SC-E-100 Series

Analogue I/O to Comms Gateway

- ***MODBUS TCP or RTU Protocol***
- ***Ethernet or RS232/485 Comms Port***
- ***Universal Configurable Analogue Input***
- ***IsoSlice I/O system for additional I/O***
- ***Built in web-page for live monitoring of data***

The SC-E-100 Ethernet Gateway module provides a straight forward method of interfacing analogue and digital process parameters to an Ethernet or RS232/485 network. The SC-E-100 allows the user to view the status of the individual inputs via the front panel display.
The SC-E-100 unit can have one or two analogue inputs but the system can be expanded through the use of the optional SC-ISOSLICE 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.
Additionally the Ethernet version has a built-in web page which can be used to display live data using any standard web browser.
Using the SC-E-100 is a simple way to implement an Ethernet measurement and control system or it can be used to add additional inputs and outputs to an existing Ethernet or RS232/485 installation.

Inputs

DC Current & Voltage

0-20mA, 4-20mA, 0-10mA into 15/30Ω

0-1V, 0-10V, 1-5V into 100kΩ / 1MΩ

0-25mV, 0-10mV, 0-500mV into >100MΩ

Min & Max Full Scale Ranges are:

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

* 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.

Additional I/O

Extra analogue and digital inputs and outputs are available through the SC-ISOSLICE I/O modules.

Technical Specifications

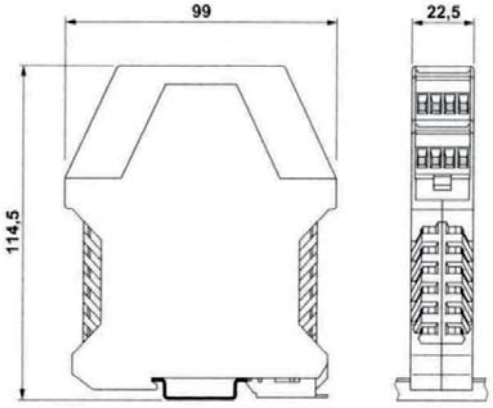
Parameter	Min	Typ	Max	Comments
Supply Voltage	16V	24V	30V	
Supply Current (mA)	65		120	24Vdc supply
Volt Drop (mA input)		0.3		At 20mA Input
Input Impedance (Volt)		1MΩ		
Input Impedance (mA)		15Ω		
Output Linearity Error		±0.01%	±0.05%	
Temp Coefficient			±100ppm/ºC	
Operating Ambient	0ºC		55ºC	
Relative Humidity	0%		90%	
Isolation Voltage see note	1kV			
Surge Voltage		2.5kV for 50µS		Transient of 10kV/µS

Notes

The process input level is shown on thew 4 digit LED display
Figures based on 24Vdc supply an ambient temperature of 20ºC.

Connection Details

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



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

Ordering Information

Part No.s:	Comms
SC-E-100-RS232	RS232
SC-E-100-RS485	RS485
SC-E-100-E	Ethernet

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ISO9001CERTIFIED

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Made in the UK

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