Ethernet & RS232/485 I/O

ISOSLICE-4

ISOLATED BUS I/O MODULE

- 4 off Thermocouple Inputs
- Communicates to Ethernet / RS232 or RS485 network via an 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

Description

The **ISOSLICE-4** isolated Bus I/O module combines full three-port isolation with access to an industrial bus. This bus connects to the E-100 or Z-PORT coordinator 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 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.

Outputs

For Output modules see Isoslice-6 or Isoslice-8

Input Types for 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

B	400 °C	1800 °C
E	-270 °C	1000 °C
J	-210 °C	1200 °C
K	-270 °C	1350 °C
N	0 °C	1300 °C
R	-50 °C	1750 °C
S	-50 °C	1750 °C
T	-270 °C	400 °C

Industrial Interface

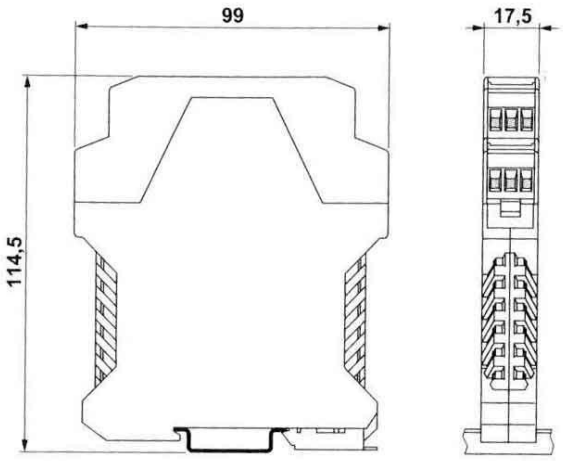
Tel: 01242 251794 Fax: 01242 571683

Email: sales@industrialinterface.co.uk

Web: www.industrialinterface.co.uk

Technical Specifications

Parameter	Min	Typ	Max	Comments
Supply Voltage	12	24V	36Vdc	
Supply Current (mA)		45	90	For 24 V dc supply (260mA for 50mS on start up)
Bus Connection				16-bit bus connection
Input Impedance (Volt)		1 MΩ		Dependent on range (Typ=10V)
Input Impedance(mA)		15 Ω		Dependent on range (Typ=20mA)
Volt drop (mA input)		0.3		At 20mA input
Output Linearity Error		±0.01%	±0.05%	
Temp Coefficient			±50ppm/°C	
Load Resistance Error			±5ppm/Ω	0 < R_L < 750Ω
Time Constant (10-90%)		60ms (normal)		
Operating Ambient	0°C		55°C	
Relative Humidity	0%		90%	
Isolation Voltage see note 1	1kV			
Surge Voltage		2.5kV for 50µS		Transient of 10kV/µS
Notes	Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur. Accuracy figures based on 24Vdc supply, 4-20mA output with 250· load and 20·C ambient. Device is protected against reverse polarity connection.			



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

Input and Output Options

Part Number	Universal inputs	mA or V inputs	RTD inputs	Thermocouple inputs	Analogue Outputs	Digital inputs	Digital outputs
ISOSLICE-1	2						
ISOSLICE-2		8					
ISOSLICE-3			4				
ISOSLICE-4				4			
ISOSLICE-5						8	
ISOSLICE-6							4
ISOSLICE-7						2 x Freq / Pulse	
ISOSLICE-8					4		
ISOSLICE-9	4 x AC I/V						
ISOSLICE-10	8 x AC I/V						

Tel: 01242 251794 Fax: 01242 571683

Email: sales@industrialinterface.co.uk

Web: www.industrialinterface.co.uk

www.facebook.com/Industrial.Interface

@IndustrialInter

Industrial Interface Ltd