

## Port Powered RS232 to RS485 converter

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This unit converts RS232 signals from your PC or laptop to balanced line RS485 signals. The converter circuit is fully port powered from the DTR and the RTS signals. RTS also controls the RS485 transmitter and receiver.



### Features

- \* 30 x 65 mm in size (DB 9 gender bender size)
- \* Transmission speeds of up to 115.2 kbps max.
- \* Slew-rate limiting allows error free data transmission
- \* Transmission lines of up 1000 meters can be used

### Connections

The DB9 Female connector, connects directly to the PC - RS232 male connector (Com 1 or Com 2). It may be connected with a short length of cable to the PC.

Table 1 : RS232 DB9 female pin outs

Signal name	DB9 Pin number
RS232 receive data	2
RS232 transmit data	3
DTR – must be connected, supplies power to circuit	4
GND – digital ground	5
RTS – Controls RS485 send and receive	7
CTS – Linked to RTS inside converter	8

The DB9 Male connector provides the connection between the RS485 interface and the data link. Only the data A and B signals need be connected to the remote end. The optional external power supply can be connected.

Table 2 : RS485 DB9 male pin outs

Signal name	DB9 Pin number
RS485 data B	1
RS485 data A	2
DGND – digital ground. External power supply GND	5
External power supply +9V to +12V DC	6
RGND – reference ground via 120 ohm resistor	9

Note: Further information is available on request from <http://www.designium.co.za/>