



Signal Isolation Module

Model SIM200-000

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Model SIM200-000 Signal Isolation Module is designed for applications where signal conditioning is required in a single channel, while maintaining electrical isolation between the input and output signals. Designed for a wide variety of input signals, the SIM200-000 Can accept the following types of inputs:

- Potentiometer
- D.C. Voltage
- D.C. Current

Each input signal is conditioned by scaling circuits which can be modified via multi-turn OFFSET, BIAS, and GAIN potentiometer adjustments. Terminal strip connections are provided for an optional external TRIM pot. A multi-turn TRIM RANGE adjustment is also supplied to limit the range of the external TRIM pot. The output circuit can be configured to source either a voltage or current. Typical output ranges are 0 to ± 10 VDC, 0 to 20 mADC, or 4 to 20 mADC.

Electrical Specifications

D.C. Power Input

24 VDC $\pm 10\%$, 400mA max.

Isolation Voltage

500V (DC or AC Peak)

Linearity

$\pm 0.5\%$ of 10 VDC span

Signal Inputs

- **Pot Input**
 +15 VDC, $\pm 5\%$ available to source a 2000 to 10,000 Ohm pot. Use 25 VDC Input Range with external pot.
- **Voltage Input**
 4 selectable ranges (via J1) with greater than 1 meg Ohm input impedance.

J1 Input Range	Gain Range
± 25 VDC	0.15 to 2
± 50 VDC	0.06 to 0.82
± 100 VDC	0.04 to 0.45
± 200 VDC	0.01 to 0.20

Table 1



- **Current Input**
 Single input range (max ± 20 mA) with 250 ohm impedance. Maximum output is ± 12 VDC or ± 24 mA.
- **Trim Potentiometer Input**
 Allows connection of an external 10,000 Ohm pot. to trim the output. Trim range may be as wide as 0 to 100% or limited to 80 to 100%.

Signal Outputs

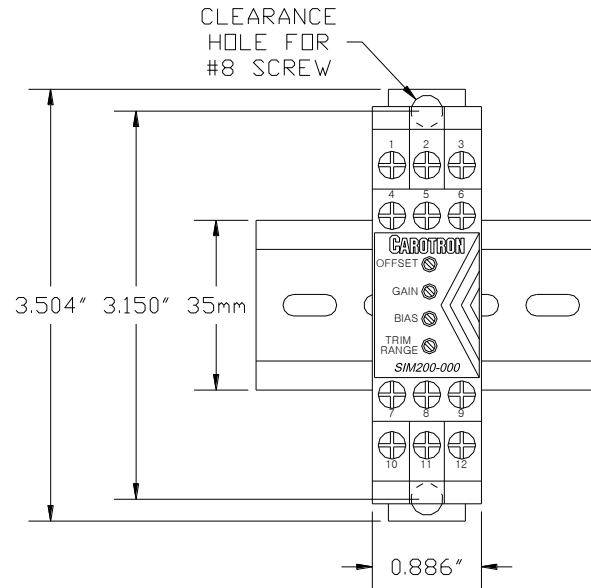
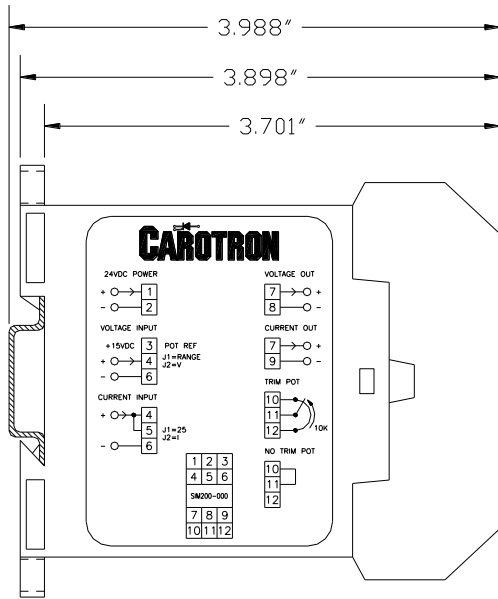
- Voltage Output**
 Selected by position V on J2. This circuit allows the output to source a voltage level of up to ± 12 VDC into a minimum resistance of 600 Ohms. If resistance is too low, output linearity may be affected.

- Current Output**
 Selected by position I on J2. This circuit allows the output to source a regulated current of up to ± 20 mA into a maximum resistance of 500 Ohms. Using the BIAS pot, the output can source a 4 to 20mA signal.

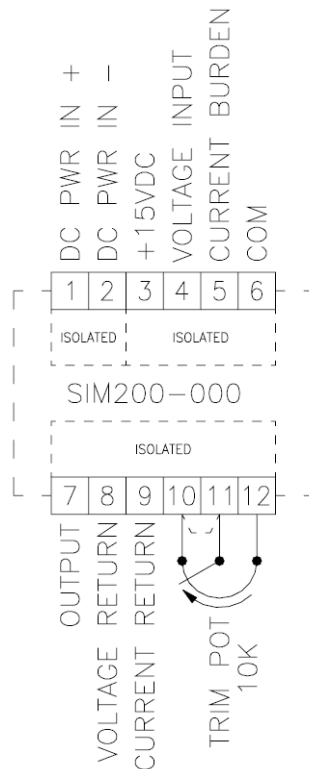
Temperature Range

- Chassis: 0-55°C

Physical Dimensions



General Connections



Signal Isolation Module SIM200-000

Physical Specifications

3.504" H x 0.886" W x 3.898" D

Shipping Weight: 2 lbs.

View or download the complete SIM200-000 Instruction Manual (MAN1052-00) from www.carotron.com .



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