS-485A
Voltage Level : -7 to +12Vdc
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

Power Supply

8v to 56Vdc : 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-485 to fiber : complete galvanic isolation
Supply to fiber : complete galvanic isolation
Supply to RS-485 : 1-port = none; 2-port = 2.5Kv

Communication

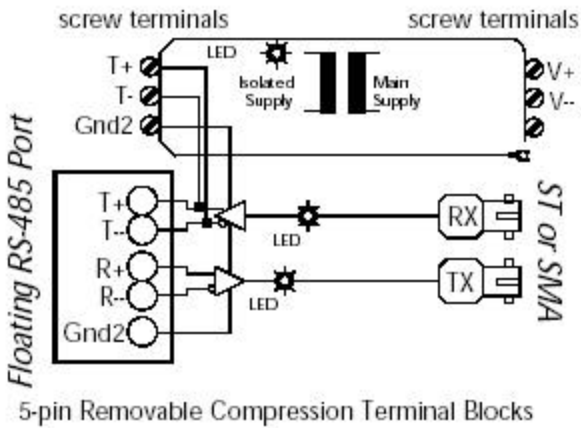
Max Speed : at least 115Kbps at standard distances
Character Setting : transparent, no configuration required
User Indications : Tx and Rx have LED (yellow) indications
Standard Distance : 1000m for EIA/RS-485; 2 Km 62.5/125 μm fiber
Practical Distance : less than 3000m for RS-485, 4000m for fiber (requires 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 connector : 9-pin, 30μ gold pins/sockets rated 500 cycles
 Case Material : nylon polyimide, fungus and termite resistant self-extinguishing
 Weight : approx 130g
 Mounting Rail : DIN EN 50 022 or DIN EN 50 035

Block Diagram

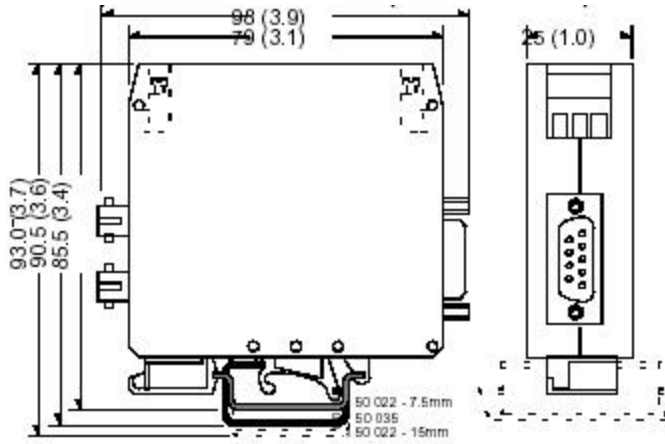


Order Information

ECD485fo			RS-485/422 to Fiber Optic (Multi-mode) Converter
	-5v		5v +/-5% Regulated DC Power
	-dv		8v to 56v Unregulated DC Power
		-1p	Non-isolated, RS-485/422 Gnd = Power Gnd
		-2p	2.5Kv isolation between RS-485/422 and Power
		-st	ST bayonet connector (@ of AT&T)
		-sma	SMA threaded connector



Dimensions in mm (and inches)



Specifications subject to change without notice.