

# Portable Battery Powered Hand Held Strain Gauge

# DIGITAL INDICATOR

## TRI50 Series



- Powered by 2x AA internal batteries
- 7½ Digit Display with battery low, peak, trough, net & shunt calibration indication
- Compatible with most Strain Gauge Based Sensors
- Dual Range Facility
- Optional RS232 Communications
- Battery life of 5000 hours in low power mode with 350ohm bridge connected
- Auto sleep facility
- Robust Construction - Sealed to IP65

### Options Available

Black Leather Case

UK Plug-In Charger

115/230vac Standalone Charger for Worldwide Use

Re-chargeable batteries

RS232 Communications

## **DESCRIPTION**

The TRI50 is a completely portable, precision instrument packaged in a small, robust IP65 (NEMA 4) enclosure, weighing only 260 grams. The TRI50 accepts an input range of up to 50mV/V.

For simplified use, the operator only has access to six keys; on/off, gross/net, peak, trough, hold and shunt cal. Calibration and configuration can be performed from the front panel, with protection against accidental or un-intentional changes. The configuration menu is very simple and enables the setting of a tare value, display resolution, filter rate, auto power off and selection of low power mode.

There are 3 calibration options; a single pass auto-calibration, entering of load cell sensitivity and corresponding display value and entering of offset and gain values for corresponding display values

Two separate ranges are available, which enable the instrument to read and display two separate parameters; i.e. lbs/kg, tonne/kN, high/low resolution, fast/slow response etc. The menu options offer the engineer the ability to tailor the instruments response to the application. In each range all the variables can be set, including zero and filtering.

Annunciators on the display give a constant indication of the operating mode of the TRI50.

The TRI50 features an innovative power saving facility which when enable can offer up to 5000 hours battery life with a 350 ohm bridge connected. In normal power mode up to 35 hours battery life is achieved with a 350 ohm bridge. The TRI50 also incorporates a auto power off facility, which can be set during configuration in 1 minute increments up to 99 minutes, or it can be disabled so the instrument is powered on until the off key is depressed.

The TRI50 can be supplied with a number of options including a leather carry case, which enables the full operation of the indicator whilst fitted in the case. There are also a number of battery and battery charger options available.

*Transducer Specialists...*

# SPECIFICATION

CHARACTERISTICS	TRI50	UNITS
Display:	7½ digit LCD ( $\pm 19999999$ ) 8.8mm high	
Resolution:	1pt. in 250,000 @ 1Hz update, 1pt. in 65,000 @ 10Hz update	digit
Accuracy:	$\pm 0.005\%$	Non-linearity as % of full scale
Bridge Excitation:	5.0 $\pm 4\%$	volts dc
Maximum Excitation Current:	59.0	mA
Input Range:	Up to $\pm 5\text{mV/V}$ ( $\pm 50\text{mV/V}$ can be supplied optionally)	mV/V for display reading of $\pm 19999$
Minimum Bridge Resistance:	85ohms (4x 350ohm sensors in parallel)	
Update Rate:	Up to 10mS (can be set in configuration menu)	
Electrical connection:	5-pin Binder socket (mating plug supplied)	
Annunciators:	Low battery warning, peak, trough, hold, net, shunt cal, range	
Operating Temperature:	-10 to +50	$^{\circ}\text{C}$
Thermal Drift:	<25	ppm/ $^{\circ}\text{C}$
Integral Battery:	2x AA (re-chargeable - optional)	
Battery Life:	35 (when a 350 ohm sensor is connected)	hours
Configurable Auto Power Off :	1-99 (in 1 minute steps)	Minutes
Keypad:	Tactile, with rim embossed keys	
Environmental Protection:	IP65 (when mating plug fitted)	
Enclosure type:	ABS, dark grey (Leather carry case optional)	
Weight:	260 approx.	Grammes
Communications:	RS232 (Optional)	

## All dimensions in millimetres

