

SC-ISOSLICE-4

ISOLATED BUS I/O MODULE -



- **4 off Thermocouple Inputs**
- **Communicates to Ethernet / Rs232 or RS485 network via an SC-E-100 unit**
- **Inter-channel & Input/Output Isolation**
- **Automatic Bus & Power Connection Via DIN Rail Bus Connector**
- **Multiple inputs in one module**
- **Very High Accuracy, Low Cost**

Input Types for SC-ISOSLICE-4

Thermocouple Inputs x 4

Thermocouple Types: E J K N R S T B

Ranges: Large number of input ranges, can be user calibrated.

Cold Junction Compensation (can be turned off)

Full thermocouple linearization

Upscale or Downscale t/c burnout options

For Channel to Channel Isolation see Isoslice-1

Outputs

For Output Modules see SC-ISOSLICE-6 or SC-ISOSLICE-8

The SC-ISOSLICE-4 isolated Bus I/O module combines full three-port isolation with access to an industrial bus. This bus connects to the SC-E-100 modules which are then used to transmit the process values via either an Ethernet or a RS232/485 wired communications network.

Full 3-port isolation is standard but for channel to channel isolation please see the SC-ISOSLICE-1

The input range and thermocouple type can be user selected using simple DIL switches inside the unit and the unit is factory calibrated for eight different thermocouple types and four different input ranges per thermocouple.

Non-interactive zero and span controls make adjustment and calibration of the unit quick and simple.

The units have a wide ranging 12 to 36 Vdc. This supply can either be wired to the appropriate terminals or picked up automatically from the Bus connector.

B	400 °C	1800 °C
E	0 °C	1000 °C
J	0 °C	1200 °C
K	0 °C	1350 °C
N	0 °C	1300 °C
R	0 °C	1400 °C
S	0 °C	1400 °C
T	-200 °C	400 °C

Technical Specifications

Parameter	Min	Typ	Max	Comments
Supply Voltage	12V	24V	36Vdc	
Supply Current (mA)		45	90	For 24Vdc supply (260mA for 50ms on start-up)
Bus Connection				16-bit bus connection
Volt Drop (mA input)		0.3		At 20mA Input
Input Impedance (Volt)		1M Ω		Dependant on range (typ=10V)
Input Impedance (mA)		15 Ω		Dependant on range (typ=20mA)
Output Linearity Error		$\pm 0.01\%$	$\pm 0.05\%$	
Temp Coefficient			$\pm 50\text{ppm}/^\circ\text{C}$	
Load Resistance Error			$\pm 5\text{ppm}/\Omega$	$0 < R_L < 750\Omega$
Time Constant (10-90%)	60mS (normal)			
Operating Ambient	0°C		55°C	
Relative Humidity	0%		90%	
Isolation Voltage ^{see note}	1kV			
Surge Voltage	2.5kV for 50 μ S		Transient of 10kV/ μ S	

Notes

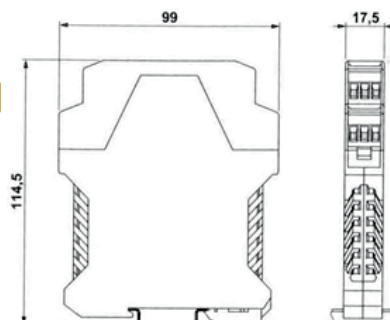
Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur. Device is protected against reverse polarity connection. Accuracy figures based on 24Vdc supply, 4-20mA output with 250 Ω load and an ambient 20°C.

Installation Data

Mounting	DIN Rail TS35
Orientation	Any
Connections	Screw Clamp with pressure plate
Conductor Size	0.5-4.0mm
Insulation Stripping	12mm
Weight	Approx 95g

Ordering Information

Part No.: SC-ISOSLICE-4



Part Number	Universal Inputs	mA or V Inputs	RTD Inputs	T/C Inputs	Analogue Outputs	Digital Inputs	Digital Outputs
SC-ISOSLICE-1	2						
SC-ISOSLICE-2		8					
SC-ISOSLICE-3			4				
SC-ISOSLICE-4				4			
SC-ISOSLICE-5						8	
SC-ISOSLICE-6							4
SC-ISOSLICE-7						2 x freq in	
SC-ISOSLICE-8					4		
SC-ISOSLICE-9	4 x AC1/V						

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ISO9001 CERTIFIED

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