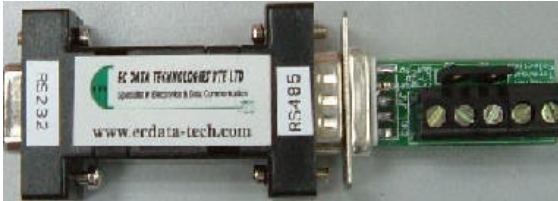




Model: ECD485nc-02
Self-Powered RS-232 to RS-485
Converter



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/full duplex mode (depends on model selected).

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

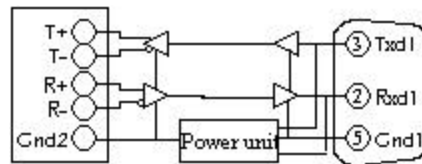
Transmission Mode:	Asynchronous, half/full duplex point-to-point, 2/4-wire
Signal Type:	RS-232 (C to F)/RS-485
Data Rate:	Up to 115200bps
Power Requirement:	Non-powered, Self-powered from RS-232
Character Setting:	Transparent, no configuration required
Dimensions:	63L x 33W x

Distance: 17H (mm)
up to 4000 feet (1200m).

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



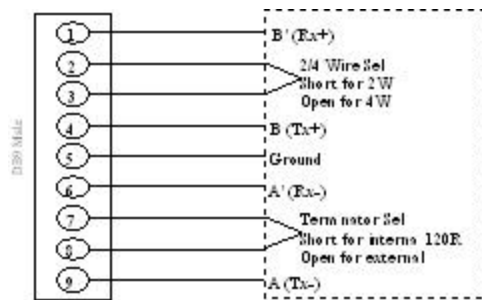
pair must be unconditioned metallic wire, solid conductor, unshielded twisted pair, between 19 and 26 AWG (the higher numbered gauges may limit distance somewhat).

For your convenience, the converter comes with DB9 male connector (factory default configuration), 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.

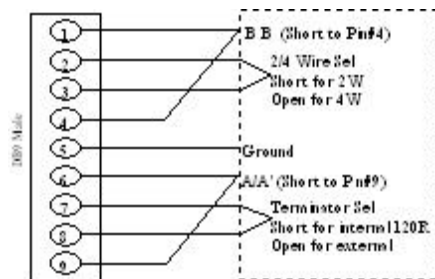
DB9 Male Connector configuration (RS-485)

4-Wire communication mode:



4-Wire Mode Pin Configuration

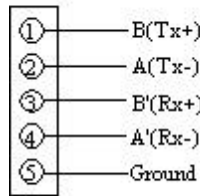
2-Wire communication mode:



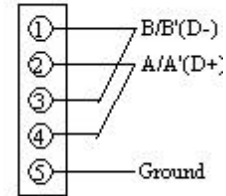
2-Wire Mode Pin Configuration

Terminal Block configuration (RS-485)

4-Wire Mode



2-Wire Mode



Note: Jumper 1 (J1) is for the internal terminator (120 Ω) Selection
Jumper 2 (J2) is for 2/4W selection

Order Information:

ECD485nc		Non-powered RS-232 to RS-485 Converter
	01	2-wire mode (Half duplex)
	02	4-wire mode (Full duplex)

Mechanical Dimensions: mm (inches)

