

## Type ELD202 Dual Channel Portable Digital Indicator

The Type ELD202 dual channel portable digital indicator is a versatile component which can be used to indicate the tilt angles measured by a pair of any of the range of **ELECTROLEVEL** tilt transducers. The measured angles are displayed on 3 ½ digit LCD meters. The ELD202 can be powered by its internal battery, or through a universal AC mains adaptor or use an external unregulated DC power supply from a wide range of sources anywhere in the range 6-28Volts.



This low power consumption unit can be scaled to provide digital readings representing common standard units e.g

- arc-seconds
- decimal degrees
- millimetres per metre

or custom scaled to user significant units e.g  
mm of deflection over a standard base line

Two voltage output signals are provided which are suitable for driving external meters, data loggers, data acquisition systems and power amplifiers for control systems.

Proprietary circuit techniques match the Signal Conditioning Unit to the attached sensors and minimise the effects of temperature scale drift and temperature datum drift, thus contributing to the high precision of an **ELECTROLEVEL** system

Where long cables to an external port need to be driven, the ELD202 should be placed within 100 metres of the sensing head and the optional 4-20mA current loop used to drive the longer cable. (requires 24Volt supply)

Robust circular DIN style connectors are fitted to the ELD202 giving a long term reliable connection both to the sensing head and to the power supply/signal connector

The ELD202 is one of a family of Signal Conditioning Units suitable for driving the **ELECTROLEVEL** tilt transducers. Other units in the range include signal conditioning units, indicators with analogue displays, with limit relays which operate at user definable angles and units which provide digital outputs in a variety of interface specifications. Single channel units are also available in all these options.

For specialist applications, the Signal Conditioning Unit circuits can be supplied for mounting in Standard Rack systems with multi-channel cards and microprocessor control of the data acquisition function.

**SPECIFICATION****ELD202 Dual Channel Portable Digital Indicator**

## Signal Conditioning Unit

Output voltage

 $\pm 1$  volt d.c. into open circuit with respect to datum reference at 2.5 Volts above system ground.

Output current

 $\pm 1$  mA d.c. into short circuit (short circuit protected).  
(4-20mA current loop option)

Temperature Coefficient of Scale

0.1%/ $^{\circ}$  C

Zero drift with temperature

100 $\mu$ V/ $^{\circ}$  C

Electronic datum Adjustment Range

 $\pm 0.1$  degrees with 0.5 degree Sensing Head $\pm 1.0$  degrees with 5.0 degrees Sensing Head

Operating Temperature Range

-15  $^{\circ}$ C to + 60  $^{\circ}$  C

to above specification

Overrange Capability

will not be damaged by overranged transducer input

Displays

3½Digit LCD meter 11mm digit height. scaled as required.

Input Power Consumption

20 mA at 12V d.c.

**External Connections**

Sensing Head

Metal Screwlocking DIN style plug

External D.C. supply and Output

Metal Screwlocking DIN style plug

Sensing head cable length

100 metres (maximum recommended)

**Power Supply**

Internal battery

PP3 batteries

External DC supply

6 to 28 volts d.c.

Universal mains adaptor

90/264 Volts ac 47/63 Hz

**Physical Details**

Enclosure

painted Aluminium Instrument case non-weatherproof

Nominal Dimensions

260mm W x 90mm H x 250 mm D

Weight

2.15 Kg

The logo for Tilt Measurement Limited, featuring the word "TILT" in a stylized, bold, blue font with a slanted, italicized appearance.**MEASUREMENT LIMITED****HORIZON HOUSE LONDON ROAD BALDOCK HERTS.. SG76NG  
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