CON-485-PE9
RS-232 to RS-485 Converter – 9 Pin

Datalogging and is powered from the RS-232 data lines; no external power is required.

Two separate terminal blocks, a rugged terminal block and a terminal block with built-in 120-ohm termination, providing an optional screw-lug wire termination for the port. The unit is enclosed in a rugged ABS housing and is powered from the RS-232 data lines; no external power is required.

The SerialComm CON-485-PE9 is a bi-directional port powered RS-232 to RS-485 converter which converts a full-duplex RS-232 port to a half-duplex two-wire RS-485 port. 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-PE9 has a DB9 female connector on the RS-232 serial port, and DB9 male connector on the RS-485 port.

The Terminal Block Selection Guide includes two terminal blocks - one for rugged applications and the other with selectable 120-ohm termination.

**TERMINAL BLOCK SELECTION GUIDE:**
The CON-485-PE9 comes with two terminal blocks for maximum performance and flexibility. One terminal block is a rugged terminal block which is sealed to provide protection from the elements and vibration. The other terminal block has a built-in 120 Ohm termination selectable by a jumper on the terminal block. Both terminal blocks include fastening hardware.

**CERTIFICATIONS:**
The SerialComm CON-485-PE9 is CE, FCC, RoHS and REACH certified.

**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: 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 # OF CONNECTIONS:** 32 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:** With Terminal Block: 1.2oz (36 grams) Without Terminal Block: 0.8oz (24 grams)
- **DIMENSIONS:** With Terminal Block: 3.15” X 1.33” X 0.70” (80.0 mm X 33.8 mm X 17.8 mm) Without Terminal Block: 2.47” X 1.33” X 0.70” (62.8 mm X 33.8 mm X 17.8 mm)

**ENVIRONMENTAL**
- **OPERATING TEMP:** -4° F to 140° F (-20°C to 60° 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
TERMINATION GUIDE:
The CON-485-PE9 terminal block has an optional built-in 120-ohm termination. 12-ohm termination is an advanced feature typically used to reduce noise and signal reflections. It is recommended to use 120-ohm termination if you are exceeding 600 feet in distance, 19.6K baud or in an electrically noisy or industrial environment. The terminal blocks are shipped with 120-ohm termination turned off but can be turned on using the convenient jumper setting located on the left bottom of the terminal block.

TROUBLESHOOTING INSTRUCTIONS:
Using two CON-485-PE9 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-PE9 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-PE9 units are working properly.

APPLICATIONS: