

## AlphaMINI CONVERTERS



## Isolating Signal Converters MIN350 & MIN360

- MIN350 – AC Current input isolating signal converter  
MIN360 – AC Voltage input isolating signal converter

Function: Conversion of an input signal into an isolated DC Current or Voltage output. Each of the MIN350 and MIN360 instruments still maintain 3 port isolation with the input and output circuits being powered from separate secondaries of the transformer.

### SPECIFICATIONS

Please note that the following are typical ranges. We also manufacture instruments to cater for other ranges, within limitations detailed below. All instruments come with span and zero potentiometers for fine tuning on site.

#### INPUTS:

##### MIN350

##### AC Current True RMS Range

0 to 1 Amp AC into 220 mOhms  
0 to 5 Amp AC into 30 mOhms

##### MIN360

##### AC Voltage True RMS Range

0 to 1 Volt AC into 5K ohms  
0 to 2 Volt AC into 10K ohms  
0 to 5 Volt AC into 25K ohms  
0 to 10 Volt AC into 50K ohms  
0 to 20 Volt AC into 100K ohms  
0 to 50 Volt AC into 250K ohms  
0 to 100 Volt AC into 500K ohms  
0 to 250 Volt AC into 1M ohms  
Minimum span: 100mV  
Maximum span: 300 Volts

##### AC Frequencies

Minimum 20 Hz  
Maximum 10K Hz

#### OUTPUTS:

##### DC Current

0 to 10mA into 10 to 1500 ohms  
4 to 20mA into 10 to 750 ohms  
Other ranges as required  
Minimum span 1mA  
Maximum span 20mA

##### DC Voltage

0 to 1 Volt into 100 ohms minimum  
0 to 10 Volts into 1000 ohms min  
Other ranges as required  
Minimum span 1 Volt DC  
Maximum span 10 Volts DC  
Optional extra:  
–10 to +10 Volts into 10K ohms min

##### Input/Output/Supply Isolation

600 Volt > 20M ohms

#### SUPPLY:

##### Power Supply Voltage

18 to 30 Volt AC or DC  
10 to 15 Volt AC or DC  
with converter to maintain signal to power supply isolation

##### Power Required

1.5 Watts Maximum

##### Pilot Light

Red LED indicates Power ON

#### GENERAL:

##### Linearity Error

Proportional to input  $\pm 0.1\%$  of span

##### Temperature Coefficient

$\pm 0.1\%$  of span /  $\Delta 10^\circ\text{C}$

##### Operating Temperature Range

0 to  $+50^\circ\text{C}$

##### Storage Temperature Range

$-20$  to  $+60^\circ\text{C}$

##### Operating Humidity Range

0 to 95% RH non-condensing

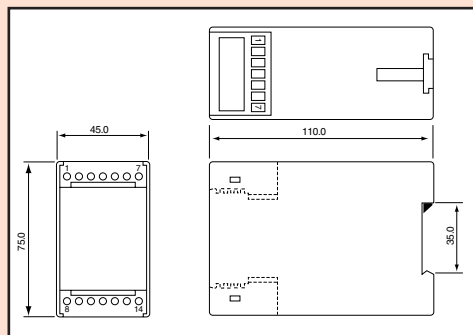
##### Storage Humidity Range

0 to 95% RH non-condensing

##### Weights

MIN350 345 gms  
MIN360 345 gms

### MECHANICAL DETAILS



### TERMINATION DETAILS

#### Terminal

- 1 Input ~
- 2 Input ~
- 3 EMC Earth
- 4 Unused
- 5 Unused
- 6 Unused
- 7 Unused

#### Terminal

- 8 Output -ve
- 9 Output +ve
- 10 Unused
- 11 Unused
- 12 Power Supply +ve
- 13
- 14 Power Supply -ve

### ORDERING DETAILS

- a) Give identification code, i.e. MIN350
- b) Give power supply voltage, 12 or 24 Volt DC or AC
- c) Give details of input signal, both type and range, i.e. 0 to 1A AC
- d) Give details of output required, both type and range, i.e. 4 to 20mA

