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.

Features

- 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

Inputs

DC/AC Current & Voltage
0-20mA, 4-20mA, 0-10mA into 15Ω
0-1V, 0-10V, 1-5V into 1MΩ

Min & Max Full Scale Ranges are:

DC Current	0 - 1mA	0 - 20mA
DC Voltage	0 - 25V	0 - 30V
Bipolar DC Voltage	±25V	±10V
3 Wire Pot	0 - 10kΩ	0 - 100kΩ

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

Outputs

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

SPECIFICATIONS

Technical

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)		1MΩ		Dependant on range (Typ=10V)
Input Impedance (mA)		15Ω		Dependant on range (Typ=20mA)
Output Linearity Error		±0.01%	±0.05%	
Temp Coefficient			±50ppm/°C	
Time Constant (10-90%)		200mS		
Operating Ambient	0°C		55°C	
Relative Humidity	0%		90%	
Isolation Voltage*	1kV			
Surge Voltage	2.5kV for 50 µS		Transient of 10kV / µS	

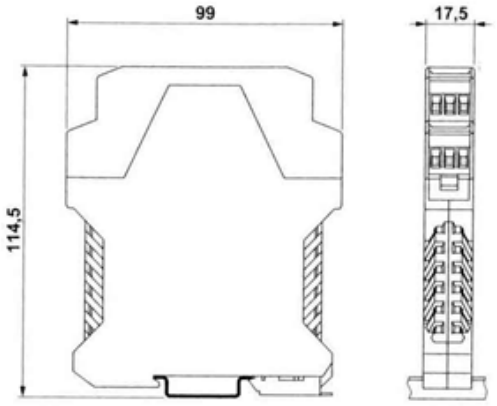
*Notes: Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur. Device is protected against reverse polarity connection. Accuracy figures based on 24Vdc supply, 4-20mA output with 250Ω load and an ambient 20°C.

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

DIMENSIONS

All dimensions are in millimeters.



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						

ORDERING OPTIONS

Example : SC-ISOSLICE-1

Please supply
Part Number SC-ISOSLICE-1

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