



# TR150 Handheld

## Reliable Instrumentation

- Portable & Battery Powered
- 7 Digit Display
- Robust Construction
- Simple Operation
- Sealed to IP65
- Compatible with most strain sensors

### Product Description

The TR150 transducer readout is a completely portable, precision instrument packaged in a small handheld IP65 enclosure, weighing only 260 grams. This device accepts a strain gauged load cell or pressure transducer with a output of between 0.75mV/V and 7.5mV/V at full range.

<b>Performance</b>	Input Type:	Strain gauge full bridge sensors
	Input Range:	Up $\pm 5\text{mV/V}$ ( $\pm 50\text{mV/V}$ can be supplied with factory set option)
	Non Linearity:	$\pm 0.005\%$ FSD
	Thermal Drift:	$< 5 \text{ ppm/}^\circ\text{C}$
	Excitation Voltage:	5Vdc ( $\pm 4\%$ ), 59mA maximum current
	Minimum Bridge Resistance:	85 $\Omega$ (4 off 350 $\Omega$ sensors in parallel)
	Internal Battery:	2 off AA size Alkaline, access via sealed rear compartment
<b>Indication</b>	Battery Life:	45 hours (Typically 450 hours in low power mode) with 350 $\Omega$ sensor)
	Update Rate:	Up to 40mS (can be set in configuration mode)
	Display Type:	7 digit LCD display, 8.8mm high digits
<b>Control Variables</b>	Display Resolution:	1 part in 250,000 at 1Hz update rate
	Annunciators:	1 part on 60,000 at 10Hz update rate
<b>Control Variables</b>	Front Panel User Keys:	Tactile keys with recessed rims for: ON/OFF - Switches TR150 power on/off RANGE - Selects between two ranges HOLD - Holds the current display value, press again to release GROSS/NET - Zeros display ( $\pm 100\%$ range) SHUNT CAL - Generates simulated input for indicator testing PEAK - Enables peak hold TROUGH - Enables valley/trough hold
	Settable Parameters:	Tare/zero value; display resolution/decimal point position; display update rate; low power mode; auto power off
<b>Mechanical</b>	Electrical Connection:	5 pin Binder socket (mating plug supplied)
	Physical Size:	152mm(h) x 90mm(w) x 34mm(d)
	Weight:	260 grammes
	Legends:	Insert legends for engineering unit identification (supplied)
<b>Environmental</b>	Operating Temperature:	$-10^\circ\text{C}$ to $+50^\circ\text{C}$
	Environmental Rating:	IP65 (when mating plug is fitted)
	Enclosure Type:	ABS, dark grey (leather carry case optional)
	Safety/Low Voltage Directive:	73/23/EEC amended by 93/68/EEC to IEC 1010-1:1990, EN 61010 - 1 - 1993 89/336/EEC
	EMC Directive:	EN 50 081 - 1 : 1992 (Light Industrial)
	Emissions:	EN 50 081 - 2 : 1992 (Heavy Industrial) pr EN 50 093 : 1991
	EMC Emissions:	EN 50 082 - 1 : 1992 (Light Industrial) EN 50 082 - 2 : 1992 (Heavy Industrial)

Specifications subject to change without notice