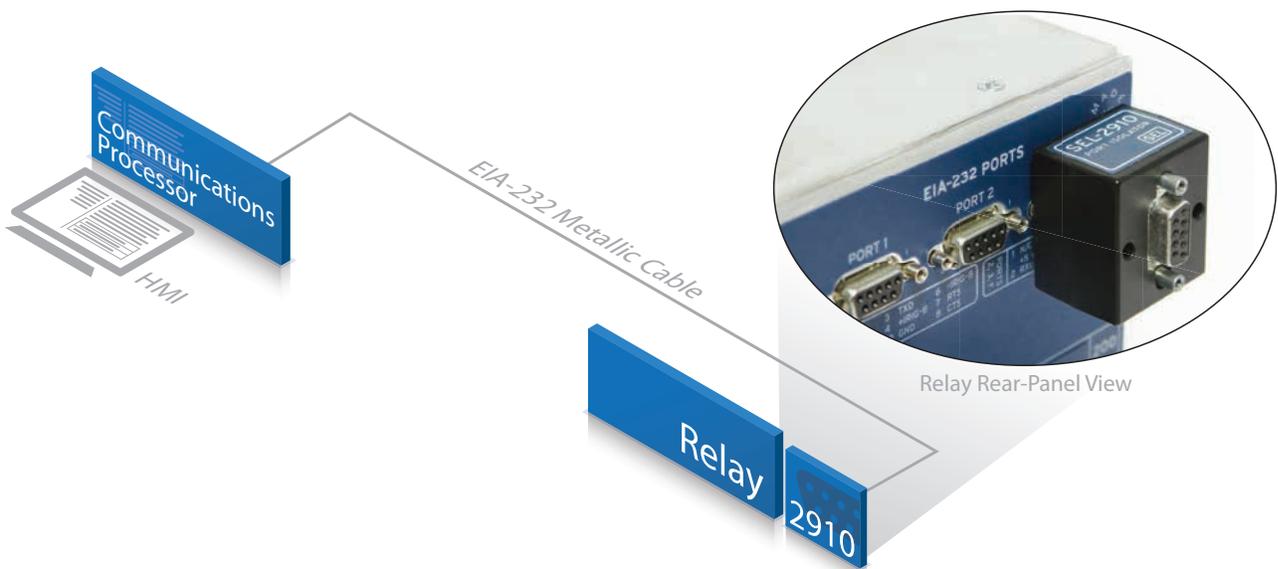


Isolate EIA-232 and IRIG-B Serial Data Links With the SEL-2910 Port Isolator



Apply in existing installations where using fiber optics or modifying cable routing is not feasible.

Features and Benefits

Port-Powered

Powered from the host device EIA-232 transmit-data signal.

Improved Safety

Isolates to 2500 V rms.

Compact

Plugs directly onto a DB-9 connector.

Utility Quality

Meets or surpasses applicable IEC and IEEE standards for temperature, humidity, vibration, shock and bump, seismic, electrostatic discharge, and dielectric strength (see back page).

Secure and Reliable Data Transfer

Reduces susceptibility to interference induced by high-current sources.

SEL-2910 Port Isolator

General Specifications

Interface

Conforms to EIA-232 standard

Connectors

Male and female DB-9

Data Rate

Up to 40 kbps

Isolation

Transmit, receive, and IRIG-B up to 2500 V rms

Power Requirements

Powered by EIA-232 transmit-data signal

Min. ± 5.5 Vdc; max. ± 12 Vdc

Size (H x W x D Installed)

1.5" x 1.32" x 1.16" (3.81 x 3.35 x 2.95 cm)

Set Screw Torque

5 to 7 in-lbs

Operating Temperature Range

-40° to +85°C (-40° to +185°F)

Type Tests

Cold

EN 60068-2-1:1990/1993, Test Ad; 16 hr at -40°C

Dry Heat

EN 60068-2-2:1974/1993 Test Bd; 16 hr at +85°C

Damp Heat, Cyclic

IEC 60068-2-30:1980, +25° to +55°C, 6 cycles, 95% humidity

Vibration

IEC 60255-21-1:1995, Class 1 (endurance); Class 2 (response)

Shock and Bump

IEC 60255-21-2:1995, Class 1 (endurance); Class 2 (response)

Seismic

IEC 60255-21-3:1995, Class 2 (quake response)

Electrostatic Discharge

EN 60255-22-2:1996, Levels 1, 2, 3, 4

EN 61000-4-2:1995, Levels 1, 2, 3, 4

Dielectric Strength

IEC 255-5:1977, IEEE C37.90:1989

2500 V rms, 1 minute

Applied between male and female DB-9 ports

Radiated Radio Frequency

ENV 50140:1993, 10 V/m

IEC 60255-22-3:2000

Exception: 4.3.2.2 freq. sweep w/ 200 steps per octave

IEEE C37.90.2:1987

Exceptions:

5.2.2 frequency sweep w/ 200 steps per octave

5.5.3 digital equipment modulation test not performed

5.5.4 test signal turned off between frequency steps to simulate keying

IEEE C37.90.2:1995, 35 V/m

Surge Withstand

IEEE C37.90.1:1989

IEEE PC37.90.1/D6:2000 (draft standard)

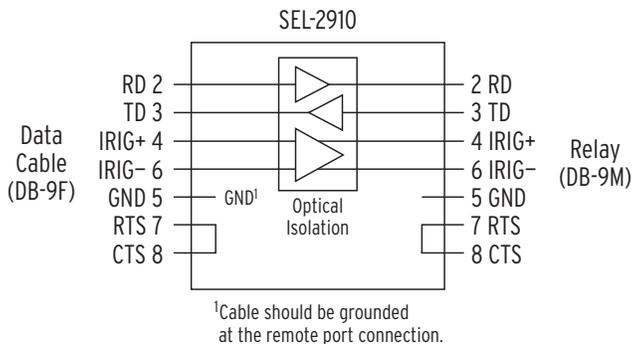
3000 V oscillatory, 5000 V transient

Applied to shell and pins of DB-9F connectors

Fast Transient

Level 4 applied to communications cables connected to SEL-2910 (DB-9F)

IEC 255-22-4:1992, EN 61000-4-4:1995



SEL-2910 Port Isolator block diagram and pin definitions.



Pullman, Washington USA
Tel: +1.509.332.1890 • Fax: +1.509.332.7990 • www.selinc.com • info@selinc.com

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