



Sandhurst Instruments Ltd



TR150 Battery Powered Load Cell Indicator

FEATURES

- ➔ Microprocessor based, allowing single pass calibration facility
- ➔ Tactile keyboard, with dual range selection, peak/valley hold, gross/net, shunt, calibration and on/off controls
- ➔ 7 digit LCD display with battery low
- ➔ Dual Range Facility & RS232 Output Option available
- ➔ TEDS Compatible (IEEE 1451-template 33)
- ➔ Powered by 2 off internal AA Alkaline Batteries with life of 450 hrs in low power mode.
- ➔ Hand held and fully portable with a number of battery & charger options available.



The TR150 is a completely portable, precision instrument packaged in a small robust IP65 enclosure, weighing only 260 grams.

The TR150 accepts an input range of up to 50mV/V with two separate ranges available which enable the instrument to read and display two parameters, i.e. lbs/kg, tonne/kN.

Calibration and configuration can be performed from the front panel with protection against accidental changes.

TYPICAL APPLICATIONS

- ➔ Portable load cell systems
- ➔ Shackle load cell display
- ➔ Link load cell display
- ➔ Hire fleet load cell display
- ➔ Portable calibration systems

Specifications

Characteristics	Typical
Input Type	Strain Gauge Full Bridge Sensors
Input Range	Up +/- 5mV/V (+/-50mV/V can be supplied*)
Non Linearity	=0.005% FSD
Thermal Drift	<5ppm / ° C
Excitation Voltage	5Vdc (+/-4%), 59mA maximum current
Minimum Bridge Resistance	85Ω (4 off 350Ω sensors in parallel)
Internal Battery	2 off AA size alkaline (access via sealed rear compartment)
Battery Life	45 hours (Typical 450 hrs in low power mode) with 350Ω sensor
Update Range	Up to 40mS (can be set in configuration menu)
Display Type	7½ digit LCD display, 8.8mm high digits
Display Resolution	1 part in 250,000 at 1 Hz update range 1 part in 65,000 at 10 Hz update range
Annunciates	Low Battery warning: peak: trough: hold: net: shunt: cal: range:
Electrical Connection	5 pin Binder socket (mating plug supplied)
Physical Size	See diagram below
Weight	260 grams
Legends	Insert legends for engineering unit identification (supplied)
Operating Temperature	-10 ° C to + 50 °C
Environmental Rating	IP65 (when mating plug fitted)
Enclosure Type	ABS, dark grey (Leather carry case optional)

FRONT PANEL USER KEYS:

Tactile keys with recessed rims for:-

- ON/OFF : switches power on/off
- RANGE : selects between 2 ranges
- HOLD : hold the current display value
press again to release
- GROSS/NET : zero display (=100% range)
- SHUNT/CAL : generates simulated input for
indictor 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
on/off

