

# SR2101

## DC INPUT, ISOLATED, TWO-WIRE TRANSMITTER, 50 mm DIAMETER CASE



### FEATURES

- Provides DC Output Proportional to a DC Voltage or Current Input
- Fully Isolated Input/Output
- Unlimited \* Choice of Input Ranges via Interchangeable Range Cards
- Reverse Polarity Protected
- Test Points for Loop Current Monitoring without Breaking Loop Circuit
- 50 mm Diameter Case - 33 mm Mounting Hole Spacing
- NEMA-4 Connection Head and Explosion-Proof Housing Available
- Low Cost
- 5 Year Warranty

### DESCRIPTION

The SR2101 is a low-cost, reliable, DC input two-wire transmitter for field or panel mounting in various industrial housings and enclosures. It provides a DC output current (4/20 mA) proportional to an DC voltage or current input.

The output is galvanically isolated from the input.

Test points located on the SR2101 front panel allow monitoring of loop current value, using a current meter, without breaking the loop.

A plug-in range card permits user ranging to the required voltage or current input range. The output ZERO and SPAN controls are accessible through the top of the case.

The SR2101 is enclosed in an extruded aluminum housing with an aluminum back. A DIN rail mounting clip is available.

### TYPICAL APPLICATION

Remote data acquisition. Distance limited by wire resistance. Voltage to current conversion. Isolation between input and output. Elimination of ground loops. Measurement of signals with high common mode voltages.

All Wilkerson products are designed with RFI filters and lightning protection to reduce susceptibility to electrical noise and damage by lightning.

### SPECIFICATIONS

#### INPUT RANGE

Voltage

any range between  $\pm 128V$  max

(min. full scale span 16 mV)

Current

(internal shunt) any range between  $\pm 0.1 A$  max

(min. full scale span 10  $\mu A$ )

#### INPUT OFFSET

can cancel any offset from

-100% to +100% of span

#### INPUT IMPEDANCE

$V_{in} < 1 V$ :  $\geq 10$  megohms

$V_{in} > 1 V$ :  $> 1$  megohm

$I_{in}$ : range dependent

Current Input Input Shunt Value

0/1 mA 100.0 Ohm

0/5 mA 49.9 Ohm

4/20 mA 61.9 Ohm

10/50 mA 20.0 Ohm

1/100 mA 20.0 Ohm

#### OUTPUT RANGE

4/20 mA

Current Limited = 28 mA

#### ISOLATION

Output / Input

1000 Volts RMS sinewave

#### MAX LOAD RESISTANCE

$= [(V_{supply} - 10)/20 \text{ mA}]$

kilohms

#### RESPONSE TIME

(Range Dependent)

- Step Change

150 ms for 99% of final value

#### ACCURACY

$\pm 0.1\%$  of span

#### LINEARITY

Better than  $\pm 0.05\%$  of span

#### COMMON MODE REJECTION

120 dB, DC to 60 Hz

#### OPERATING TEMPERATURE

$-13^{\circ}F$  to  $176^{\circ}F$  /  $-25^{\circ}C$  to  $80^{\circ}C$

#### TEMPERATURE STABILITY

$\pm 0.015\%$  of span per  $^{\circ}C$

#### POWER

10 to 36 VDC, Polarity-Protected

#### SUPPLY VOLTAGE EFFECT

0.02% of span max, 10 to 36 V

\* Within specified range limits.

**ORDERING INFORMATION**

**INPUT**

**Select Units**

VDC    mADC

**Enter Input**

Zero Scale

Full Scale

**OPTIONS**

Conformal Coating

**TAGS**

**Specify Tag Numbers**

Tag number is typed on product label at no charge.

**Enter Tag Number(s)**

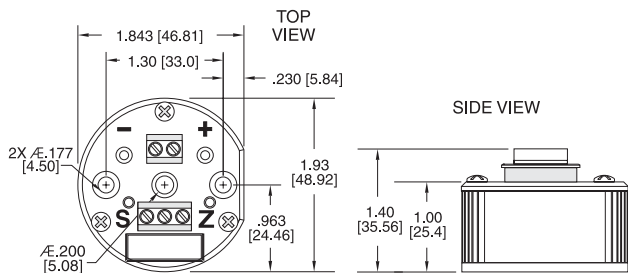
**ACCESSORIES**

**SR2101**

DMP2000	Mounting Plate, DIN-Rail (SR2000 & TW300)	Qty _____
TSH-A6L	NEMA-4 Aluminum Connection Head (SR2000 & TW300)	Qty _____
SR-CARD	Silver Series Transmitter Range Card (SR2000)	Qty _____
DR1	DIN-Rail, 35 mm Symmetrical, 39 inches (1 meter)	Qty _____
XJAY	Explosion-Proof Housing for SR2000 and TW300 Series	Qty _____

**DIMENSIONS**

Inches [mm]



**CONNECTIONS**

