



Model: rdc485ic

RS-232 to RS-485 isolated converter

The rdc485ic safely connects RS-232 devices to 2 or 4-wire RS-485 devices without danger of ground loops and damaging surges. The data signals have 2.5kV optical isolation. Internally isolated DC supply provides 2-port galvanic isolation, or full 3-port can be ordered so both the RS-232 and RS-485 signals float with respect to the power supply ground. Jumpers allow internal 120Ω terminating resistor.

600w transient (spike) suppressor diodes are standard on isolated ports; 9-pin D-sub shell or removable 5-pin compression terminal block; DC supply of 5, or 9 to 36v; 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 rdc485ic a very engineer-friendly device for your industrial data communication system.

Specification

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

Isolation (ISO/IEC 9549)

RS-232 to RS-485: 2500 v (optical, 5kV test)
 Supply to RS-485.....: 2500 v (galvanic, 3kV test)
 Supply to RS-232.....: 2-port = none ; 3-port = 500v

Power Supply:

38 to 58v DC.....: 1.2 watt (48v about 25mA)
 9 to 36v DC.....: 1.2 watt (24v about 50mA)
 5v DC +/- 10%.....: About 175 mA

LEDs (green) indicate isolated power status

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-485
 Practical Distance ...: less than 50m for RS-232, 3000m for RS-485
 (requires quality, low-cap cable < 50 pf/m)

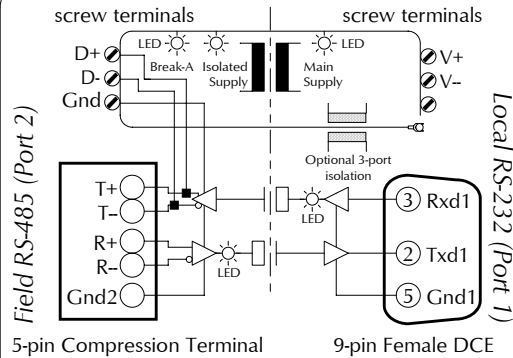
Mechanical / Environment

Operating Range ..: -20C 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

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(Version 1.0) Specifications subject to change without notice.

Block Diagram

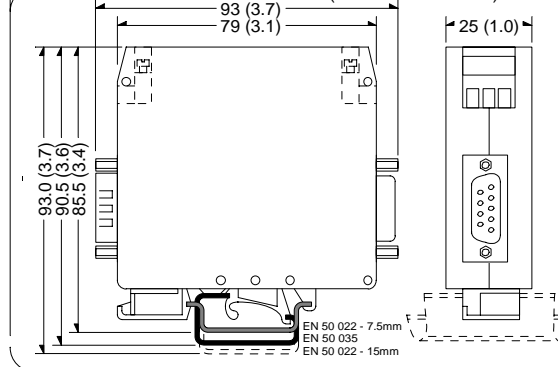


Order Information

rdc485ic	-	-	-	-	-	-	-	-	-
			nnn						
				120Ω					
			cc						
			cd						
			dd						
			2p						
			3p						
			5v						
			dv						
			hv						

Note : Boxes in bold denote factory default options

Dimensions in mm (and inches)



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