MODEL ATC-131
Port-Powered RS-232 Isolator, 9 Pin, 2 Channel
User's Manual

1.0 General Description

The ATC-131 optically isolates and protects the transmit and receive lines of your RS-232 port from ground loops and power surges up to 2500V RMS for one minute. The data stream is converted from an electrical pulse to an optical beam, then back to an electrical pulse. Because there is no electrical connection between the DTE and DCE sides of the isolator, the ATC-131, unlike a surge suppressor, will not pass large sustained power surges through to your equipment.

This isolator will protect both the transmit and receive lines at baud rates up to 57.6K without the need of an external power supply. Power is derived through the transmit and handshake lines. Special circuitry allows the ATC-131 to be powered regar-dless of the state of the handshake lines. At least one handshake line must be connected on each side of the isolator. Note that handshake line signals are not passed through the isolator

2.0 Specifications
2.1 Interface
Conforms to EIA RS-232 standards
2.2 Connectors and signals

The ATC-131 has a DB-9 female connector on the RS-232 DCE side and DB-9 male connector on the RS-232 DTE side.
RS-232 DCE Side :
Connector: DB-9 Female.
Signals: Use Pins 3 (RXD)and 2 (TXD) Pins 7 (RTS) and 8 (CTS) are tied together Pins 4 (DTR), 6 (DSR), and 1 (CD) are tied together.
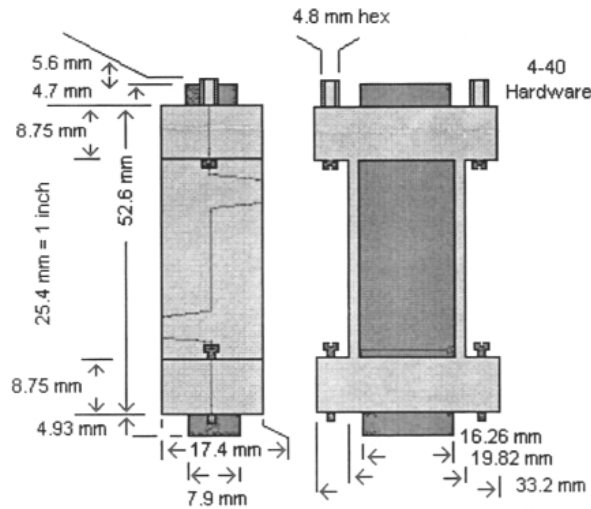RS-232 DTE Side:
Connector: DB-9 male.
Signals: Use Pins 3 (TXD) and 2 (TXD) Pins 7 (RTS) and 8 (CTS) are tied together Pins 4 (DTR), 6 (DSR), and 1 (CD) are tied together.
2.3 Data Rate : 300 to 57.6KBPS
2.4 Dimensions:
2.4"L x 1.3"W x 0.66"H
(6.1L x 3.3W x 1.7H cm)

Note: Male DB9 Connectors are sized slightly larger outside

3.0 Installation
3.1 RS-232 DTE and DCE Interface
Typical DTE devices include PCs, terminals, and printers. Typical DCE devices include modems and multiplexers.
Most DTE ports are male and most DCE ports are female. If the ATC-131 inserted into a

Working system, it will only pass signals if inserted correctly. If the devices communicate with each other without the ATC-131 9S in line, but not when it is installed, simply reverse the isolator.
If your port meets the low voltage requirements of RS-562, you will not be able to use this isolator. An RS-562 portwill only produce about 3.7 volts, which is not adequate to power the isolator. Typically the only devices that have this type of port are palmtop or very low power laptop computers.
NOTE: Connecting an external power supply to the handshake lines may damage the isolator. Contact technical support for more information on connec-ting an external power supply to the handshake lines.

3.2 Connection Diagram