# **LT540**

5-Way IP65 Load cell Junction / Summation box

Manual – English 1.03



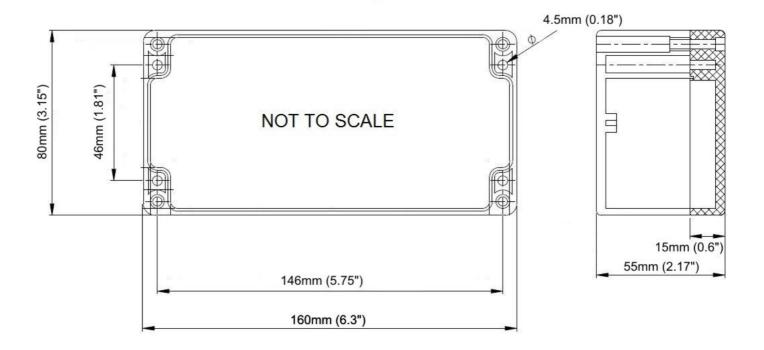
### Introduction

The load cell junction / summation box allows for easy connection / summation of up to 4 load cells to be connected in parallel to the load cell instrumentation. Features of the junction / summation box include an IP65 protection rating, cage clamp wire connectors for easy connection, a red LED for excitation indication and a clear lid for easy fault finding.

### 1 Features

- Easy connection / summation of up to 4 load cells in parallel
- IP65 Protection rating
- Red LED indicating the presence of the load cell excitation voltage
- Supports 4 or 6 wire load cells
- Clear lid for easy fault finding
- Shielded 6-wire connection to the load cell instrumentation
- Cage clamp wire connectors
- 1 year limited warranty

# 2 Dimension & Template Drawing



# 3 Specifications

Enclosure:							
Unit Dimensions	160x80x55mm (6.3x3.15x2.17")						
Enclosure Sealing	Tongue and groove with Neoprene seal						
Enclosure Material	Polycarbonate (grey base, clear lid)						
IP Protection Rating	IP65						
Connector Ratings: (Cage clamp wire connectors)							
Conductor cross section solid min	0.2mm2						
Conductor cross section solid max	2.5mm2						
Conductor cross section stranded min	0.2mm2						
Conductor cross section stranded max	1.5mm2						
Conductor cross section solid min with	0.25mm2						
ferrule							
Conductor cross section solid max with	1.5mm2						
ferrule							
Wire stripping length	7.5mm						
Gland Ratings:							
Clamping/sealing range	4-8mm (0.157-0.314") Diameter wire						
Environmental Conditions:							
Operating temperature	-10°C to 50°C (14°F to 122°F)						
Storage temperature	-40°C to 80°C (-40°F to 176°F)						
Operating and storage humidity	<85%, RH (non-condensing)						

### 4 Installation

Connect Load cells "LOAD CELL 1" to "LOAD CELL 4" noting the load cells correct wiring positions. Connect a suitable shielded cable from the load cell instrumentation to the junction box connector marked "INSTRUMENT". Make sure the red LED is illuminated indicating the presence of the excitation voltage when the load cell instrumentation is powered on. If it does not illuminate then turn off the instrumentation and double check all connections.

#### Notes:

- Tighten the gland nut until the rubber touches the cable completely and then tighten the nut with ½ turn (180 degrees)
- For unused glands either replace the glands with blank glands or insert a small off cut of wire to represent a "Dummy load cell" to block the hole.
- Install the junction / summation box with the glands pointing downwards with cable drip loops (If the cables and
  junction box is exposed to water then bend a short downward loop in all cables near the cord grips so any water
  draining down the cables will drip off before reaching the junction box.

#### 4-Wire Load Cells:

If using 4-wire load cells then link the SEN+ to EXC+ and SEN- to EXC- on the specific load cell connector.

0	LOAD CELL	1	LOAD	1	LOAD CELL 3	1	LOAD CELL 4		TRUMENT		
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0	NOTE: IF USING 4-WIRE LOAD CELLS LINK SEN+ TO EXC+ AND SEN- TO EXC- ON THE INSTRUMENT CONNECTOR  USE SHIELDED 6-WIRE CABLE TO INSTRUMENT										

Note: Install with glands facing downwards and with cable drip loops

## **5 Ordering Information**

**LT540** – 5 way Junction/summation box

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