

CON-485-PE25

RS-232 To RS-485 Converter – DB25
Datasheet Revision 1.2

INTRODUCTION:

The SerialComm CON-485-PE25 is a bi-directional port powered RS-232 to RS-485 converter in a 25 pin format. It can convert any standard full duplex RS-232C port to any two-wire balanced half duplex RS-485 port. In simple terms, it will convert any RS-232 signal to a RS-485 signal and vice versa. The unit is powered from the RS-232 data lines. It also supports data direction auto-turnaround. Therefore, no external power or flow control is required. The data direction auto-turnaround automatically enables the RS-485 driver when data is present on the RS-232 side making the device plug-and-play, requiring no software drivers. The CON-485-PE25 has a DB25 female connector on the RS-232 side and a DB25 male connector on the RS-485 side.

CERTIFICATIONS:



GENERAL FEATURES:

- Port Powered: no external power is necessary
- Data Direction, auto-turnaround, no flow control is necessary
- Plug-and-Play (Device is hot-pluggable)
- 5 Year Manufacturer's Warranty
- RoHS, CE, FCC, ISO 9001 and IAF Compliance Certified
- Built-in surge protection, static protection and circuit protection
- Surface Mount RoHS Compliant Technology manufactured to ISO 9001 Standards

PINOUT CONFIGURATION:

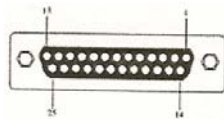
RS-232 SIDE – DB25 FEMALE

SIGNAL	DCD	DTR	RTS	CTS	TX	RX	GND
PIN #	8	20	4	5	2	3	7
FUNCTION	TIED	TIED	TX	RX	GND		

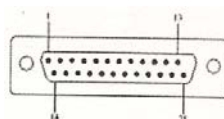
RS-485 SIDE – DB25 MALE

SIGNAL	GND	D+	D-
PIN #	1	2	3
FUNCTION	GND	D+	D-

FEMALE – DB25



MALE – DB25



SPECIFICATIONS:

PART NUMBER:	CON-485-PE25
STANDARDS:	EIA/TIA RS-232C Standard and RS-485 Standard
BAUD RATES:	From 300 Baud To 115,200 Baud
POWER SOURCE:	Port Powered From RS-232 Data Lines
CURRENT CONSUMPTION:	Less Than 10 mA
CONNECTOR TYPES:	RS-232 Side: DB25 Female & RS-485 Side: DB25 Male
DISTANCE:	RS-232 Side: 16 ft (5m) and RS-485 Side: up to 4000 ft (1.2km)
MAX NUMBER OF DROPS:	32 Drops
STATIC PROTECTION:	1500W Static Protection
SURGE PROTECTION:	600W Surge Protection
WEIGHT:	1.3oz (38 grams)
DIMENSIONS:	2.41" X 2.19" X 0.67" (61.0 mm X 55.6 mm X 16.9 mm)
OPERATING TEMP.:	-4° F to 140° F (-20°C to 60° C)
OPERATING HUMIDITY:	5% To 95% - No Condensation

TROUBLESHOOTING INSTRUCTIONS:

Perform a loop back test on two CON-485-PE25 converters. Attach the two CON-485-PE25s to two serial ports on a PC and using two instances of HyperTerminal, send a character from one and see if it echoes to the other. This will test both transmit and receive functions.

APPLICATIONS:

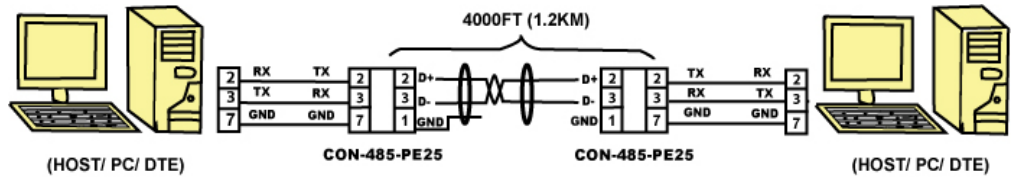


FIGURE 1: EXTENDING RS-232 DATA DISTANCE

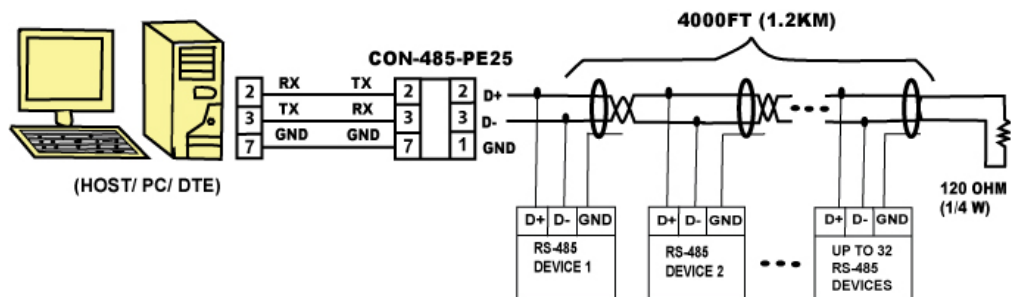


FIGURE 2: MASTER/SLAVE MULTIPLE DROP CONFIGURATION.