



Model: ECD485nc
Self-Powered RS-232 to RS-485
Converter



The ECD485nc provides excellent versatility in a compact package. Requiring no AC power or batteries for operation, the converter supports asynchronous RS-232 data rate up to 115200 bps over one unconditioned twisted pair in half duplex mode.

The unit is equipped with female DB9 connector for RS-232 and male DB9 connector for RS-485. You can choose either a terminal block or an RJ-45 socket adapter for the twisted pair connection.

Specifications

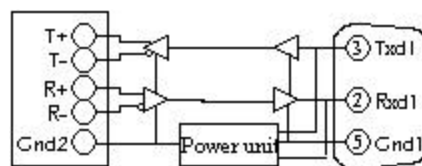
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|--------------------|--|
| Transmission Mode: | Asynchronous, half duplex 2-wire |
| Signal Type: | RS-232 (C to F)/RS-485 |
| Data Rate: | Up to 115200bps |
| Power Requirement: | Non-powered, Port-powered from RS-232 |
| Character Setting: | Transparent, no configuration required |
| Dimensions: | 63L x 33W x 17H (mm) |

Distance: up to 4000 feet
(1200m) on CAT
5 solid cable

Mechanical/Environment

Operating Range: -40C to 65C
(Ambient Temperature)
Storage Range: -40C to +100C
Relative Humidity: 10 to 90% RH,
non-condensing
Comm Ports: 9-pin,
male/female,
gold pins rated
500 cycles
Case Material: Plastic
Weight: approx 20g

Block Diagram:



Installation

Connection to the RS-232 Interface

The RS-232 interface is factory configured as DCE. It connects directly to DTE such as a terminal or PC. If you must use a cable to connect the DCE to your DTE device, use a straight through cable no longer than 50 feet (15.2m or 2500pF per wire). For your convenience, the converter comes with a female DB9 connector on the RS-232 side.

Connection to the RS-485 Interface

To function properly, the converter must have one twisted pair of metallic wire. This

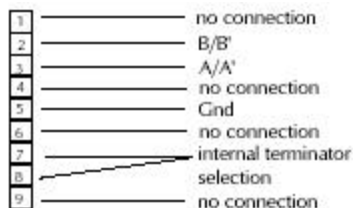


pair must be unconditioned metallic wire, solid conductor, unshielded twisted pair, between 19 and 26 AWG (the higher numbered gauges may limit distance somewhat).

For your convenience, the converter comes with DB9 male connector (factory default configuration), RJ-45 and terminal block (using extension adapter) on the RS-485 side.

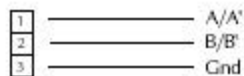
Note: To communicate properly at the RS-485 side, we strongly recommend connect the ground together as the signal current loop.

DB9 Male Connector configuration (RS-485)



Note: Short Pin7 & Pin8 to activate the internal terminator (120 Ohm)

Terminal Block configuration (RS-485)



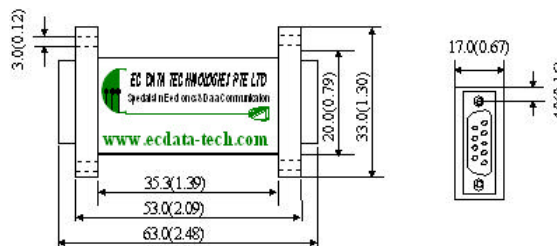
Note: Jumper 1 is for the internal terminator (120 Ohm) selection (factory default setting).

Order Information:

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|----------|--|
| ECD485nc | Non-powered RS-232 to RS-485 Converter |
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Mechanical Dimensions: mm (inches)

ECD485nc-DS



Specifications subject to change without notice.