

Model: rdcFOu

Universal Fiber Optics Converter

The rdcFOu safely & effectively connects your equipment by fiber optics, providing the ultimate level of isolation, surge, and noise protection. Field configurable to RS-232, RS-422, or RS-485 (both 2 or 4-wire), the rdcFOu saves you engineering time and money by simplifying your testing, installation, and maintenance.

Optionally, the serial port can be optically/galvanically isolated from your DC supply ground to further enhance robustness and prevent multi-vendor politics.

ST or SMA connectors can be supplied, plus the quality Hewlett Packard components used are guaranteed to work with 62.5/125, 100/140, and 50/125 μm fiber sizes.

Specification

Fiber Optic

Connector: ST (bayonet) or SMA (threaded)
 Fiber Size: 62.5/125, 100/140, and 50/125 μm
 Insertion Loss: for ST, is a repeatable 0.2dB typically
 Technology: 820 nm wavelength, GaAlAs emitters
 Power: typically -12dBm into 62.5/125 μm fiber

Serial (Field Selectable)

Signal Type: EIA/RS-232C/D/E, EIA/RS-422A, and EIA/RS-485A
 Voltage Level: +/- 9 vDC or -7/+12vDC
 Surge Protection: +/- 15 vDC 600watt (isolated models only)

Isolation

RS-232 to fiber: complete optical isolation
 Supply to fiber: complete optical isolation
 Supply to RS-232: Isolated models have 2500v isolation

Power Supply

38v-58v DC: 1.5w normal 30mA @ 48v
 9v-30v DC: 1.5w normal 60mA @ 24v
 5v DC +/- 5%: 1w normal 200mA @ 5v
 User Indications: Green LED for supply & isolated power

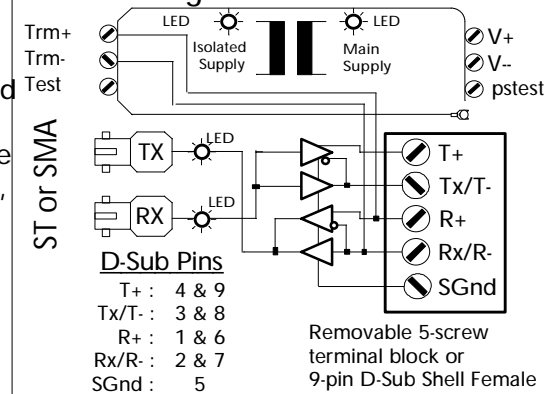
Communication

Max Speed: atleast 115Kbps at standard distances
 Character Setting: transparent, no configuration required
 User Indications: Transmit and Receive Data
 Standard Distance: At least 2 Km with 62.5/125 μm fiber
 Practical Distance: Up to 4000m for fiber optics

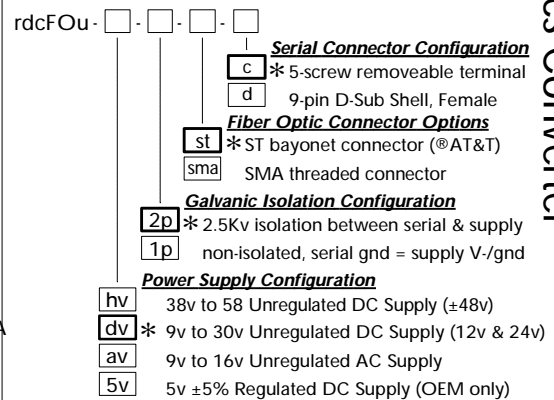
Mechanical / Environment

Operating Range: -40°C to +65°C (Ambient Temperature)
 Storage Range: -40°C to +100°C
 Relative Humidity: 10 to 90% RH, non-condensing
 Terminals: wire up to 2.5mm (12 AWG)
 D-shell connector: 9-pin, 30 μ gold pins/sockets rated 500 cycles
 Case Material: fungus and termite resistant self-extinguishing
 Weight: approx 130g
 Mounting Rail: DIN EN 50 022 or DIN EN 50 035

Block Diagram



Order Information

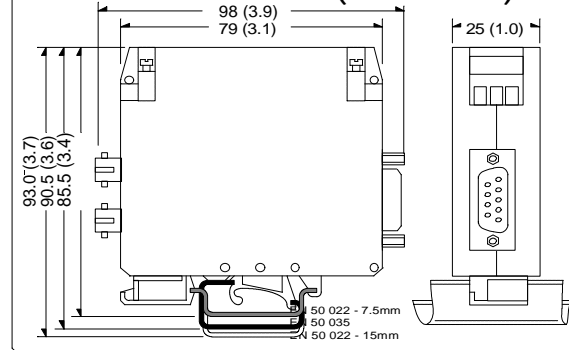


* shows factory default options

Non-isolated (-1p) is only available with power supply -dv or -5v

Testing your fiber optics - the top screw-terminal labeled "Test" can be used to easily test your fiber optics link. Connecting it to the serial SGnd terminal forces the fiber transmitter ON. You can easily see the light at the remote end (even with the naked eye) and identify the proper fiber.

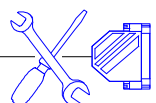
Dimensions in mm (and inches)



Copyright © 1999 Robust DataComm, Inc.

Specifications subject to change without notice.

www.robustdc.com



RS-232/422/485 to Fiber Optics Converter