Robust DataComm Pte Ltd

Making Industrial Data Flow Like Water ... Safely, Silently, & Sanely

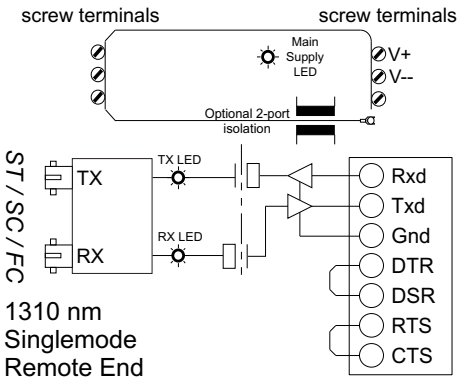
Model: rdc232SFO

RS-232 to Singlemode Fiber Optics Converter

The rdc232SFO safely and easily connects your panel mounted RS-232 devices to fiber optic cables up to 20 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 rdc232SFO a very engineer- friendly device for your industrial data communication system.

Block Diagram



Specification

Fiber Optic

Interface	: 1310 nm full duplex (Remote)
Connectors	: ST(bayonet), SC or FC (Remote)
Fiber Size	: 9/125 µm
Power Budget	: 15 dbm @ 65 °C on 9/125 um 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) : 20 Km with 9/125 µm 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, 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

Order Information

rdc232SFO-□-□-□-□

RS-232 Connector (Local)

- **d** Db9 Female Connector (DCE)
- **c** 5-way compression screw terminals

Fiber Optic Connector (Remote)

- **st** ST bayonet connector
- **sc** SC connector
- **fc** FC connector

Isolation Options

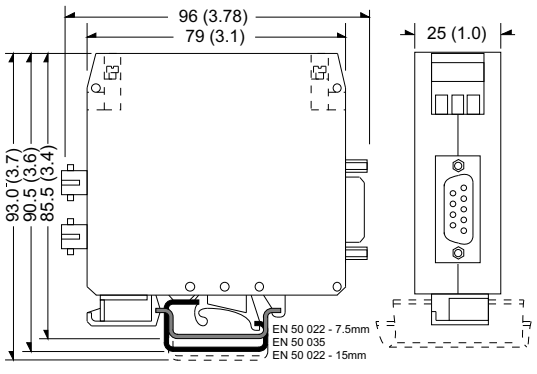
- **2p** 2.5 KV isolation between RS-232 and supply
- **1p** Supply ground = RS-232 ground

Power Supply Configuration

- **dv** 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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(Version 1.0) Specifications subject to change without notice.

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