

# Sensata ISOSLICE-3 4 RTD Input Isoslice Unit User Manual

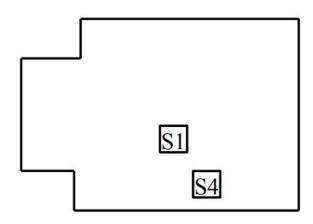
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The ISOSLICE-3 unit has 4 analog inputs for 3-wire PT100 RTD sensors. The input ranges can be selected independently. This is achieved using the dips witches shown below.

- S1 selects the input range for inputs 1,2,3,4
- S4 selects the isoslice bus channel (2 to 128)



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# **Input Range**

Each input can be set up independently of the others using S1. Any range within the limits shown below can be selected. The input ranges available are:

- 200 up to 150 °C
- 200 up to 650 °C
- 200 up to 850 °C

Default Range	0 to 100 °C	-100 to 100 °C	0 to 400 °C	0 to 800 °C
Full Range	-200 to 150 °C	-200 to 150 °C	-200 to 650°C	-200 to 850 °C
Input	S1	S1	S1	S1
1	_	2	1	1,2
2	_	4	3	3,4
3	_	6	5	5,6
4	_	8	7	7,8

The default range will be selected from the table above when the switches are changed.

## **Channel number**

The channel number is selected using S4. The channel number must be between 2 and 128, using switches 2 to

8. If all switches are off, the channel number is 1 (invalid):

The channel number is a binary reading of switches 2 to 8, with switch 8 the lowest bit.

S4 2345678

**0000000** channel 1 (invalid)

0000001 channel 2

**0000010** channel 3

0000011 channel 4

0000100 channel 5

11111111 channel 128

So switch 2 adds 64, 3 adds 32, 4 adds 16, 5 adds 8, 6 adds 4, 7 adds 2, 8 adds 1

#### Connections

- 1. Input 1 +ve
- 2. Input 1 -ve
- 3. Input 2 +ve
- 4. Input 2 -ve
- 5. Input 3 +ve
- 6. Input 3 -ve
- 7. Input 4 +ve
- 8. Input 4 -ve
- 9. Input 1 3rd wire
- 10. Input 2 3rd wire
- 11. Input 3 3rd wire
- 12. Input 4 3rd wire

# Calibration

The ISOSLICE-3 has an led that shows which mode it is in.

**Green** run

Red learn span point

Amber learn zero point

## Calibration of a channel:

In run mode select the input to be calibrated Calibrate the span point
Return to run mode
Calibrate the zero point
Return to run mode

#### Select the Input to be calibrated

Push the up or down button when the LED is green. The LED will flash red between 1 and 4 times, indicating the input that will be calibrated next.

### Calibrate the Span Point

When the input has been chosen push and release both buttons.

The LED will go red.

Put in the span value (eg 247.04 ohms for 400°C) into the corresponding input, wait a few seconds for the input to be averaged to a stable level then push the up button to confirm that the input value is the value for the span at 100%

Push and release both buttons to return to run mode. The LED will go off briefly (to indicate it has learned and saved a new value) and then change to green.

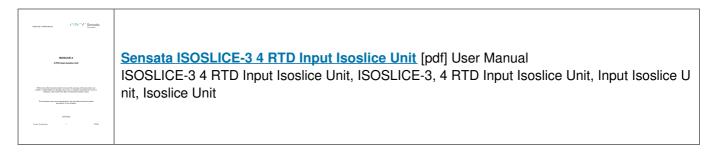
#### Calibrate the Zero Point

Push and release both buttons
The LED will change from green to amber.

Put in the zero value (eg 100 ohms for 0°C) into the corresponding input, wait a couple of seconds for the input to be averaged to a stable level then push the up button to confirm that the input value is the value for the zero at 0.00%.

Push and release both buttons, the LED will again go off briefly and then change to green. Check the calibration has been successful by varying the input and confirming the value shown on the Z-Port or E100 display for the corresponding input and channel is as expected.

#### **Documents / Resources**



Manuals+,