

Web: www.ecdata-tech.com Email: info@ecdata-tech.com

# **Model: ECD485AC**

#### Addressable RS232 to RS485 Converter

The ECD485AC (Addressable RS485 Converter), allows non-addressable, "dumb" RS232 devices to be connected on an addressable RS485/422 network. By using a "header character," in conjunction with a user selectable "unit hex address" for each ECD485AC, as many as 32 RS232 devices can be granted access to the network.

The Host computer of the RS-485 network controls each ECD485AC on the network by sending them a "header character" plus an address of the ECD485AC to turn on (connect) a specified ECD485AC at the network, and turn off (disconnect) all the other ECD485ACs from the network. All the ECD485Acs will receive all data transmitted by the Host. Only one node at a time can access the Host.

There is no delay or buffering through the ECD485AC. ALL data that is sent from the RS-485 side after "SELECTION" will be passed through to the RS-232 device. The unit will auto turn off (depends on the delay timing selection), by selecting the suitable timing, the unit will pass the original data to the RS232 device ( mask the header character and address code for the next data frame)

Jumpers select internal 120 Ohm terminating resistor, 2-wire communication mode (half duplex). 600w transient (spike) suppressor diodes are standard on the RS485 port; 9-pin D-sub shell or removable 5-pin compression terminal block; DC supply of 9 to 36V, industrial design, small size, DIN rail mount and user indication, make the ECD485AC a very engineer-friendly device for your industrial data communication system.

#### **Specification**

Ports RS-232 RS-485

Signal Type : EIA/RS-232E : EIA/RS485/422A Voltage Level : +/- 9 Vdc : -7 to +12Vdc Permitted Surge : +/- 25Vdc : +/- 25Vdc

## **Power Supply:**

9 to 36Vdc, :2.5 watt (24v about 100mA)

5Vdc +/- 5%, :500mA LED (green) indicates power status.

#### Communication:

Data Rate : 9600 or 19200bps (Jumper selectable)

Character Setting : 8,N,1 for addressable mode

User Indications : Transmit and receive signals (yellow) in the RS485 network.

: When ECD485AC is turn on (Red)

Turn on Delay Time : Disable, 100ms, 150ms & 200ms (Jumper selectable)

Standard Distance : 15m for EIA/RS-232; 1200m for EIA/RS-485

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Practical Distance : less than 50m for RS-232, 3000m for RS-485 (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)

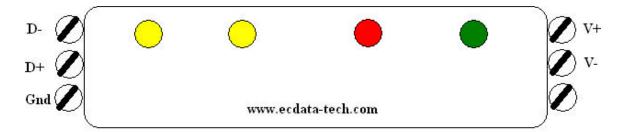
D-shell connecter : 9-pin, 30µ gold pins/sockets rated 500 cycles

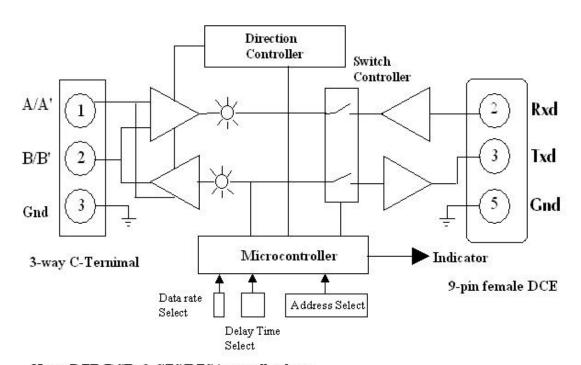
Case Material : nylon polymide, fungus and termite resistant self-extinguishing

Weight : approx 130g

Mounting Rail : DIN EN 50 022 or DIN EN 50 035

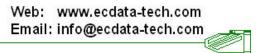
## **Block Function Diagram**





Note: DTR/DSR & CTS/RTS internally short.

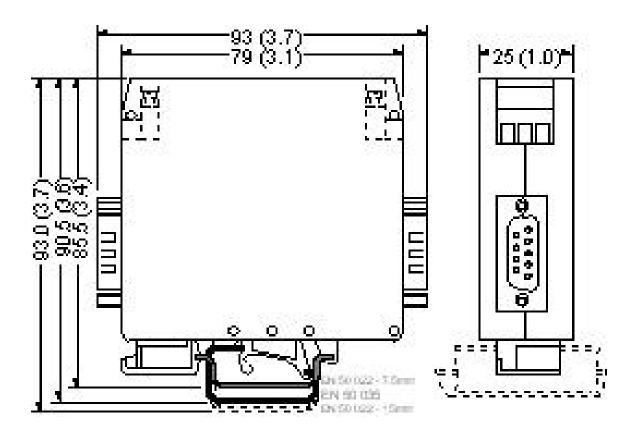
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## **Order Information**

ECD485AC			EC Data RS485 Addressable Converter
	-dv		9-36V unregulated DC power supply
	-5v		5V+/-5% Regulated DC power supply
		cd	RS485 C-Term connector, RS232 DB9F connector
		dd	RS485 DB9M connector, RS232 DB9F connector

## **Dimensions in mm (inches)**



Specifications subject to change without notice.

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