

### SERIALCOMM.COM

#### **GENERAL FEATURES:**

- Plug-and-Play (hot-pluggable)
- Slim built-in terminal block design
- Rugged industrial design
- Data direction auto-turnaround no flow ٠ control necessary
- Port powered no external power needed .
- Built-in surge and static protection
- 5-vear manufacturer's warrantv
- CE. FCC. RoHS and REACH certified .



CON-485-PI9

**Compact Industrial** RS-232 To RS-485 Converter

Datasheet Revision 2.7

#### **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.
    - Connect the two RS-232 ports to two PC RS-232 ports. b)
    - Running hyper terminal programs on both PCs, send ASCII characters to the CONc) 485-PI9 converter from one PC port, and check that the characters are received at the 2<sup>nd</sup> 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.

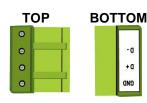
#### **PINOUT CONFIGURATION: RS-232 SIDE – DB9 FEMALE**

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



# **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						
MEAN TIME BEFORE FAIURE:	251,702 Hours						
RELIABILITY	Low Failure Rate – 99+% Reliability Since Inception						
WARRANTY:	5 Year Replacement Warranty						

FEM. DB9

## **APPLICATIONS:**

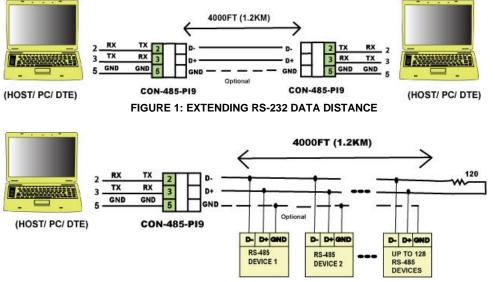


FIGURE 2: MASTER/SLAVE MULTIPLE DROP CONFIGURATION