



# SF1302

## RTD INPUT SLIM PROFILE TWO-WIRE TRANSMITTER

### FEATURES

- Provides 4/20 mA DC Output Proportional to a Two-Wire RTD Input
- 5/8" Thick Low Profile Design Allows Mounting of Two Transmitters in a Single Standard Size Connection Head for use with Dual RTD's
- 2-Wire, 10 ohms to 1000 ohms RTD's
- Linearized for Platinum RTD's
- NEMA-4 Connection Head Available
- 50 mm DIN Diameter Case - 33 mm Mounting Hole Spacing
- Low Cost
- 5 Year Warranty

### DESCRIPTION

The SF1302 is a low-cost, reliable, RTD input two-wire transmitter designed with the OEM in mind. These transmitters are housed in a low profile, 50 mm diameter extruded aluminum case. This thin design allows two transmitters to be stacked in one standard connection head for use with dual RTD sensors.

The SF1302 provides a DC output current (4/20 mA) proportional to a two-wire RTD input. Filtering and

conditioning to reduce susceptibility to transients and noisy operations provides accurate, trouble-free operation. Linearization is provided for platinum RTDs.

The SF1302 utilizes a single constant current source to excite the RTD. The output ZERO and SPAN controls are located on the top of the case. Terminations are made to screw terminal connectors on the top of the case. A center hole provides clearance for 1/4

inch diameter and smaller sensors.

An optional DIN-rail mounting kit allows the SF1302 to be mounted on standard 35 mm rails. Two transmitters can also be stacked in the DIN-rail if space is limited.

### TYPICAL APPLICATIONS

Remote temperature data acquisition.

### SPECIFICATIONS

#### INPUT

2-Wire, 10 ohms to 1000 ohms  
Pt, Ni, Cu  
(100 Ohm Pt RTD lead  
resistance = 0.1 ohms max.  
ie: 24 in. Probe with 24 awg  
Leads)

#### OUTPUT

4/20 mA

#### INPUT RANGE

specify any range within RTD  
limit (min. 50°F / 28°C Span)

#### EXCITATION CURRENT

2.65 mA

#### MAX LOAD RESISTANCE

$R_{max} = (V_{supply} - 12V) /$   
.020 mA) kilohms

#### ACCURACY

±0.1% of span or 0.2 ohms,  
whichever is greater

#### LINEARITY

(Platinum RTD, output vs.  
temp.)  
±0.05% of span (-50 to 500°C)  
±0.15% of span (0 to 900°C)

#### COMMON MODE REJECTION

100 dB, DC to 60 Hz

#### OPERATING TEMPERATURE

-13°F to 176°F / -26°C to 80°C

#### TEMPERATURE STABILITY

±0.02% of span or  
0.025°C/ °C,  
whichever is greater

#### POWER

12 - 32 VDC, polarity protected

#### SUPPLY VOLTAGE EFFECT

0.02% of span max.,  
12 to 32 VDC

**ORDERING INFORMATION**

**INPUT**

**Select Units**

Deg C  Deg F

**Enter Input**

Zero Scale

Full Scale

**Select Sensor**

- 100 ohm Pt., .00385 Alpha
- 100 ohm Pt., .00392 Alpha
- 100 ohm Pt., .00375 Alpha
- 1000 ohm Pt., .00385 Alpha
- 1000 ohm Pt., .00392 Alpha
- 10 ohm Cu.
- Other - Specify in Notes

**OPTIONS**

Conformal Coating

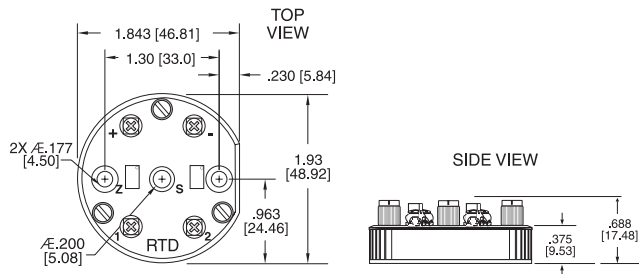
**ACCESSORIES**

**SF1302**

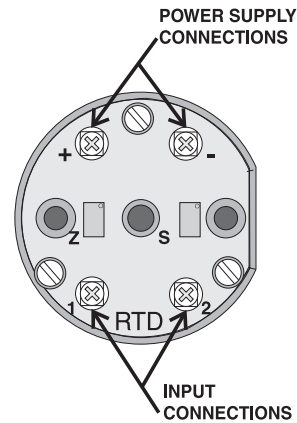
DMP2000	Mounting Plate, DIN-Rail & Surface (SR2000 & TW300)	QTY _____
TSH-A6L	NEMA-4 Aluminum Connection Head (SR2000 & TW300)	QTY _____
DR1	DIN-Rail, 35 mm Symmetrical, 39 inches (1 meter)	QTY _____
XJAY	Explosion-Proof Housing (SR2000 & TW300 Series)	QTY _____

**DIMENSIONS**

Inches [mm]



**CONNECTIONS**





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