Linearized and isolated RTD and Thermocouple transmitters are part of the Series SC4000 Iso Verter® II Signal Conditioning Modules. These modules completely isolate the input from the output and from ground. Compatible with industry standard 35 mm DIN Rail mount transmitters and isolators, these modules are easily applied in new or existing installations.

The SC4380 Process Signal Converter/Isolator accepts virtually all standard process signals as an input, and isolates and retransmits the signal in either the same units or virtually any other standard process signal. The SC4380 can be field programmed for reverse or direct action and can receive and transmit single sided or bipolar* signals. Low Voltage units (SCL) are also available.

The SC4151 RTD Transmitters each offer a fixed scale range input (selected when ordered) and a linearized, isolated, field selectable 4 to 20 mA or 0 to 10 VDC output. Output is selected by simple switch settings. Low Voltage units (SCL) are also available.

The SC4130 Thermocouple Transmitter offers a fixed scale range input (selected when ordered) and a linearized, isolated, field selectable 4 to 20 mA or 0 to 10 VDC output. Output is selected by simple switch settings. Low Voltage units (SCL) are also available.

Note: The term “bipolar” refers to an input or output that crosses zero volts. Certain devices have ranges that run from minus to plus voltages (eg. -1 to +5 VDC, -10 to +10 VDC, etc.). The SC4380 Iso Verter® II can be set up to accept a bipolar signal input or provide a bipolar output.

To Order Use Range Code as Suffix:

### Specifications

**Isolation:** 1500 VAC RMS.

**Linearity:** 0.1% of full scale.

**Drift:** ±0.02%/°C typical, ±0.05%/°C maximum.

**Power Supply:** SC: 85 to 265 VDC/VAC 50 to 400 Hz; SCL: 12 to 24 VDC/VAC 50 to 400 Hz.

**Output Loads:**
- Current: 600 ohms maximum voltage: 500 ohms minimum (20 mA maximum).

**Input Characteristics:**
- SC4380: Voltage: 1 megohms impedance; Current: 10 ohms;
- SC4151: RTD Search current < 500 µA;
- SC4130: 3 megohms impedance.

**Case Size:**
- 0.866˝ W (22.5 mm) x 2.950˝ H (75.0 mm) 3.880˝ D (98.5 mm).

**Mounting:** Mounts on industry standard 35 mm DIN Rail (DIN EN50022-35).

### Input Ranges

**Current**
- 0 to 5 mA
- 0 to 10 mA
- 0 to 20 mA
- 0 to 50 mA
- 0 to 100 mA
- 1 to 5 mA
- 4 to 20 mA
- 10 to 50 mA

**Voltage**
- 0 to 100 mV
- 0 to 200 mV
- 0 to 500 mV
- 0 to 1 V
- 0 to 5 V
- 0 to 10 V
- 1 to 5 V
- 2 to 10 V

### Model SC4151 & SCL4151

**Model SC4151 Range Codes**
- A = DIN, -100 to 200°C
- B = DIN, 0 to 100°C
- C = DIN, 0 to 150°C
- D = DIN, 0 to 200°F
- E = DIN, 0 to 200°C
- F = DIN, 0 to 400°F
- G = DIN, 0 to 250°C
- H = DIN, 0 to 500°F
- J = DIN, 0 to 500°C
- K = DIN, 0 to 1000°F

**Model SCL4151 Range Codes**
- A = DIN, -100 to 200°C
- B = DIN, 0 to 100°C
- C = DIN, 0 to 150°C
- D = DIN, 0 to 200°F
- E = DIN, 0 to 200°C
- F = DIN, 0 to 400°F
- G = DIN, 0 to 250°C
- H = DIN, 0 to 500°F
- J = DIN, 0 to 500°C
- K = DIN, 0 to 1000°F

### Model SC4380 & SCL4380 Operating Ranges

**Inputs**

<table>
<thead>
<tr>
<th>Current</th>
<th>Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 5 mA</td>
<td>0 to 100 mV</td>
</tr>
<tr>
<td>0 to 10 mA</td>
<td>0 to 200 mV</td>
</tr>
<tr>
<td>0 to 20 mA</td>
<td>0 to 500 mV</td>
</tr>
<tr>
<td>0 to 50 mA</td>
<td>0 to 1 V</td>
</tr>
<tr>
<td>0 to 100 mA</td>
<td>0 to 5 V</td>
</tr>
<tr>
<td>1 to 5 mA</td>
<td>0 to 10 V</td>
</tr>
<tr>
<td>4 to 20 mA</td>
<td>1 to 5 V</td>
</tr>
<tr>
<td>10 to 50 mA</td>
<td>2 to 10 V</td>
</tr>
</tbody>
</table>

**Outputs**

<table>
<thead>
<tr>
<th>Current</th>
<th>Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 1 mA</td>
<td>0 to 1 V</td>
</tr>
<tr>
<td>0 to 5 mA</td>
<td>0 to 5 V</td>
</tr>
<tr>
<td>0 to 10 mA</td>
<td>0 to 10 V</td>
</tr>
<tr>
<td>1 to 5 mA</td>
<td>1 to 5 V</td>
</tr>
<tr>
<td>2 to 10 V</td>
<td>1 to 5 V</td>
</tr>
</tbody>
</table>

*Note: The term “bipolar” refers to an input or output that crosses zero volts. Certain devices have ranges that run from minus to plus voltages (eg. -1 to +5 VDC, -10 to +10 VDC, etc.). The SC4380 Iso Verter® II can be set up to accept a bipolar signal input or provide a bipolar output.*