

CON-485-PE25

RS-232 To RS-485 Converter – DB25
Datasheet Revision 1.3

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:

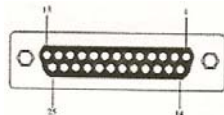
- Port Powered: no external power is necessary
- Data Direction, auto-turnaround, no flow control is necessary
- Plug-and-Play (Device is hot-pluggable)
- 5 Year Manufacturer's Warranty
- RoHS, CE, FCC and ISO 9001 Compliance Certified
- Built-in surge protection, static protection and circuit protection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

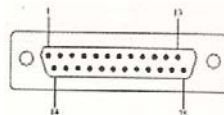
FEMALE – DB25



RS-485 SIDE – DB25 MALE

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

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:

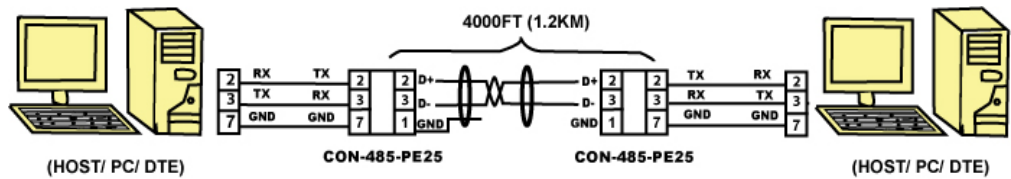


FIGURE 1: EXTENDING RS-232 DATA DISTANCE

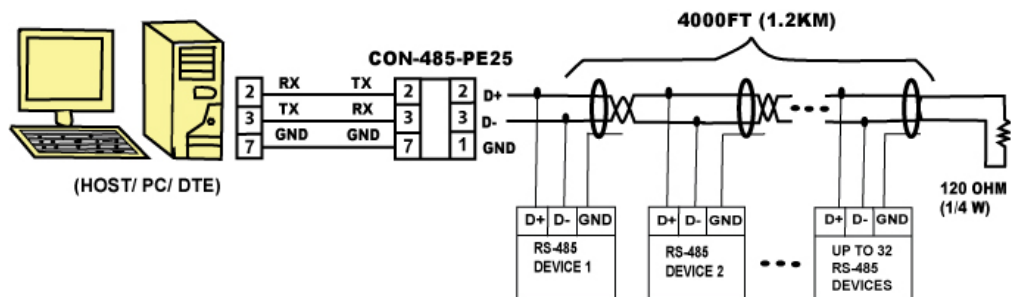


FIGURE 2: MASTER/SLAVE MULTIPLE DROP CONFIGURATION.