



# LOOP-POWERED DIGITAL PANEL METER

TYPE 500-20A

- **Loop-powered**
- **Less than 2 volts drop across input**
- **User configurable scaling to ranges within +1999 to -1999**
- **Configurable for reversed reading**
- **Unpluggable connector**
- **Custom made legends**
- **Optional splash resistant front panel**  
(up to IP65)



The 500-20A is a 3<sup>1</sup>/<sub>2</sub> digit LCD panel meter which provides a scaleable display of an analogue signal in engineering units.

Externally accessible switches and trimming controls enable user configurable span and zero (offset) setting, zero offset polarity, decimal point selection and reading polarity.

## Scaling

Scaling in engineering units may be set to any portion of the display range i.e. within the range -1999 to +1999 (maximum span 3000 counts). zero offset may be adjusted from -1999 to +1000. For example with zero offset set to -1000 and Span set to 3000 the display will read -1000 to +1999. The required readouts at full scale and zero are set by rear panel switches and trimming controls.

## Decimal points

Decimal point position is selectable by switches on the rear panel.

## Reading polarity

A switch on the rear panel reverses the polarity of the display; a positive going signal is then displayed as negative going. This feature in conjunction with zero offset setting will provide a reverse reading function.

## Reversed reading

The wide range of available zero offset, together with reading polarity and offset polarity settings, will enable reversed reading action to be configured. e.g. with 4mA input the display can be set to read '1000' and with 20mA input, to read '0'.

## Legends

Custom made legends, e.g. depicting engineering units or process description, can be supplied at no extra cost or can be made and fitted by user.

## Splash resistant front panel

A flexible transparent rubber hood offering front of panel ingress protection up to IP65 is available.

## SPECIFICATION

### DISPLAY

Type: 12.7mm LCD  
Range: 3.5 digit (-1999 to +1999)  
Sample rate: 2.5 per second  
Overrange display: '1' or '-1' (MSD only) displayed  
Polarity: automatic with '-' displayed

### ACCURACY

$\pm 0.1\%$  FS  $\pm 1$  digit (when works calibrated)

### LINEARITY

$\pm 1$  digit

### INPUT

4-20mA  
Input volts drop:  $< 2$  V  
Input protection: to 40mA max

### CONFIGURATION

The instrument is configured by means of switches and trim controls on the rear panel of the instrument.

#### User adjustable settings:

- Scaling: to any portion of the display range  
(maximum span 3000 counts)
- Decimal points: one of three switch selectable
- Zero offset polarity

### TEMPERATURE COEFFICIENT

$\pm 100$ ppm/ deg C typ.

### ENVIRONMENTAL

Temperature range:  
operating -10 to +50 deg C  
storage -20 to +70 deg C  
Humidity: 0-95% RH non-condensing

### SAFETY & EMC

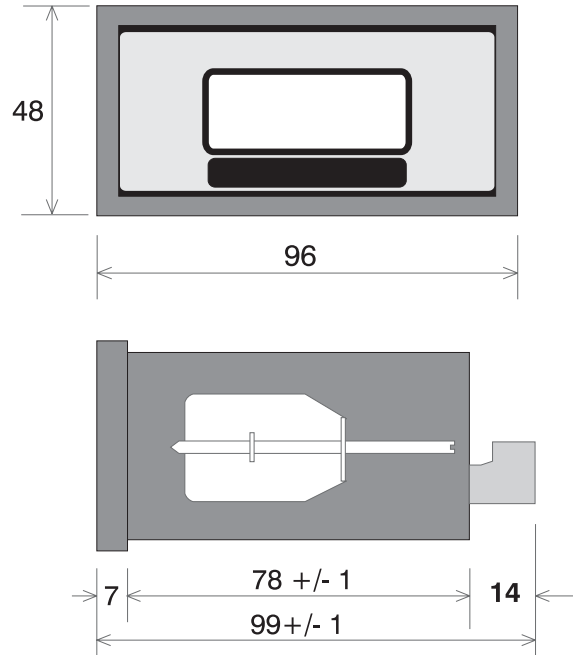
Safety: EN61010-1  
Immunity: EN50082-1  
Emissions: EN50081-1  
CE certified

### MECHANICAL

Weight: approx. 200g  
Input signal connector: un-plugable screw terminal type. Wire capacity: 0.2 - 2.5 sq. mm; (24 - 12 AWG)

### Dimensions (mm)

Panel cut-out to DIN43700: 45 (+0.6, -0) x 92 (+0.8, -0)



### ORDERING INFORMATION

Please supply the following:  
NB if the following is not specified, the instrument will be supplied scaled 0 - 100.0 with legend '%' and without splash resistant front panel.

<input type="checkbox"/> Display at 20mA	<input type="checkbox"/> Display at 4mA
<input type="checkbox"/> Legend	<input type="checkbox"/> Splash resistant front panel option

Continuous development may necessitate changes in these details without notice

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