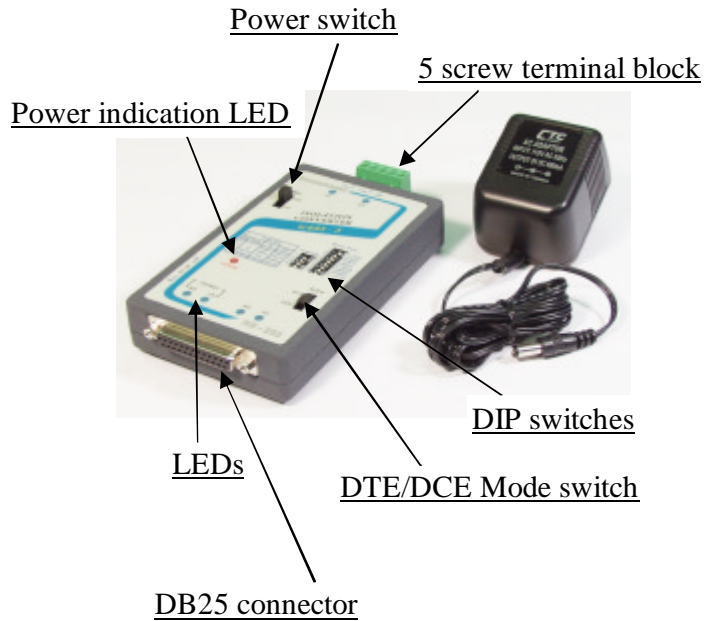


# Model Name: ic485-3

The **ic485-3** Interface converter provides conversion between **RS-232** interface and **RS-485** standard. The **RS-232** interface connection is via the unit's **DB-25F** female **D-Type** connector, while the **RJ-485** side's connection is via a five screw terminal block.

The **ic485-3** converter's circuitry provides a high degree of electrical isolation between the **RS-232** and **RS-485** sides. The **RS-232** side may operate as **DTE** or **DCE**, has provisions for establishing hardware flow control, and has **LEDs** to indicate data transmission and reception. The **RS-485** side may operate in either two wire half duplex or four wire half or full duplex and also has **LEDs** to indicate data transmission and reception.



## Features

- ✍ Easy to configure
- ✍ DTE/DCE selectable
- ✍ RS-232 handshaking; DTR/DSR, RTS/CTS, or Auto
- ✍ RS-485; 2 or 4 wire, Half or Full Duplex
- ✍ 2500VDC Isolation minimum
- ✍ External DC power required

## Function Table

| Function |            |        |            |
|----------|------------|--------|------------|
| DIP      | Name       | On     | Off        |
| 1        | Tx         | Enable | Flow Ctrl. |
| 2        | Rx         | Enable | Flow Ctrl. |
| 3        | Flow Ctrl. | Auto   | Hardware   |
| 4        | Hardware   | DTR    | RTS        |

## DIP switches:

| Function |                          | Baud Rate |
|----------|--------------------------|-----------|
| 1        | <input type="checkbox"/> | 1200      |
| 2        | <input type="checkbox"/> | 2400      |
| 3        | <input type="checkbox"/> | 4800      |
| 4        | <input type="checkbox"/> | 9600      |
| 5        | <input type="checkbox"/> | 19200     |
| 6        | <input type="checkbox"/> | 38400     |
| 7        | <input type="checkbox"/> | 57600     |
| 8        | <input type="checkbox"/> | 115.2K    |

## Description:

| DIP function setting |     |     |     | Tx                  | Rx                    | Application examples   |
|----------------------|-----|-----|-----|---------------------|-----------------------|--|
| 1                    | 2   | 3   | 4   |                     |                       |  |
| ON                   | ON  | X   | X   | Always on           | Always on             | 4 wires, full duplex   |
| OFF                  | ON  | ON  | X   | Auto                | Always on             | 4 wires, full duplex, Auto flow control                              |
| OFF                  | ON  | OFF | ON  | DTR (or DSR)        | Always on             | 4 wires multidrop/2 wires half duplex with DTR hardware flow control |
| OFF                  | ON  | OFF | OFF | RTS (or CTS)        | Always on             | 4 wires multidrop/2 wires half duplex with RTS hardware flow control |
| ON                   | OFF | ON  | X   | Always on           | Auto                  |  |
| ON                   | OFF | OFF | ON  | Always on           | /DTR (or /DSR) enable |  |
| ON                   | OFF | OFF | OFF | Always on           | /RTS (or /CTS) enable |  |
| OFF                  | OFF | ON  | X   | Auto                | Auto                  | 2 wires half duplex, Auto flow control                               |
| OFF                  | OFF | OFF | ON  | DTR (or DSR) enable | /DTR (or /DSR) enable | 2 wires half duplex with DTR hardware flow control                   |
| OFF                  | OFF | OFF | OFF | RTS (or CTS) enable | /RTS (or /CTS) enable | 2 wires half duplex with RTS hardware flow control                   |

Note : X indicates "don't care"

## Specifications

### Connectors

RS-232 DB25F

RS-485 5-screw terminal block

**Voltage** 9VDC

**Power** <6W

**Electrical Iso.** 2500VDC minimum

**Data Rates** 1200, 2400, 4800, 9600, 19.2K, 38.4K, 57.6K, or 115.2K

**Dimensions** 140(L)x80(W)x25(H) mm

**Dimensions** 5-5/8(L)x3-1/8(W)x1(H) in.

**Power Source** External DC9V/300mA adapter

**Humidity** up to 90% non-condensing

**Temperature** 0~50°C / 32 ~ 125°F

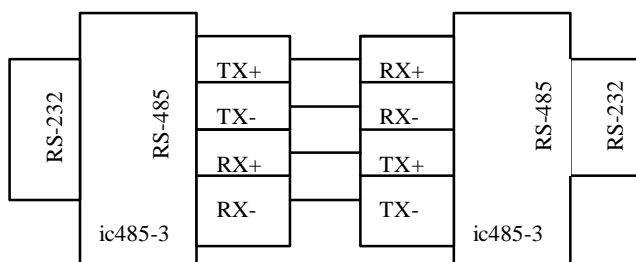
**Weight** 180g (6 1/2oz.) net

## RS-232 Pin Definition

| Pin | Designation | Description         |
|-----|-------------|---------------------|
| 1   | FG          | Frame GND           |
| 2   | TD          | TX Data             |
| 3   | RD          | RX Data             |
| 4   | RTS         | Request To Send     |
| 5   | CTS         | Clear To Send       |
| 6   | DSR         | Data Set Ready      |
| 7   | SG          | Signal Ground       |
| 8   | DCD         | Data Carrier Detect |
| 20  | DTR         | Data Terminal Ready |

## Application Drawings

**4 wire (half or full duplex)**



**2 wire (half duplex only)**

