The Model SCU is a universal analog input, loop powered transmitter for isolation, display and retransmission of all common process sources. The input allows selection of one of eight thermocouple types, three RTD types and process inputs, scalable in engineering units from -19999 to +19999, with adjustable decimal points. Featuring 1500 V isolation between input and output, the SCU also offers two independent alarms for isolation between input and output, the SCU also offers two independent alarms for additional application flexibility.

**INPUT RANGES**

<table>
<thead>
<tr>
<th>Input Type</th>
<th>Range °F</th>
<th>Range °C</th>
<th>Input Type</th>
<th>Range °F</th>
<th>Range °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type J</td>
<td>-100 to +600</td>
<td>-73 to +316</td>
<td>Type B</td>
<td>+15 to +1800</td>
<td>+80 to +1000</td>
</tr>
<tr>
<td>Type K</td>
<td>-200 to +2500</td>
<td>-125 to +1371</td>
<td>Type N</td>
<td>+10 to +2000</td>
<td>+50 to +1371</td>
</tr>
<tr>
<td>Type T</td>
<td>-350 to +750</td>
<td>-194 to +237</td>
<td>Type R</td>
<td>+15 to +2000</td>
<td>+80 to +1371</td>
</tr>
<tr>
<td>Type E</td>
<td>-100 to +1800</td>
<td>-73 to +926</td>
<td>Type S</td>
<td>-17 to +1760</td>
<td>-6 to +1300</td>
</tr>
<tr>
<td>Type F</td>
<td>0 to 3200</td>
<td>9 to +1800</td>
<td>Type N</td>
<td>+10 to +2000</td>
<td>+50 to +1371</td>
</tr>
<tr>
<td>Type G</td>
<td>-50 to 1100</td>
<td>-29 to +59</td>
<td>Type J</td>
<td>+15 to +1800</td>
<td>+80 to +1000</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

**Inputs**

- **Thermocouple:** J, K, T, E, R, S, B, N.
- **RTD:** Platinum DIN, 1000 ohm.
- **Voltage:** 0 to 10 VDC, Current: 0 to 25 mA DC.

**Input Characteristics**

- **Thermocouple Input Impedance:** 3 MΩ minimum.
- **RTD Search Current:** 200 mA.
- **Voltage Input Impedance:** 5000 ohm.
- **Current Input Load:** 10 ohms.

**Input Resolution**

- Low Gain (All other inputs): 1.0 µV per count.
- High Gain (Type T, R, S, B, thermocouples): 1.0 µV per count.

**Input/Output Accuracy:** ±0.1% of full span of selected input.

**Drift:** ±0.1% (0.00 ppm) per °C typical, ±0.2% (0.02 ppm) per °C maximum.

**Operating Temperature Range:** -4 to 131°F (-20 to 55°C).

**Power Supply Requirements:** Load resistance > 0.020 ohms, 4-20 mA VDC minimum, 45 VDC maximum (maximum load 2250 Ohms).

**Process Output:** 4 to 20 mA DC.

**Input Isolation:** 1500 V.

**Alarm Outputs:** Open collector, 24 VDC @ 24 mA maximum, non-isolated.

**Mounting:** Industry standard 35mm DIN rail, DIN EN50022-35. Surface mount adaptor available.

**Display:** 4-1/2˝ digit LCD, 0.3˝ high.

**Weight:** 8 oz (230 g).

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The Iso Verter II Isolator/Converter protects electronic circuits by completely isolating the input and output signals from each other and from ground. Both input and output ranges are fully field selectable with easy to adjust switches. With bipolar input selection and zero suppression, nearly any standard input/output range combination is possible. Zero and span adjustments are easily accessible on top of housing. Units plug into universally available octal sockets for quick, easy installation. Industry standard “pin-out” wiring configuration allows direct replacement of most competitive models. Order optional 481-0159 socket for new installations.

**RANGES AVAILABLE (Field Selectable)**

<table>
<thead>
<tr>
<th>Current (mA)</th>
<th>Voltage (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 mA</td>
<td>0-1 V</td>
</tr>
<tr>
<td>0-5 mA</td>
<td>0-5 V</td>
</tr>
<tr>
<td>0-10 mA</td>
<td>0-10 V</td>
</tr>
<tr>
<td>0-20 mA</td>
<td>0-20 V</td>
</tr>
<tr>
<td>0-50 mA</td>
<td>0-50 V</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

- **Isolation:** 1500 VAC.
- **Linearity:** 0.1% of full span.
- **Drift:** ±0.02%/°C typical, ±0.05%/°C maximum.
- **Ambient Operating Temperature:** 32 to 131°F (0 to 55°C).
- **Output Loads:** Current: 600 ohms maximum.
- **Voltage:** 500 ohms minimum (20 mA maximum).
- **Input Impedance:** Current: 10 ohms, Voltage: 1 megohm.
- **Power Supply:** 85-265 VDC/VAC, 50-400 Hz.
- **Case Size:** (Including socket pins) 2½˝ W x 3½˝ H x 1¼˝ D
- **Height:** 2½˝ (73 mm) above socket.

**Mounting:** Industry standard octal socket.

**Model 4380 Process Signal Converter/Isolator**

**ACCESSORY**

**Model 481-0159 DIN Rail Socket Adapter**