

CON-485-PI9
Compact Industrial
RS-232 To RS-485 Converter

SERIALCOMM.COM

Datasheet Revision 2.6

GENERAL FEATURES:

- Plug-and-Play (hot-pluggable)
- Slim built-in terminal block design
- Rugged industrial design
- Data direction auto-turnaround - no flow control necessary
- Port powered - no external power needed
- Built-in surge and static protection
- 5-year manufacturer's warranty
- CE, FCC, RoHS and REACH certified



DESCRIPTION:

The SerialComm CON-485-PI9 is a compact industrial bi-directional port powered RS-232 to RS-485 converter which converts a full-duplex RS-232 port to a half-duplex two-wire balanced RS-485 port. It has a compact design for space restricted applications. A built-in data direction auto-turnaround feature automatically enables the RS-485 driver when data is present from the RS-232 port eliminating the need for software drivers, and making the device fully plug-and-play. The CON-485-PI9 has a DB9 female connector on the RS-232 serial port and 3-position terminal block on the RS-485 port. The terminal block unplugs for convenience. The unit is enclosed in a rugged ABS housing and is powered from the RS-232 data lines; no external power is required.

CERTIFICATIONS:



TROUBLESHOOTING INSTRUCTIONS:

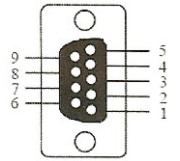
Using two CON-485-PI9 units:

1. Check that all connections comply with the connection diagrams.
2. Perform a loop back test:
 - a) Connect the two RS-485 ports.
 - b) Connect the two RS-232 ports to two PC RS-232 ports.
 - c) Running hyper terminal programs on both PCs, send ASCII characters to the CON-485-PI9 converter from one PC port, and check that the characters are received at the 2nd PC port. Repeat the test in the opposite direction. This tests that the transmit and receive functions of both CON-485-PI9 units are working properly.

PINOUT CONFIGURATION:
RS-232 SIDE – DB9 FEMALE

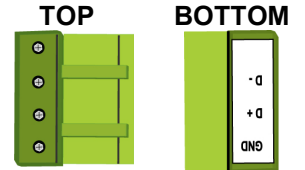
SIGNAL	DC D	DTR	DSR	RTS	CTS	TX	RX	GND
PIN #	1	4	6	7	8	2	3	5
FUNCTION	TIED			TIED		TX	RX	GND

FEM. DB9



RS-485 SIDE – ATTACHED TERMINAL BLOCK

INDUSTRIAL CONVERTER
128 RS-485 Drops, High Temp Range



SPECIFICATIONS:

COMMUNICATION	
STANDARDS:	EIA/TIA RS-232C Standard and RS-485 Standard
BAUD RATES:	From 300 bps to 115,200 bps
CONNECTOR TYPES:	RS-232 Side: DB9 Female and RS-485 Side: 4-way Terminal Block
DISTANCE:	RS-232 Side: 16 ft (5m) and RS-485 Side: up to 4000 ft (1.2km)
MAX # OF CONNECTIONS:	128 Connection Drops
ELECTRICAL	
POWER SOURCE:	Port Powered From RS-232 Data Lines
CURRENT CONSUMPTION:	Less Than 10 mA
STATIC PROTECTION:	15KV Electric Static Discharge (ESD) Protection
SURGE PROTECTION:	600W Surge Protection
MECHANICAL	
HOUSING:	Rugged ABS
WEIGHT:	0.8oz (24 grams)
DIMENSIONS:	2.80" X 1.33" X 0.66" (71.2 mm X 33.8 mm X 16.8 mm)
ENVIRONMENTAL	
OPERATING TEMP.:	-40° F to 185° F (-40°C to 85° C)
STORAGE TEMP:	-40° F to 185° F (-40°C to 85° C)
OPERATING HUMIDITY:	5% To 95% - No Condensation
QUALITY	
PRODUCT SAFETY:	CE, FCC, RoHS and REACH Third-party Certified
QUALITY MANAGEMENT	Manufactured and Distributed to ISO 9001:2015 QMS
RELIABILITY	Low Failure Rate – 99+% Reliability Since Inception
WARRANTY:	5 Year Replacement Warranty

APPLICATIONS:

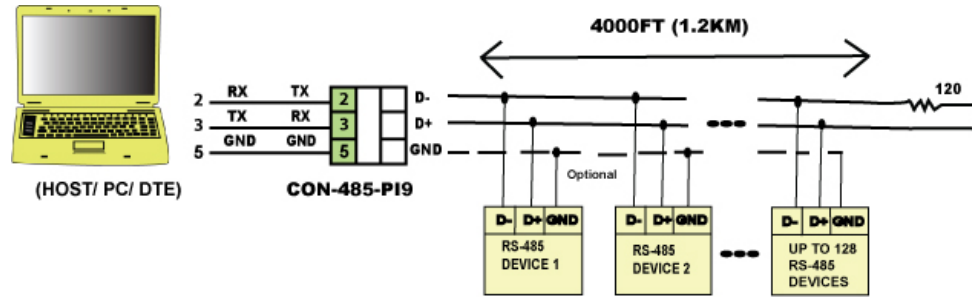
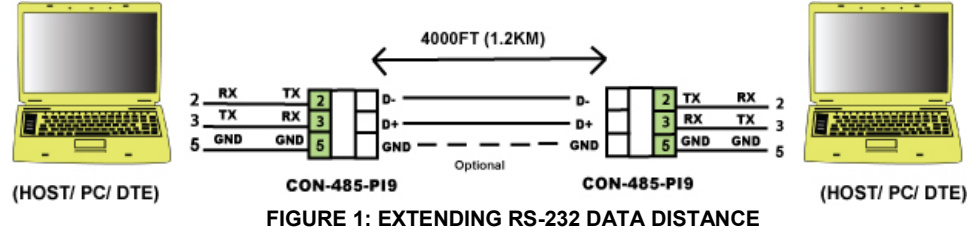


FIGURE 2: MASTER/SLAVE MULTIPLE DROP CONFIGURATION