

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.

On the standard model, the serial port is optically/galvanically isolated from your DC supply ground to further enhance robustness and prevent ground loops or 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

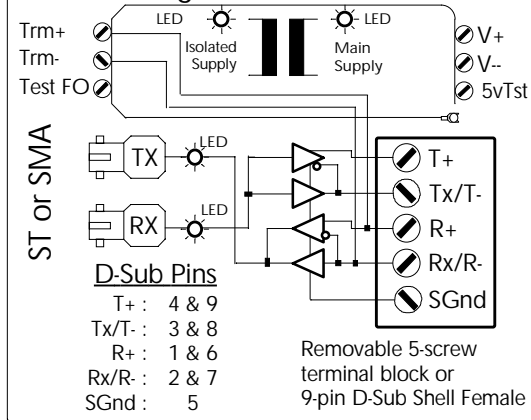
Communication

- 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

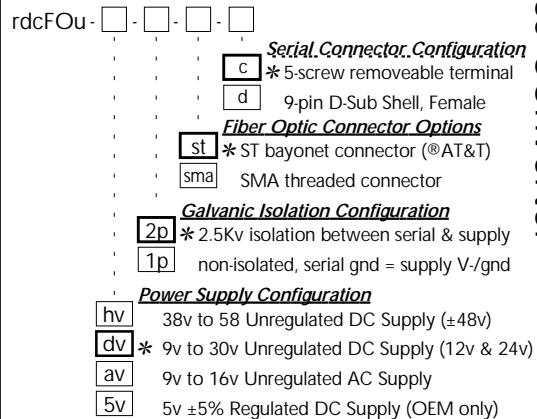
Mechanical / Environment

- 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 FO" 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)

