



## Model: ECD485fos

### RS-485/422 to Fiber Optics Converter (Single Mode)

The **ECD485fos** safely and easily connects your panel mounted RS-422/485 devices to fiber optic cables up to 11 km long, providing the ultimate in isolation, surge, and noise protection. Even the RS-422/485 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  $\mu\text{m}$  fiber sizes.

Isolation, industrial design, small size, DIN rail mount, user indication, and wide range DC supply make the **ECD485fos** 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)  
Fiber Size : 9/125  $\mu\text{m}$  single mode fiber  
Insertion Loss : 0.2dB typically  
Technology : 1310 nm wavelength, ELED  
Power : typically -17dBm into 9/125  $\mu\text{m}$  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

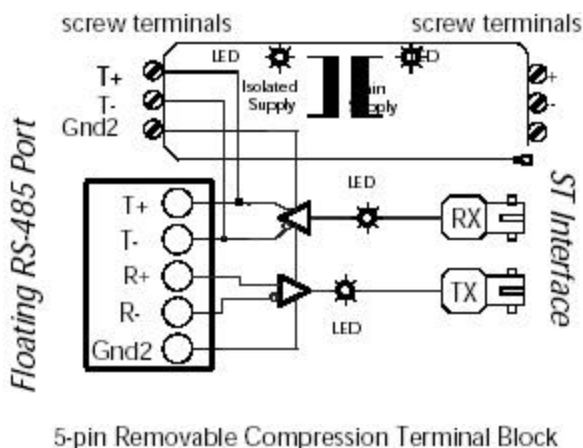
Max Speed : at least 115Kbps at standard distances  
Character Setting : transparent, no configuration required  
User Indications : Txd and Rxd have LED (yellow) indications  
Practical Distance : less than 3000m for RS-485, 11km for fiber (requires quality, low-cap cable < 50 pf/m)



**Mechanical / Environment**

Operating Range : -40C 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 connector : 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**

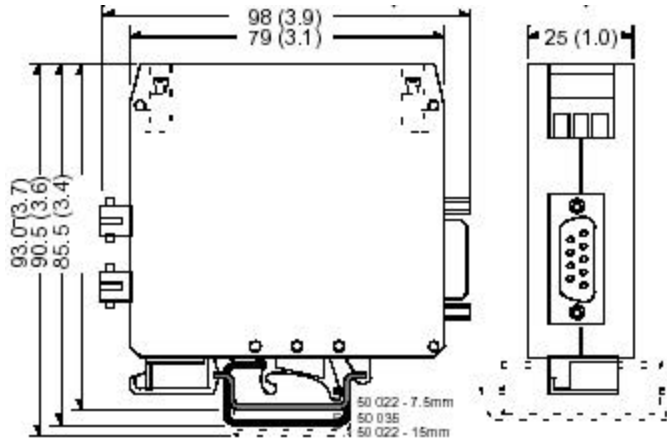


**Order Information**

<b>ECD485fos</b>			<b>RS-485/422 to Fiber Optic (single-mode) Converter</b>
	<b>-5v</b>		5v +/-5% Regulated DC Power
	<b>-dv</b>		8v to 56v Unregulated DC Power
		<b>-1p</b>	Non-isolated, RS-485/422 Gnd = Power Gnd
		<b>-2p</b>	2.5Kv isolation between RS-485/422 and Power
		<b>-st</b>	ST bayonet connector (® of AT&T)



**Dimensions in mm (and inches)**



**Specifications subject to change without notice.**