

# Converter RS-232/RS-485



## Port Powered RS-232 To RS-485

HC-02 is a RS-232 and RS-485 bi-directional interface between the converter. Simple second-line communications can be RS485 multi-point framework for communications networks. Has been widely used in point-to-point, point-to-multipoint interface of RS485 communication equipment such as:

1. Industrial Automation System.
2. PLC and PLD.
3. Intelligent surveillance system.
4. POS credit card machines, POS systems.
5. Data acquisition, control system and so on.

HC-01 to RS-232 serial port to send the TXD and RXD receive balanced signals into RS-485 signals. No external power supply, RS232 port directly from the power supply of 3 feet, 7 feet at the same time with a request to send (RTS), 4-pin data terminal ready (DTR) to the HC-01 auxiliary power supply, automatic flow control so that you do not have to re - installation of hardware and software settings, use very simple.

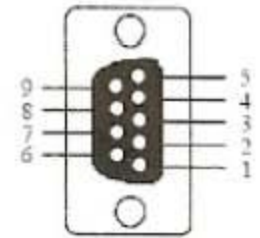
## Performance parameters:

Serial interface	Interface compatible with EIA/ TIA of RS232C, RS485 standard
Transmission medium	Ordinary twisted-pair
Transmission distance	0-5Km (115200 - 9600bps) Which 1.2Km (up to 57.6Kpbs)
Power Requirements	Without
Joint approach	RS-232: DB9F RS-485: DB9M
Signal	RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
Work	RS-485: Asynchronous half-duplex
Communication protocol	Transparent
Operating temperature	-20°C~50°C
Relative humidity	5%~95%

**PINOUT CONFIGURATION:  
RS-232 SIDE – DB9 FEMALE**

SIGNAL	DCD	DTR	DSR	RTS	CTS	TX	RX	GND
PIN #	1	4	6	7	8	2	3	5
FUNCT.	TIED			TIED		RX	TX	GND

**FEM. DB9**

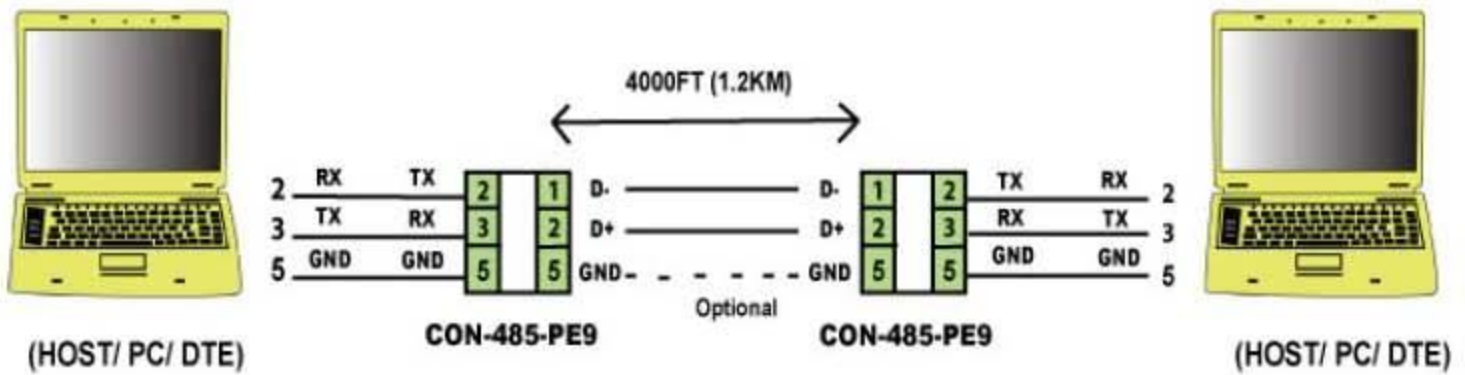
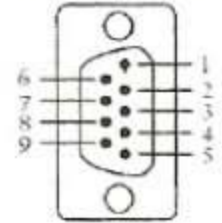


**RS-485 SIDE – DB9 MALE OR TERMINAL BLOCK**

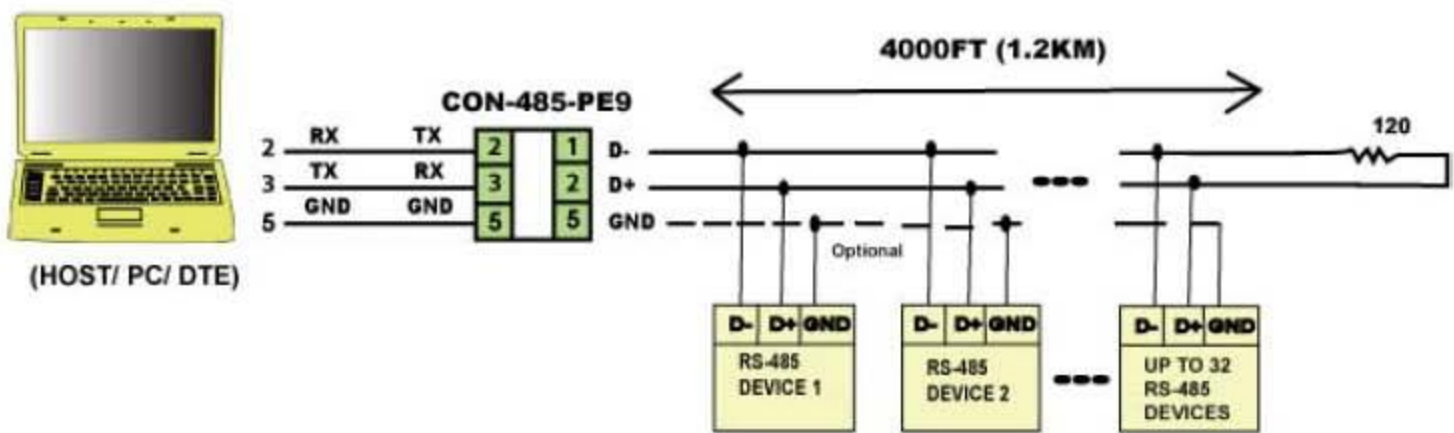
SIGNAL	D-	D+	GND
PIN #	1	2	5
FUNCTION	D-	D+	GND

**TERMINAL BLOCKS**  
Includes two terminal blocks - one for rugged applications and the other with selectable 120 ohm termination.

**MALE DB9**



**FIGURE 1: EXTENDING RS-232 DATA DISTANCE**



**FIGURE 2: MASTER/SLAVE MULTIPLE DROP CONFIGURATION**