

CON-485-PE9

RS-232 To RS-485 Converter – DB9  
Datasheet Revision 1.2

INTRODUCTION:

The SerialComm CON-485-PE9 is a bi-directional port powered RS-232 to RS-485 converter in a 9 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-PE9 has a DB9 female connector on the RS-232 side and either a DB9 male connector or 3-way terminal block on the RS-485 side. Separate terminal block is included in package.

CERTIFICATIONS:



GENERAL FEATURES:

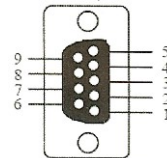
- Port Powered: no external power is necessary
- Data Direction, auto-turnaround, no flow control is necessary
- Plug-and-Play (Device is hot-pluggable)
- 5 Year Manufacturer's Warranty
- RoHS, CE, FCC, ISO 9001 and IAF Compliance Certified
- Built-in surge protection, static protection and circuit protection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

PINOUT CONFIGURATION:

RS-232 SIDE – DB9 FEMALE

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

FEM. DB9

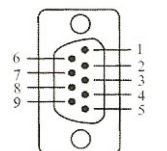


RS-485 SIDE – DB9 MALE OR TERMINAL BLOCK

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



MALE DB9



SPECIFICATIONS:

PART NUMBER:	CON-485-PE9
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: DB9 Female and RS-485 Side: either DB9 Male or 3 Way Terminal Block
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:	<b>With Terminal Block:</b> 1.2oz (36 grams) <b>Without Terminal Block:</b> 0.8oz (24 grams)
DIMENSIONS:	<b>With Terminal Block:</b> 3.15" X 1.33" X 0.70" (80.0 mm X 33.8 mm X 17.8 mm) <b>Without Terminal Block:</b> 2.47" X 1.33" X 0.70" (62.8 mm X 33.8 mm X 17.8 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-PE9 converters. Attach the two CON-485-PE9s to two serial ports on a PC and using two instances of a HyperTerminal program send a character from one and see if it echoes to the other. This will test both transmit and receive functions.

APPLICATIONS:

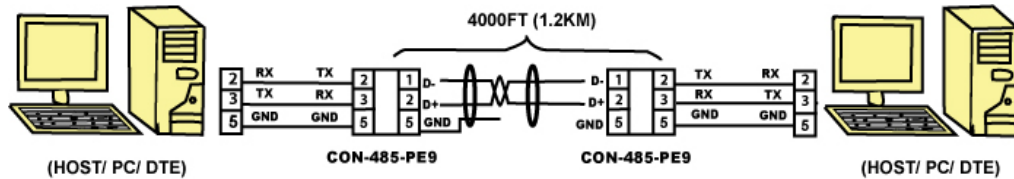


FIGURE 1: EXTENDING RS-232 DATA DISTANCE

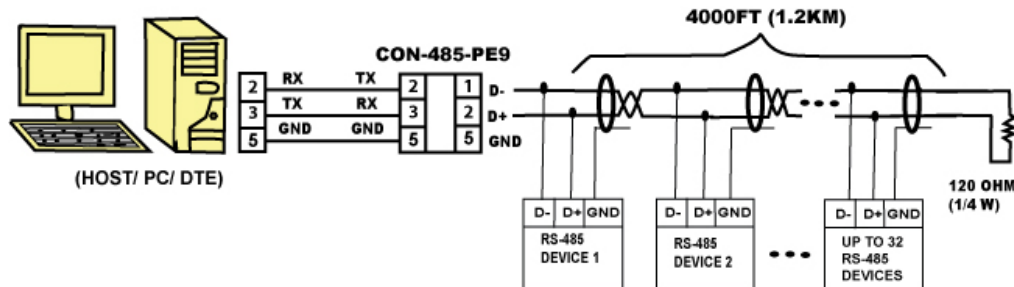


FIGURE 2: MASTER/SLAVE MULTIPLE DROP CONFIGURATION