



# 6N1-ISO

## 6 Analog / Digital Inputs to 1 Analog Output

The 6N1-ISO series is a microprocessor controlled interface designed to provide maximum flexibility with a minimum of cost.

With a variety of standard inputs, the 6N1-ISO provides the user with the ability to interface several devices to a single analog output. The 6N1-ISO can average two to six inputs, output the highest of two to six inputs, output the lowest of two to six inputs, output the sum of 2 inputs, or output the difference of two inputs. The 6N1-ISO also accepts up to 6 digital inputs(binary sequence) and outputs a proportional analog signal.

The 6N1-ISO-STG is a true staging device. It can be used in retrofit applications of interfacing a two or three stage thermostat to an SCR heater. It will convert 24VAC staged signals to a proportional analog output. The 6N1-ISO-STG offers two different modes. The first mode will check inputs sequentially high(#6) to low(#1), to set output percentage. The output percentage is based on highest input pressed, and ignores others. The other mode will check the total number of inputs, to set an output percentage. The output percentage is based on total number of active inputs.

Input ranges are jumper selectable and all modes and analog outputs are DIP switch selectable. The output signal is optically isolated from the input signals. The power output terminal can be used for power if the inputs are only contact closures.

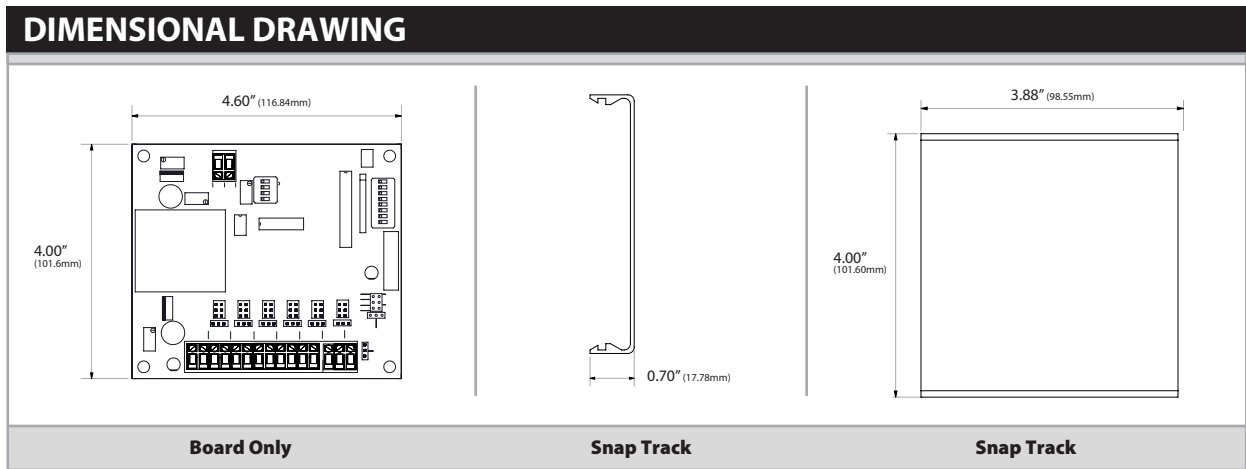
**Applications:** Coldest Zone Hot Deck Reset, Signal Selector, 3 Stage SCR, Staging

**The 6N1-ISO is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, [www.workaci.com](http://www.workaci.com).**

### PRODUCT SPECIFICATIONS

<b>Supply Voltage:</b>	24 VAC (+/- 10%), 50/60 Hz
<b>Supply Current:</b>	255 mA maximum (6.12VA with a 24 volt power supply)
<b>Power Output:</b>	24 VDC or 15 VDC (Jumper Selectable)
<b>Power Output (Supply Current):</b>	100 mA maximum
<b>Input Voltage Signal Range/Input Impedance</b>	0 to 5 VDC @ 1MΩ, 0 to 10 VDC @ 20,000Ω, 0 to 20 VDC @ 10,000Ω
<b>(6N1-ISO):</b>	
<b>Input Current Signal Range/Input Impedance</b>	0-20 mA @ 249Ω
<b>(6N1-ISO)</b>	
<b>Input Mode (Digital/Binary) (6N1-ISO &amp; 6N1-ISO-STG):</b>	15 VDC, 24 VDC or 24 VAC +/-10% @ 100,000Ω
<b>One Analog Signal Output (@ Impedance):</b>	0-5 VDC @ 1000Ω   0-10 VDC @ 1000Ω   0-20 VDC @ 1000Ω   0-20 mA @ 500Ω maximum
<b>Output Signal Accuracy:</b>	+/- 2% of full scale
<b>Resolution (Analog/Binary):</b>	64 steps of resolution
<b>Product Functions(6N1-ISO):</b>	Average, Highest, Lowest, Sum, Difference
<b>Product Functions(6N1-ISO-STG):</b>	Stage Control
<b>Connections:</b>	90° Pluggable Screw Terminal Blocks
<b>Wire Size:</b>	16 (1.31 mm <sup>2</sup> ) to 26 AWG (0.129 mm <sup>2</sup> )
<b>Terminal Block Torque Rating:</b>	0.5 Nm (Minimum); 0.6 Nm (Maximum)
<b>Operating Temperature Range:</b>	35 to 120°F (1.7 to 48.9°C)
<b>Operating Humidity Range:</b>	10 to 90% non-condensing
<b>Storage Temperature:</b>	-20 to 150°F (-28.9 to 65.5°C)
<b>Snaptrack Material:</b>	Polyvinyl Chloride (PVC)
<b>Snaptrack Flammability Rating:</b>	UL94 V-0
<b>Product Dimensions:</b>	(L) 4.00" (W) 4.60" (H) 1.00" (101.6 x 116.84 x 25.4 mm)
<b>Product Weight:</b>	0.60 lbs. (0.27 Kg)
<b>Agency Approvals:</b>	RoHS2, WEEE





### STANDARD ORDERING

Model # Example: **6N1-ISO** -OR- **111750**

Model #	Item #	Description
<b>6N1-ISO</b>	111750	6 Analog / Digital Inputs to 1 Analog Output (Average, Highest, Lowest, Sum, Difference)
<b>6N1-ISO-STG</b>	148420	6 Digital Inputs to 1 Analog Output, Stage Control (Stage Control)

### ACCESSORIES

Model # Example: **A/DO008** -OR- **142583**

Model #	Item #	Description
<b>A/DO008</b>	142583	Transient Voltage Suppressor, Bi-directional, 56 VAC/DC, 1500W
<b>A/DRC 3.88 X 4.0</b>	142622	DIN Rail Adapter Kit