



Model: ECD422ir Isolated RS-422 Repeater

The ECD422ir safely connects two RS-422 devices without danger of ground loops and damaging surges. It also doubles the permitted cable length. The data signals have 5kV optical isolation. Internally isolated DC supply provides 2-port galvanic isolation, or full 3-port can be ordered so both RS-422 signals float with respect to the power supply ground. Jumpers allow either 100. or 220 internal terminating resistor (terminator). Other options: 600w transient (spike) suppressor diodes; 9-pin D-sub shell or removable 5-pin compression terminal block; DC supply of 5, 12, 24, 36 and 48v; 2 or 3-port galvanic isolation; custom terminating resistor values. Isolation, industrial design, small size, DIN rail mount, user indication, and DC supply make the ECD422ir a very engineer-friendly device for your industrial data communication system.

Specification

RS-422 ports

Signal Type	:EIA/RS-422A, EIA/RS-485A
Voltage Level	:-7 to +12Vdc
Permitted Surge	: +/- 25 Vdc

Isolation (ISO/IEC 9549)

RS-422 to RS-422	:2500 v (optical, 5kV test)
Supply to field	:2500 v (galvanic, 3kV test)
Supply to local	:2-port = none ; 3-port = 2500v

Power Supply:

9v to 36Vdc	:1.5 watt (24v about 65mA)
5v DC +/- 5%	:150mA

LEDs (green) indicate isolated power status

Communication:

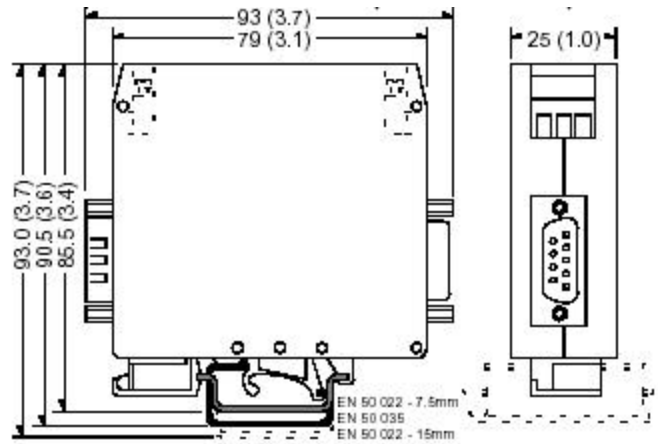
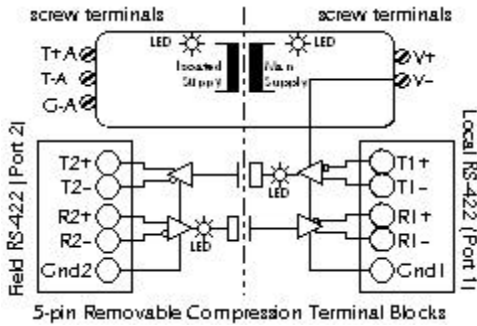
Max Speed	:at least 115Kbps over standard distance
Character Setting	:transparent, no configuration required
User Indications	:Each receive signal has LED (yellow)
Standard Distance	:1000m for EIA/RS-422
Practical Distance	:1000m for EIA/RS-422 (requires quality, low-cap cable)

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)
D-shell connector	:9-pin, 30μ gold pins/sockets rated 500 cycles
Case Material	:nylon polyimide, fungus and termite resistant self-extinguishing
Weight	:approx 130g
Mounting Rail	:DIN EN 50 022 or DIN EN 50 035

Note: it is better using DIN EN50 022

Block Diagram



Order Information

ECD422ir			RS-422 Isolated Repeater
	-5v		5v +/-5% Regulated DC Power
	-dv		9v to 36v Unregulated DC Power
		-2p	Two ports isolated, Local ground = Power ground
		-3p	Three ports isolated (fully isolated)
		-cc	Both ports compression terminal (C-Term)
		-cd	Field port C-Term, local port DB9 female connector
		-dd	Both ports DB9 female connector

Specification subject change without notice

Dimensions in mm (and inches)