

## SC-Strain-Dual Strain Gauge Transmitter - 2 Outputs



- *Isolated bridge excitation voltage*
- *Two user configurable isolated outputs*
- *Universal 110/240 Vac supply or 24Vdc supply option*
- *1500V 3-Port isolation*
- *Dual output version available*

### DESCRIPTION

The SC-STRAIN-DUAL Universal Strain Gauge transmitter is suitable for use with the majority of strain gauges, load cells and pressure transducers. The unit provides a high stability excitation voltage which is isolated from both the high level output and the power supply. Front panel push buttons allow non-interactive adjustment of the output zero and span settings. This is especially useful for the initial calibration and set-up of the bridge and measuring system.

The outputs required may be user-reconfigurable using internal switches or requested at point of order. The options include 0-10V dc, 0-20mA and 4-20mA. It has two power supply options, operating either from a 12 to 36Vdc supply or 90 to 264Vac supply. The unit is housed in a compact 17.5mm DIN rail mounting enclosure.

### General Specifications

#### Recommended operating Conditions

Bridge Supply Current	28mA into 350Ω
Bridge Excitation Voltage	10 Vdc, others available
Output Resistance	0-750Ω for mA o/p

#### Environment Conditions

Storage Temperature	-40 to 100°C
Operating Ambient	0 to 55°C
Relative Humidity	0-90% RH

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**ISO9001** CERTIFIED

cynergy3-sc-strain-dual-v2



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# SC-Strain-Dual

## Strain Gauge Transmitter - 2 Output

### Technical Specifications

Parameter	Min	Typ	Max	Comments
Supply Voltage AC Version		90-264Vac		10% Voltage switch selectable
Supply Current AC Version		50 / 25 mA		Upscale Output
Supply Voltage DC Version	12Vdc	24Vdc	36Vdc	
Supply Current DC Version		95mA		Upscale output
Bridge Excitation Voltage		10Vdc		Others Available
Bridge Output Signal	1mV/V	4mV/V		Others Available
Output Linearity Error			±0.1%	
Temp Coefficient		±100ppm/°C		
Load Resistance Error			-10ppm/Ω	0 < R <sub>L</sub> < 600Ω
Time Constant (10-90%)		30ms		
Operating Ambient	-15°C		60°C	
Relative Humidity	0%		90%	
Isolation Voltage	1kV			Signal input to output and power supply
Surge Voltage	2.5kV for 50μs		Transient of 10kV / μs	

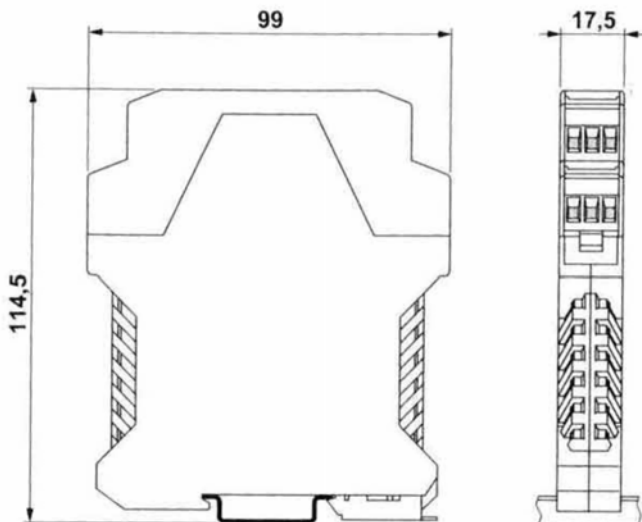
### Notes

Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur.

Device is protected against reverse polarity connection.

Accuracy figures based on an ambient temperature of 20°C. Device incorporates a non-resettable thermal cut-out in the mains input.

**IMPORTANT:** Mains input should be protected by a 100mA anti-surge fuse (T100mA) with a voltage rating of 250Vac and a breaking capacity of 35A at 250Vac placed in series with the live connector.



### Installation Data

<b>Mounting</b>	DIN Rail TS35
<b>Orientation</b>	Any
<b>Connections</b>	Screw Clamp with pressure plate
<b>Conductor size</b>	0.5-4.0mm
<b>Insulation Stripping</b>	12mm
<b>Weight</b>	Approx 115g

### Connection Details

1. Power -ve
2. Power +ve
4. mV input -ve
5. mV input +ve
3. +ve Excitation Voltage
6. -ve Excitation Voltage
10. Output 2-ve
7. Output 1-ve
12. Output 2+ve
9. Output 1+ve

### Ordering Information

<b>Please supply:</b>	
<b>Part Number:</b>	SC-II-DCON-STRAIN-3-AA-JJ-000
<b>Power Supply:</b>	-3 for 90-264 Vac -6 for 12-36 Vdc
<b>Bridge Excitation:</b>	e.g. 10Vdc
<b>Bridge Output Signal:</b>	e.g. 4mV/V
<b>Output Type:</b>	e.g. mA, Volt
<b>Output Range:</b>	e.g. 4-20mA, 0-10V
<b>Dual Output Unit:</b>	SC-STRAIN-6 or -3