

Model: rdcFoms

Single Mode to Multi-mode Fiber Optics Converter

The converter provides transparent conversion between fiber optic devices utilizing multi-mode fiber and those with single mode fiber. Single mode fiber can transmit data over much longer distance than multi-mode fiber. Single mode is ideal for longer "metropolitan distances" and multi-mode is well suited to short premises installation.

Single mode fiber accomplishes the distance by confining the transmitted power to a single optical mode which propagates down the center axis of the fiber. The converter regenerates signal strength and is mainly used to exceed the distance for multi-mode fiber.

Industrial design, small size, DIN rail mount, user indication, and wide range DC supply make the rdcFoms converter a very engineer-friendly device for your industrial data communication system.

Specification

Fiber Optic

Interface : Multi-mode 820nm full duplex
: Single mode 1310nm full duplex

Connectors : Multi-mode ST(bayonet)
: Single mode ST(bayonet)

Loss Budget : Singlemode on 9/125 um cable
: 9 dBm @ 65 °C (non-HS1)
: 16 dBm @65 °C (HS1)
: Multimode on 62.5/125 um cable
: 10 dBm @ 65 °C (non-HS1)
: 11 dbm @ 65 °C (HS1)

Power Supply

9v to 36v DC : 110 mA (Max)
5v DC +/- 5% : 450 mA (Max)
User Indications : Green LED for incoming power supply

Communication

Max Speed : Up to 2.5/20 Mbps at standard distances
Character Setting : transparent, no configuration required
User Indications : Yellow LEDs for both directions
Practical Distance : Multi-mode 2 km, Single mode 11 km

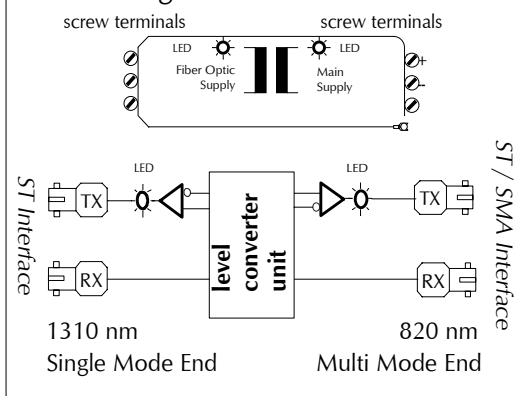
Mechanical / Environment

Operating Range : -40 °C to +65 °C
Storage Range : -40 °C to +100 °C
Relative Humidity : 10 to 90% RH, non-condensing
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

rdcFoms - ☐ - ☐ - ☐ - ☐

Maximum Speed
☐ Up to 2.5 Mbps
HS1 Up to 20 Mbps

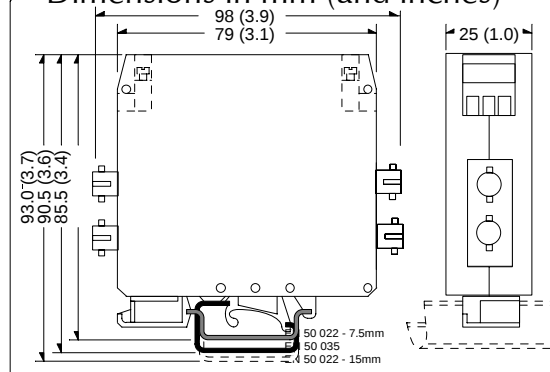
Singlemode Connector
☐ **st** ST bayonet connector

Multimode Connector
☐ **st** ST bayonet connector
☐ **sma** SMA threaded connector

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)



www.robustdc.com

