

Optically Isolated Data Line Interfaces

RS232 and RS422/485 data cables often interact with the ground wiring in a building. The result is ground loops (current flowing through the data cable ground wire), electrical noise and transient surges which can disrupt data communication and damage your equipment. Peradata's self-contained isolating interfaces pass data bi-directionally between computer equipment while providing complete electrical isolation. They increase system reliability in harsh industrial environments.

- Model IC-232** transmits RS232 data bidirectionally.
- Model IC-422** converts data bidirectionally between RS232 and RS422/485 signal formats.
- Model ISO-422** transmits RS422 data bidirectionally.

Features

Totally self-contained; each port has on-board power supply for maximum transmission distance.

1500 volt rated optical isolation eliminates common-mode voltages and ground loops.

Remote control of RS422/485 high impedance output state for multi-drop operation (8 channel models).

Operates at up to 150Kbit/s.

LEDs show status of data lines without loading.

Protects equipment from transient overvoltage pulses and static discharge (ESD) (with optional surge-suppression feature).

Applications

RS232 and RS422 LANs and Remote Terminals

Prevent ground loops where interconnected equipment are powered from different electrical circuits.

Data Acquisition

Isolate sensitive computer circuitry from measuring equipment and test circuits.

Industrial Control

Prevent noise and induced signals from damaging equipment and corrupting data.

Telecommunications

Isolate communications equipment from telephone system equipment.

Long Distance Data Transfer

Doubles communication distances and provides signal conditioning.

Trouble Shooting

Isolate faults and monitor data traffic.



Specifications:

Interface:	Fully compatible with EIA RS232 and RS422
Capacity:	4 lines each direction (8 total), or 1 line each direction (2 total), depending on model.
Data Rate:	up to 150kbit/s
Power Source:	120 Vac, 60 Hz, 4W
Common Mode Voltage Rating (Isolation):	1500 volts between ports and between each port and AC line
Connections:	
Self-contained models:	Industry standard DB25 connectors
OEM Circuit Cards:	wire terminal connectors
Indicators:	"Power" and each data line (3 or 9 total)
Cabinet:	Durable, impact-resistant phenolic 5-3/16 x 6-3/4 x 2-1/4 in.. (13.2 x 17.15 x 5.7 cm)
Weight: Self-contained models	3.5 lb.(1.6 kg.)

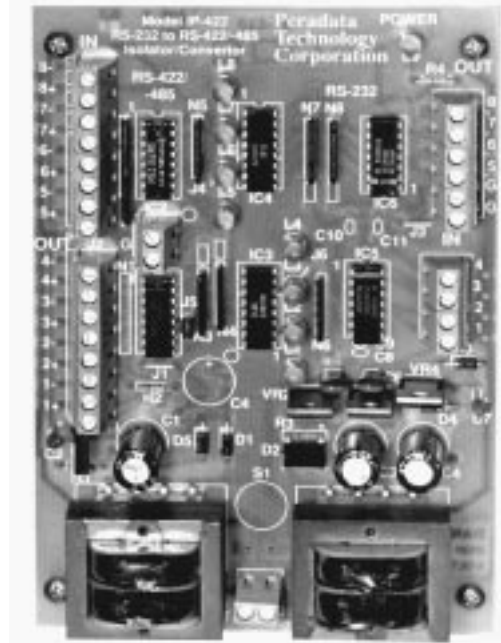
Optically Isolated Data Line Interfaces - OEM Products

Convertor/Isolator/Monitor Circuit Assemblies for RS232 and RS422/485 Data Lines

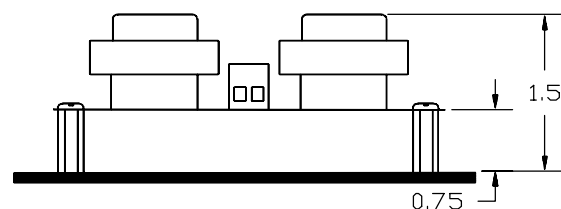
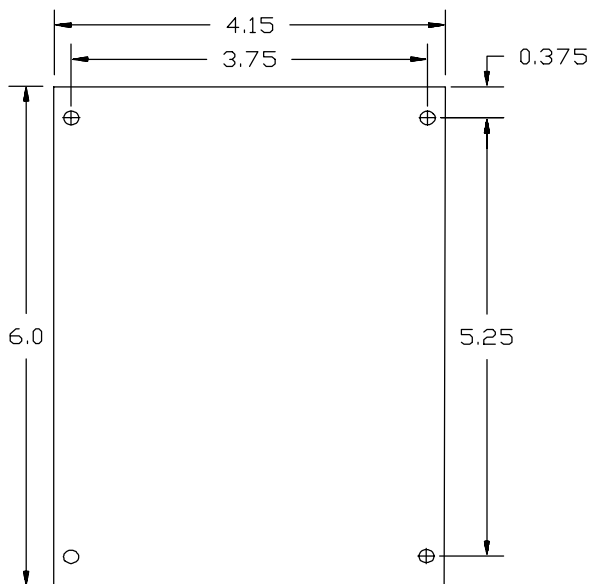
If your products connects to your customers equipment, it's vulnerable to ground loops, common-mode voltages, transient surges and spurious signals present in your customer's environment.

These circuits are OEM versions of Models IC-232, IC-422 and ISO-422. They isolate RS232 and RS422 based equipment while transmitting data bidirectionally between them.

Available in eight channel or two channel models.



Dimensions and Mounting Details



Model Designations

Optically Isolated Interfaces -

Self-contained units with cabinets

Model	Description
IC-232-8	8 line RS232 isolating interface
IC-232-8SP*	Same as IC-232-8 with surge suppression
IC-422-8	8 line RS232 to RS422/485 isolator/convertor
IC-422-8SP*	Same as IC-422-8 with surge suppression
ISO-422-8	8 line RS422 isolating Interface
ISO-422-8SP*	Same as ISO-422-8 with surge suppression

* These models have surge suppression on one port. For Model IC-422 indicate whether RS232 or RS422 port is to be protected.

Optically Isolated Interfaces -

Circuit assemblies for OEM applications

Model	Description
IP-232-8	8 line RS232 isolating interface circuit
IP-232-8SP*	Same as IP-232-8 with surge suppression
IP-232-2	2 line RS232 isolating interface circuit
IP-232-2SP*	Same as IP-232-2 with surge suppression
IP-422-8	8 line RS232 to RS422/485 isolator/convertor
IP-422-8SP*	Same as IP-422-8 with surge suppression
IP-422-2	2 line RS232 to RS422/485 isolator/convertor
IP-422-2SP*	Same as IP-422-2 with surge suppression
IPO-422-8	8 line RS422/485 isolating interface circuit
IPO-422-8SP*	Same as ISO-422-8 with surge suppression
IPO-422-2	2 line RS422/485 isolating interface circuit
IPO-422-2SP*	Same as ISO-422-2 with surge suppression

* These models have surge suppression on one port. For Model IP-422 indicate whether RS232 or RS422 port is to be protected.