

## Model: rdc485fos

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

The rdc485fos 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 rdc485fos a very engineer-friendly device for your industrial data communication system.

## Specification

### Fiber Optic

Connector : ST (bayonet)  
 Fiber Size : 9/125  $\mu\text{m}$  single mode fiber  
 Insertion Loss : 0.2 dB typically  
 Technology : 1310 nm wavelength, ELED  
 Link Loss Budget : typically 9 dBm

### RS-485 (compatible with EIA-422)

Signal Type : EIA/RS-422A & RS-485A  
 Voltage Level : -7 to +12VDC  
 Permitted Surge : +/- 25 vDC

### Isolation

Power Supply to  
 Fiber/RS-485 : 1-port = none ; 2-port = 2.5Kv

### Power Supply

9 to 36 vDC : 50 mA (Nominal) @ 24 vDC  
 5v DC +/- 5% : 240 mA (Norminal)  
 38 to 58 vDC : 25 mA (Norminal) @ 48 vDC  
 User Indications : Green LED 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  
 Practical Distance : less than 3000m for RS-485, 13 km for fiber  
 (requires quality, low-cap cable < 50 pf/m)

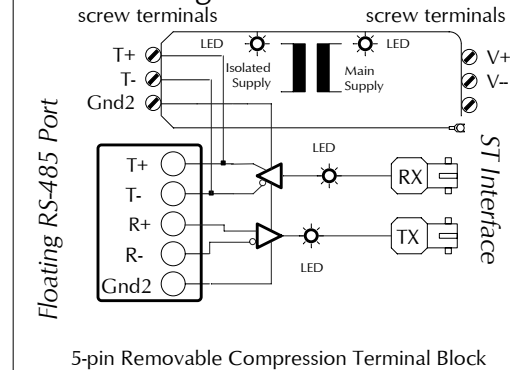
### Mechanical / Environment

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)  
 Case Material : nylon polymide, fungus and termite resistant self-extinguishing  
 Weight : approx 130g  
 Mounting Rail : DIN EN 50 022 or DIN EN 50 035

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(Version 1.0) Specifications subject to change without notice.

### Block Diagram

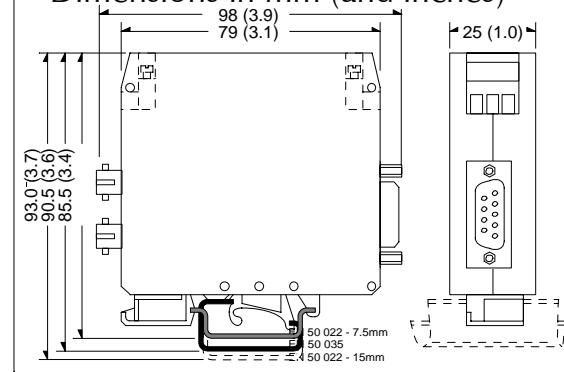


### Order Information

- rdc485fos -  -  -  -
- c** Galvanic Isolation Configuration
  - 5-way Screw Connector
  - 9 Pin D-shell Connector
  - st** Connector Configuration
  - ST bayonet connector (® of AT&T)
  - 2p** Galvanic Isolation Configuration
  - 2.5Kv isolation between RS-485 & supply
  - 1p** non-isolated, RS-485 SGnd = supply V-
  - dv** Power Supply Configuration
  - 9 to 36v Unregulated DC Supply
  - hv** 38 to 58v Unregulated DC Supply
  - 5v** 5v +/- 5% Regulated DC Supply

Boxes in bold denote factory default options

### Dimensions in mm (and inches)



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