

SC-ISOSLICE-1

ISOLATED BUS I/O MODULE



The SC-ISOSLICE-1 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 as is an isolated transmitter supply which can be used to power any standard 2-wire 4-20mA transmitter.

The input type and range can be user selected using simple DIL switches inside the unit. All Thermocouple inputs are fully linearised.

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.

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-1

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ISO9001 CERTIFIED

SC-ISOSLICE-1 2017

- 2 off Universal Isolated Analogue I/O
- 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
- Robust System with High MTBF
- Very High Accuracy, Low Cost

Input Types for SC-ISOSLICE-1

DC/AC Current & Voltage

0-20mA, 4-20mA, 0-10mA into 15 Ω

0-1V, 0-10V, 1-5V into 1M Ω

Min & Max Full Scale Ranges are:

DC Current	0 - 1mA	0 - 20mA
DC Voltage	0 - 25mV	0 - 30V
Bipolar DC Voltage	$\pm 25mV$	$\pm 10V$
3 Wire Pot	0 - 10k Ω	0 - 100k Ω

Outputs

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

Thermocouples

Types E,J,K,N,R,S,T,B linearised or non-linearised. Ranges: Wide range of inputs. Cold junction compensation. Upscale or downscale t/c burnout options. For 4-channel t/c input specify SC-ISOSLICE-4

Technical Specifications

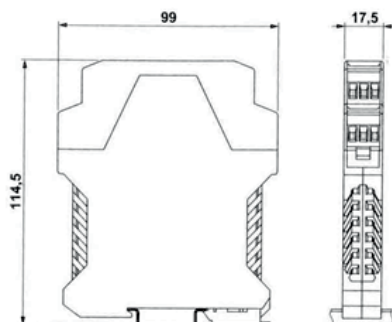
Parameter	Min	Typ	Max	Comments
Supply Voltage	12V	24V	36Vdc	
Supply Current (mA)		45	90	For 24Vdc supply (260mA for 50ms on start-up)
Bus Connection				16-bit bus connection
Volt Drop (mA input)		0.3		At 20mA Input
Input Impedance (Volt)		1M Ω		Dependant on range (typ=10V)
Input Impedance (mA)		15 Ω		Dependant on range (typ=20mA)
Output Linearity Error		$\pm 0.01\%$	$\pm 0.05\%$	
Temp Coefficient			$\pm 50ppm/^{\circ}C$	
Time Constant (10-90%)		200ms		
Operating Ambient	0 $^{\circ}C$		55 $^{\circ}C$	
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 $^{\circ}C$.



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 AC I/V						



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Mouser Electronics

Authorized Distributor

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Sensata:

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