



SLIMCON

ISOLATING SIGNAL CONVERTER

- Wide Range of Inputs Available
- Full 3-Port Isolation
- Zero & Span Pots For Output
- Fast Time Response
- High Accuracy, Low Cost
- Only 7.2 mm Wide



Description

The SLIMCON family of Isolating Signal Converters can accept a range of inputs including 4-20mA and voltage signals. The unit produces a high level DC output of either voltage or current.

Full 3 port isolation is standard on the product range.

The SLIMCON can be factory configured to accept a current or voltage input and provides a current or voltage output.

The input and output of the unit can also be reconfigured using the built in switches together with the zero and span adjustment potentiometers.

The unit is powered from 24Vdc nominal.

Inputs

Standard Ranges are shown below - contact Sales for others.

SLIMCON for DC Current & Voltage

0-20mA, 4-20mA, 0-10mA into 5Ω/11Ω

0-10V, 1-5V, 0-5V, 2-10V into 1MΩ

Bipolar Voltage Input version available, please call

Outputs

DC Current and Voltage

Current source or sink

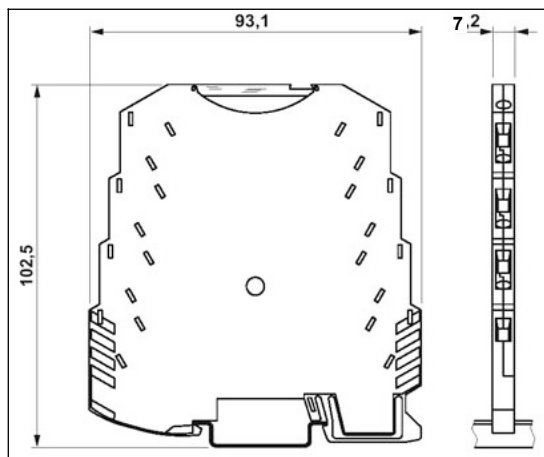
0-20mA, 4-20mA into 500Ω

0-10V, 0-5V, 1-5V into a minimum 100kΩ



Performance Characteristics

| Parameter | Min | Typ | Max | Comments |
|---|---|---------------|------------------------------|---------------------------------------|
| Supply Voltage | 18V | 24V | 30V | 22Vdc required to drive 500 ohms |
| Supply Current (mA) | | 25 | 30 | Based on 24 V dc supply into 500 ohms |
| Input Impedance (Volt) | | 500k Ω | | |
| Input Impedance (mA) | | 5 Ω | 10 Ω | Dep't on range (Typ=20mA, max 0-10mA) |
| Volt drop (mA input) | | 0.1 | 0.15 | At 20mA input |
| Output Linearity Error | | $\pm 0.03\%$ | $\pm 0.1\%$ | |
| Temp Coefficient | | | $\pm 100\text{ppm}/\text{C}$ | |
| Load Resistance Error | | | $\pm 5\text{ppm}/\Omega$ | 0 < R _L < 500 Ω |
| Time Constant (10-90%) | | 25mS | 30mS | Faster response available on request |
| Operating Ambient | 0 C | | 55 C | |
| Relative Humidity | 0% | | 90% | |
| Isolation Voltage <small>see note 1</small> | 1kV | | | |
| Surge Voltage | 2.5kV for 50 μ S | | | Transient of 10kV/ μ S |
| Notes | <p>Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur.</p> <p>Accuracy figures based on 24Vdc supply, 4-20mA output with 250Ω load and 20C ambient.</p> <p>Device is protected against reverse polarity connection. External 100mA fuse required</p> <p>SLIMCON does NOT provide safety isolation when the input is connected to the mains.</p> | | | |



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. 60g |

Connection Details

1. Power Supply -ve
2. Power Supply +ve
4. Process Input -ve
5. Process Input +ve
10. Output -ve
12. Output +ve

Ordering Information

Please supply:

| | |
|----------------------|--------------------|
| Part Number: | SLIMCON |
| Input Type: | e.g. mA, Volt |
| Input Range: | e.g. 4-20, 0-10 |
| Output Type: | e.g. mA, Volt |
| Output Range: | e.g. 4-20mA, 0-10V |
| Power Supply: | e.g. 24Vdc |
| Isolation: | Full 3-Port |