



Model: ECD232ir5

**RS-232 to RS-232 isolated repeater
(Txd, Rxd, RTS, CTS and Signal Ground)**

The ECD232ir5 safely connects two RS-232 devices without danger of ground loops and damaging surges. The RS-232 signals have 5kV optical isolation, plus two isolated (2.5KVrms) supplies for 3-port galvanic isolation. Un-like self-powered isolators which weaken the RS-232 signal and stress your hardware, the ECD232ir5 boosts the signal, effectively doubling the maximum RS-232 distance and allows guaranteed performance up to 115kbps.

The data lines Txd, Rxd, RTS and CTS are fully isolated, plus over 2.5KVrms isolation DC-DC converters are added to the power path. This effectively decouples the signal grounds and prevents surge currents. The RS-232 uses standard 9-pin d-shell connectors with AT-style serial COM port pin configuration. Isolation, industrial design, small size, DIN rail mount, user indication, and DC supply make the ECD232ir5 a very engineer-friendly device for your industrial data communication system.

Specification

RS-232 ports

Signal Type: RS-232C, D,E and F.
Voltage Level: +/- 9 vDC
Permitted Surge: +/- 25 vDC

Isolation

RS-232 to RS-232 :5000 v (optical, 5kV test)
Supply to Local Port :2500 v (galvanic,

ECD232ir5-DS

Supply to Field Port :3kV test)
:2500 v (galvanic, 3kV test)

Power Supply:

9v to 36v DC 1 watt (24v about 50mA)
5v DC +/- 5% 100mA

LEDs (green) indicate input and isolated power status

Communication

Max Speed: at least 115Kbps over 15m
Character Setting :transparent, no configuration required
User Indications :Each receive signal has LED (yellow)
Standard Distance : 15m per segment (per EIA-232) 30m end-to-end
Practical Distance : 50m per segment, 100m end-to-end (requires quality, low-cap cable < 50 pf/m)

Mechanical / Environment

Operating Range :-40C to +65C
Storage Range :-40C to +100C
Relative Humidity : 10 to 90% RH, non-condensing
Terminals : wire up to 2.5mm (12 AWG)
RS-232 ports : 9-pin, male, DTE, gold pins

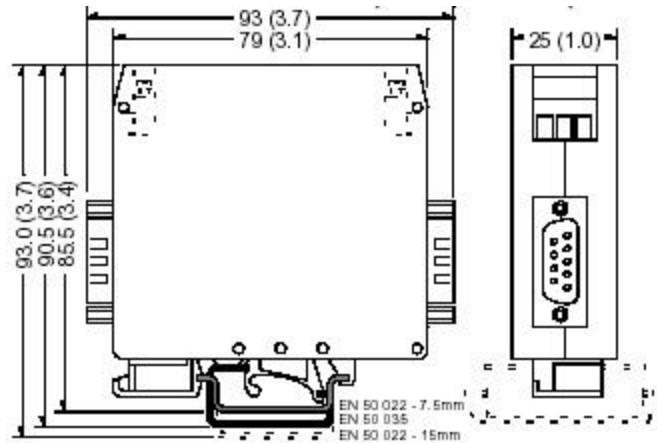
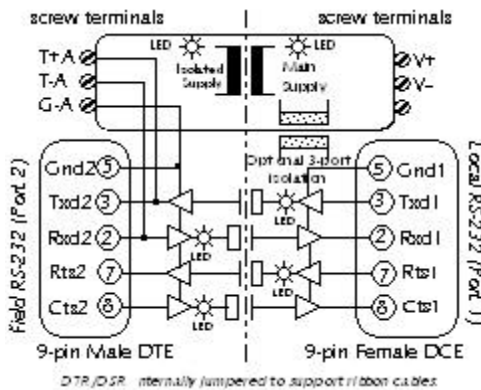


rated 500 cycles
Case Material : nylon polyamide, fungus and termite resistant self-extinguishing
Weight : approx 130g
Mounting Rail : DIN EN 50 022 (best) or DIN EN 50 035

Note: Only full 3-port isolated models are warrantied 3 years.

Dimensions in mm (and inches)

Block Diagram



Order Information

Specifications subject to change without notice.

ECD232ir5			RS-232 to RS-232 Isolated Repeater (5-wire)
	-5V		Using 5Vdc +/-5% Regulated DC Power
	-dv		Using 8 to 56Vdc Unregulated DC Power
		-2p	Two ports isolated, local port ground = power port ground
		-3p	Three Ports fully isolated

Note: All isolated ports include 500 watt voltage transient suppressor diodes.