## SIGNAL CONDITIONERS



# Isolated DIN Rail Repeater/Splitter for Current Signals

#### DRSL-SP1



- Isolation and Conversion of Current Signals
- ✓ Splitter Function: 1 Current Input—2 Current Outputs
- ✓ Slimline Housing—Only 6 mm (0.24") Wide
- ✓ Fast Response Time <7 ms
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- ✓ High Accuracy, <0.05% of Span
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- ✓ Easy-to-Use—No Setup Needed

The DRSL-SP1 isolated repeater/ splitter provides a competitive choice in terms of both price and technology for galvanic isolation of current signals to SCADA systems or PLC equipment. Two current outputs are provided which mirror the single current input.

The DRSL-SP1 can be used for signal conversion of a standard process current signal into two individual analog signals. The unit offers 4-port isolation, provides surge suppression and protects control systems from transients and noise. The DRSL-SP1 also eliminates 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. The unit operates over a wide temperature range from -25 to 70°C (-13 to 158°F).

#### **SPECIFICATIONS**

**CURRENT INPUT** 

Measurement Range: 0 to 20.5 mA Functional Range: 0 to 23 mA Input Voltage Drop: <1.5 Vdc

**CURRENT OUTPUT Number of Outputs: 2** 

Signal Range: 0 to 20.5 mA (span)

**Load:** 23 mA/300  $\Omega$  maximum **Load Stability:**  $\leq$ 0.01% of span/100  $\Omega$  (span = 0 to 20 mA)

Current Limit: ≤28 mA



GENERAL

Supply Voltage (via Power Rail or Connectors): 16.8 to 31.2 Vdc Power Consumption: 0.8 W max Internal Consumption: 0.4 W

typical/0.65 W max **Isolation:** Input/output 1/ output 2/supply

Isolation Voltage (Test): 2.5 kVac Isolation Voltage (Working):

300 Vac

Signal/Noise Ratio: > 60 dB Response Time (0 to 90%, 100 to 10%): <7 ms

Accuracy: <±0.05% of span

**Temperature Coefficient:** <±0.01% of span/°C

EMC Immunity Influence: <±0.5%

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<sup>2</sup>/AWG

26 to 12 stranded wire

Screw Terminal Torque: 0.5 Nm





DRSL-SP1 and DRSL-PWR-RAIL (sold separately) shown smaller than actual size.

### **CONNECTIONS** Current Current Input output Output 1 Input Supply + Output 2 Supply Supply -Current output No connection Rail, +24 VDC Rail, Gnd. No connection No connection



OMEGACARE™ extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE™ covers parts, labor and equivalent loaners.

To Order	
Model No.	Description
DRSL-SP1	Isolated repeater/splitter for current signals

Model. No.	Description
DRSL-PWR-RAIL	Power rail (with cover and two end covers, one right hand and one left hand), 1 m (3.3') length
DRSL-PCU	Power connector unit, 24 Vdc/2.5 A output to power rail
DRSL-MOD-STOP	Module stop (screwed onto power rail to support and hold mounted devices)

Ordering Example: DRSL-SP1 isolated repeater/splitter for current signals, DRSL-PWR-RAIL power rail, DRSL-PCU power connector unit, DRSL-MOD-STOP module stop and OCW-1, OMEGACARE <sup>™</sup> extends standard 1-year warranty to a total of 2 years.