



E-100

ANALOGUE I/O TO INDUSTRIAL ETHERNET CONVERTER

- MODBUS TCP Protocol Stack
- Other Protocols available
- Universal Configurable Analogue Input
- Slice I/O system for additional I/O
- High Accuracy, Low Cost



Description

The E-100 Ethernet Gateway module provides a straight forward method of interfacing analogue and digital process parameters to an Ethernet network. The E-100 allows the user to view the status of the individual inputs via the front panel display.

The E-100 unit has one universal analogue input but the system can be expanded through the use of the optional ISO-SLICE slice I/O modules.

These modules connect automatically via the DIN rail mounted bus connector, allowing the easy addition and removal of extra I/O.

A built-in display allows local monitoring of the individual inputs and outputs, a useful commissioning and operations tool.

Using the E-100 is a simple way to implement an Ethernet measurement and control system or can be used to add additional inputs and outputs to an existing Ethernet installation.

Inputs

The input types and ranges included below are our standard ones only. Contact Sales for others.

DC Current & Voltage

0-20mA, 4-20mA, 0-10mA into 15/30 Ω

0-1V, 0-10V, 1-5V into 100k Ω / 1M Ω

0-25mV, 0-100mV, 0-500mV into >10M Ω

Min & Max Full Scale Ranges are:

DC Current	0 - 1mA	0 - 5A
Bipolar DC Current	± 5 mA	± 10 mA
DC Voltage	0 - 25mV	0 - 300V*
Bipolar DC Voltage	± 5 V	± 10 V
2 Wire Pot	0 - 125 Ω	0 - 1k Ω
3 Wire Pot	0 - 1k Ω	0 - 100k Ω

* Note: For input voltages greater than 60Vdc a Divider unit must be specified.

Thermocouples

Types E,J,K,N,R,S,T,B linearised or non-linearised

Ranges: Wide range of inputs

Cold junction compensation (can be turned off)

Upscale or downscale t/c burnout options

Resistance Thermometers

2, 3 or 4 wire PT100 or PT1000, linearised or non-linearised

Ranges: Wide range of inputs

Upscale or downscale RTD burnout options

Frequency Input

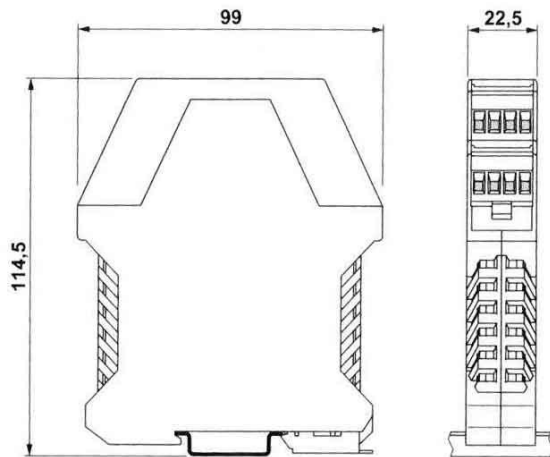
Wide range of freq inputs to 250kHz. Specify -FREQ

Additional I/O

Extra analogue and digital inputs and outputs are available through the ISO-SLICE slice I/O modules.



Parameter	Min	Typ	Max	Comments
Supply Voltage	16	24V	30	
Supply Current (mA)	65		140	24 V dc supply
Input Impedance (Volt)		1M Ω		
Input Impedance (mA)		15 Ω		
Volt drop (mA input)		0.3		At 20mA input
Output Linearity Error		$\pm 0.01\%$	$\pm 0.05\%$	
Temp Coefficient			$\pm 100\text{ppm}/^\circ\text{C}$	
Operating Ambient	0 $^\circ\text{C}$		55 $^\circ\text{C}$	
Relative Humidity	0%		90%	
Isolation Voltage <small>see note 1</small>	1kV			
Surge Voltage	2.5kV for 50 μS			Transient of 10kV/ μS
Notes	The process input level is shown on the 4 digit LED display. Figures based on 24 Vdc supply 20 degC ambient.			



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 120g

Connection Details			
3.	Tx supply +ve		RTD 4 th wire
5.	Input mA +ve	T/C +ve	RTD +ve
4.	Input mA -ve	T/C -ve	RTD -ve
6.			RTD
3 rd wire			
1.	Power Supply -ve		
2.	Power Supply +ve		

Ordering Information	
Please supply:	
Part Number:	E-100
Input Type:	e.g mA, Volt, T/C, RTD
Input Range:	e.g 4-20, 0-10, 0-500 $^\circ\text{C}$
Protocol	MODBUS TCP or other RS232 Version -RS
Power Supply:	24 Vdc
Options:	Extra I/O available through ISO-SLICE modules