



# Model: rdc232MFO

## RS-232 to Multimode Fiber Optics Converter

The rdc232MFO 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 can be galvanically isolated from the DC supply ground too. The fiber optic port is available with either ST, SC or FC connectors.

Industrially designed with a small footprint, DIN rail mount, user indicators, and wide DC supply range make the rdc232MFO a very engineer- friendly device for your industrial data communication system.

## Specification

### Fiber Optic

- Interface : 850 nm full duplex (Remote)
- Connectors : ST(bayonet), SC or FC (Remote)
- Fiber Size : 62.5/125, 100/140 and 50/125  $\mu$ m
- Power Budget : 15 dbm @ 65 °C on 62.5/125  $\mu$ m cable

### RS-232

- Signal Type : EIA/RS-232E
- Voltage Level : +/- 9 vDC
- Permitted Surge : +/- 25 vDC

### Isolation

- RS-232 to fiber : Intrinsically isolated
- Supply to fiber : Intrinsically isolated
- Supply to RS-232 : 1-port = none ; 2-port = 2.5Kv

### Power Supply

- 9v to 36v DC : 25 mA (Max)
- 5v DC +/- 5% : 100 mA (Max)
- User Indications : Green LED for incoming power supply

### Communication

- Max Speed : Up to 115 kbps
- Character Setting : transparent, no configuration required
- User Indications : Yellow LEDs for both directions
- Distance : 15 m for EIA/RS-232  
 (For 50 m, requires quality, low-cap cable < 50 pf/m)  
 : 4 Km with 62.5/125  $\mu$ m fiber  
 (Depends on attenuation loss, no. of splices etc along FO cable)

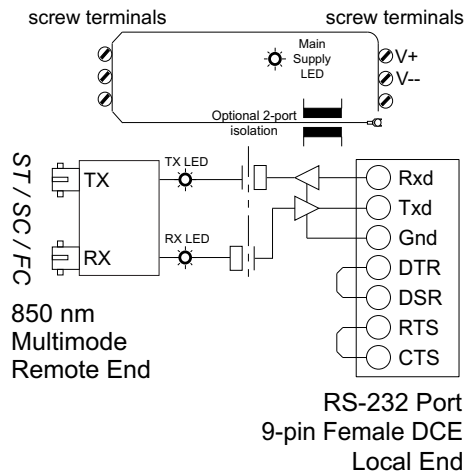
### Mechanical / Environment

- Operating Range : -10 °C to +65 °C
- Storage Range : -40 °C to +85 °C
- Relative Humidity : 10 to 90% RH, non-condensing
- Terminals : wire up to 2.5mm (12 AWG)
- D-shell connector : 9-pin, 30 $\mu$  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

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(Version 1.0) Specifications subject to change without notice.

### Block Diagram

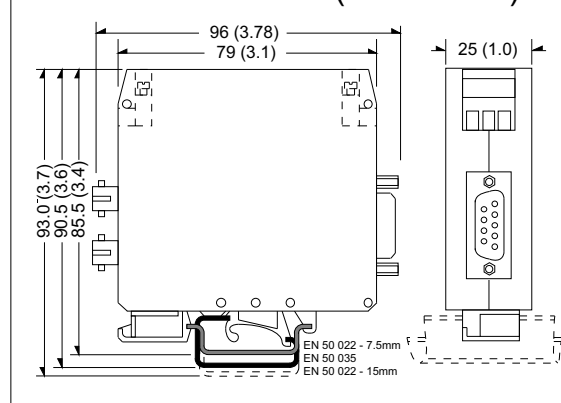


### Order Information

- rdc232MFO-**d**-**st**-**2p**-**dv**
- d** RS-232 Connector (Local)  
Db9 Female Connector (DCE)
  - c** 5-way compression screw terminals
  - st** Fiber Optic Connector (Remote)  
ST bayonet connector
  - sc** SC connector
  - fc** FC connector
  - 2p** Isolation Options  
2.5 KV isolation between RS-232 and supply
  - 1p** Supply ground = RS-232 ground
  - dv** Power Supply Configuration  
9v to 36v 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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