



Model: ECD232ir3

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

The ECD232ir3 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 ECD232ir3 boosts the signal, effectively doubling the maximum RS-232 distance and allows guaranteed performance up to 115kbps.

The data lines Txd & Rxd 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 ECD232ir3 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: +/- 9Vdc

Permitted Surge: +/- 25Vdc

Isolation

RS-232 to RS-232 :5000 v (optical,
5kV test)

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

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

Power Supply:

9 to 36Vdc 1 watt (24v about 50mA)

5 Vvdc +/- 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

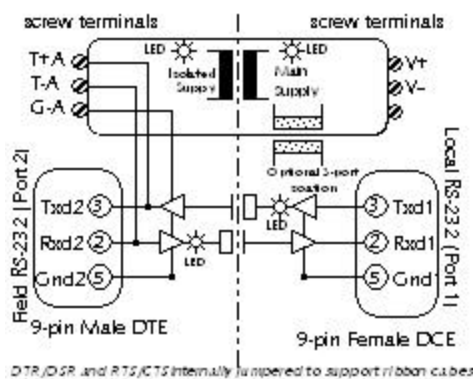
Terminals : wire up to
2.5mm (12
AWG)

RS-232 ports : 9-pin, male,



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

Block Diagram



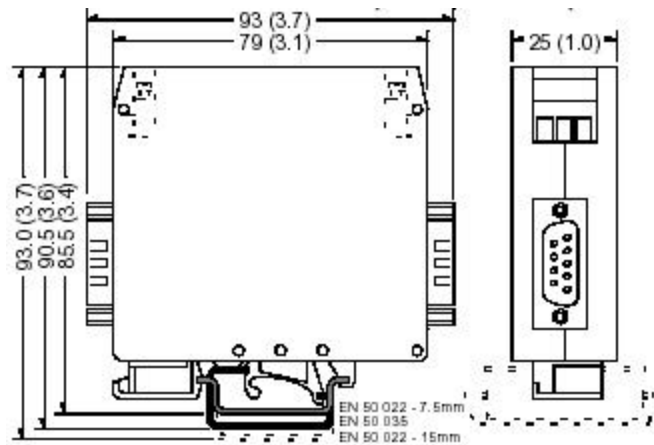
Order Information

ECD232ir3			RS-232 to RS-232 Isolated Repeater (3-wire)
	-5V		Using 5Vdc +/-5% Regulated DC Power
	-dv		Using 9 to 36Vdc 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.

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

Dimensions in mm (and inches)



Specifications subject to change without notice.