



Model: ECD422ic

RS-232 to RS-422 isolated converter

The **ECD422ic** safely connects RS-232 devices to RS-422 devices without danger of ground loops and damaging surges. The data signals have 5kV optical isolation. Internally isolated DC supply provides 2-port galvanic isolation, or full 3-port isolation can be ordered so both the RS-232 and RS-422 signals float with respect to the power supply ground. There is an internal 100 Ohm terminating resistor.

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 or 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 **ECD422ic** a very engineer-friendly device for your industrial data communication system.

Specification

Ports

	RS-232	RS-422
Signal Type	:EIA/RS-232E	:EIA/RS-422A & RS-485A
Voltage Level	: +/- 9 Vdc	: -7 to +12Vdc
Permitted Surge	: +/- 25 Vdc	: +/- 25 Vdc

Power Supply:

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

LEDs (green) indicate isolated power status

Isolation (ISO/IEC 9549)

RS-232 to RS-422	: 5000 v (optical, 5kV test)
Supply to RS-422	: 2500 v (galvanic, 3kV test)
Supply to RS-232	: 2-port = none ; 3-port = 2500v

Communication:

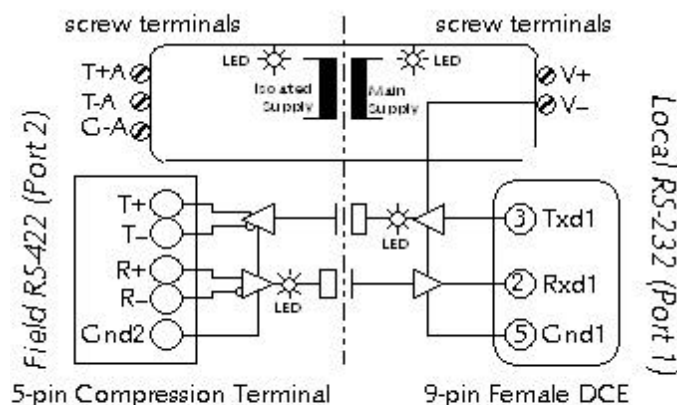
Max Speed	: at least 115Kbps at standard distances
Character Setting	: transparent, no configuration required
User Indications	: Each receive signal has LED (yellow)
Standard Distance	: 15m for EIA/RS-232; 1000m for EIA/RS-422
Practical Distance	: less than 50m for RS-232, 3000m for RS-422 (requires 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)
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

Block Diagram



5-pin Compression Terminal

9-pin Female DCE

Note: When ordered connector type is configurable

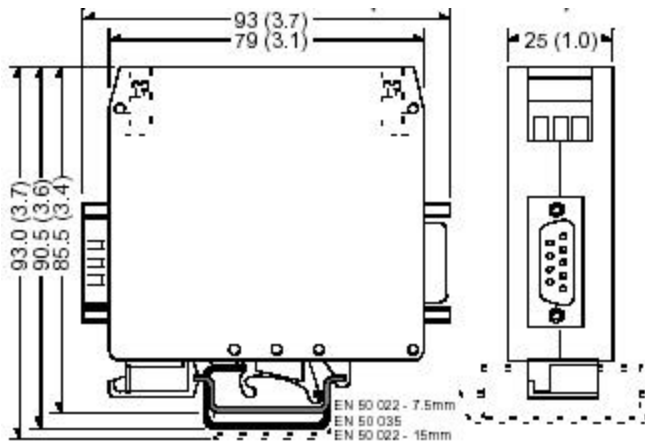
Note: When ordered field RS-422 can be protected by 600w transient voltage suppressor diodes

Order Information

ECD422ic				RS-232 to RS-422 Isolated Converter
	-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



Dimensions in mm (and inches)



Specifications subject to change without notice