DIN Rail 2-Wire Transmitter Isolators

DRSL-LPO Series

- 1 Channel (DRSL-LPO-1) or 2 Channel (DRSL-LPO-2) 2-Wire Transmitter Isolators
- Powered By the Host (Output) Current Signal Loop
- 1:1 Signal Ratio
- Low Channel Voltage Drop
- Available Input Transmitter (Tx) Supply
- Fast Response Time <5 ms
- High Conversion Accuracy, <0.05% of Span (3.8 to 20.5 mA)
- Slimline 6 mm (0.24") Housing

DRSL-LPO-1 and RAIL-35-1 (sold separately) shown smaller than actual size.

The DRSL-LPO Series DIN rail 2-wire transmitter isolators provide a competitive choice in terms of both price and technology for galvanic isolation of current signals to SCADA systems or PLC equipment. These units provide isolation and 1:1 conversion of standard current signals and are powered by the host (output) current signal loop. Input transmitter (Tx) power supply of 3.5 to 32.5V is provided.

The DRSL-LPO series offers isolation between input and output, provides surge suppression and protects control systems from transients and noise. These units also eliminate ground loops and can be used for measuring floating signals. Low power consumption facilitates DIN rail mounting without the need for any air gap. Measurement ranges are factory calibrated. These isolators operates over a wide temperature range from -25 to 70°C (-13 to 158°F).

SPECIFICATIONS

NUMBER OF CHANNELS
DRSL-LPO-1: 1
DRSL-LPO-2: 2

CURRENT INPUT
Signal Range (Input to Output): 3.8 to 20.5 mA
Signal Conversion: 1:1
Functional Range: 3.5 to 23 mA (NAMUR NE43 compliant)
Available 2-Wire Transmitter (Tx) Supply: 3.5 to 32.5V

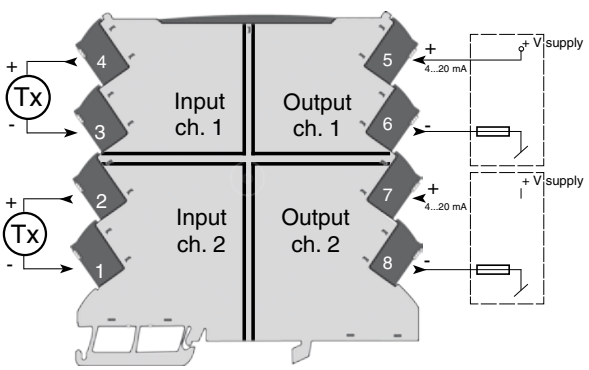
CURRENT OUTPUT
Output Loop Current Limitation: 24 mA typical
Output Overload: 50 mA max

GENERAL
Supply Voltage: 6 to 35 Vdc
Internal Consumption: 50 mW per channel
Voltage Drop (Input to Output): 2.5V typical
Isolation Voltage (Test): 2.5 kVac
Isolation Voltage (Working): 300 Vac
Signal/Noise Ratio: >60 dB
Cut-Off Frequency (3 dB): 100 Hz
Response Time (0 to 90%, 100 to 10%): <5 ms
Absolute Accuracy (at 25°C): ≤±8 µA
Temperature Coefficient (>25°C): ≤±0.02 µA [(T-25°C) x V_{supply}]
Temperature Coefficient (<25°C): ≤±0.07 µA [(T-25°C) x V_{supply}]
EMC Immunity Influence: <±0.5% of span (4 to 20 mA)
Extended EMC Immunity
NAMUR NE 21, A Criterion, Burst: <±1% of span

ENVIRONMENTAL
Operating Temperature: -25 to 70°C (-13 to 158°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Calibration Temperature: 20 to 28°C (68 to 82°F)
Relative Humidity: 0 to 95% RH non-condensing
Protection Degree: IP20
Installation Area: Pollution degree 2 and measurement/overvoltage category II

MECHANICAL
Dimensions: 113 H x 6.1 W x 115 mm D (4.4 x 0.24 x 4.5")
Weight: 70 g (0.15 lb) approx
DIN Rail Type: DIN EN 60715 - 35 mm
Wire Size: 0.13 x 2.5 mm^2/ AWG 26 to 12 stranded wire
Screw Terminal Torque: 0.5 Nm

CONNECTIONS



To Order

Model No.	Description
DRSL-LPO-1	DIN rail 2-wire transmitter isolator, 1 channel
DRSL-LPO-2	DIN rail 2-wire transmitter isolator, 2 channel
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length
DRSL-MOD-STOP	Module stop (screwed onto DIN rail to support and hold mounted devices)

Ordering Example: DRSL-LPO-1 *DIN rail 2-wire transmitter isolator, 1 channel,* ***RAIL-35-1*** *DIN rail and* ***OCW-1,*** *OMEGACARE℠ extends standard 1-year warranty to a total of 2 years.*