

IQ601

3-Way Load cell Junction / Summation box

Manual – English 1.01



Introduction

The load cell junction / summation box allows for easy connection / summation of up to 2 load cells to be connected in parallel to the load cell instrumentation. Features of the junction / summation box include removable connectors for easy connection and fault finding, a bi-color LED for load cell voltage excitation indication and a clear lid for easy fault finding.

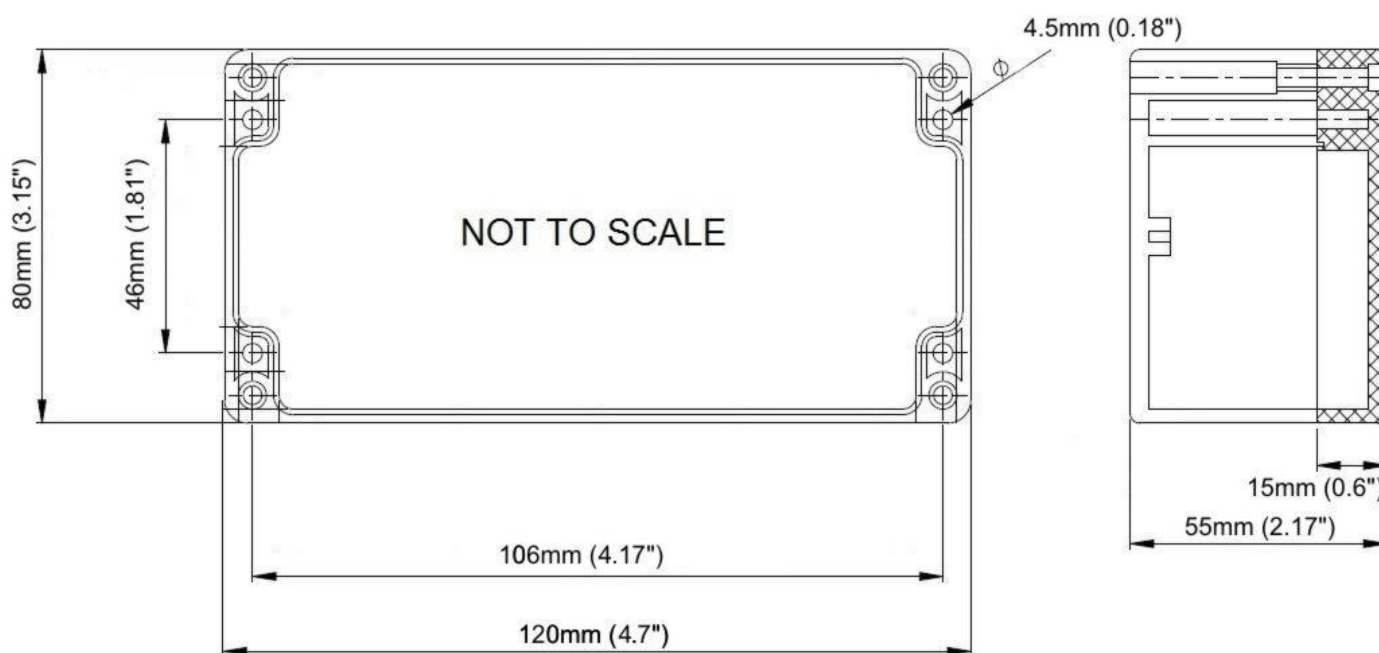
1 Features

- Easy connection / summation of up to 2 load cells in parallel
- Bi-color LED indicating the presence of ac/dc load cell excitation voltage or incorrect dc polarity
- Supports 4 or 6 wire load cells
- Clear lid for easy fault finding
- Shielded 6-wire connection to the load cell instrumentation
- Removable connectors for easy fault finding
- Color coded cable glands
- 1 year limited warranty

2 Specifications

Enclosure:	
Unit Dimensions	120x80x55mm (4.72x3.15x2.17")
Enclosure Sealing	Tongue and groove with Neoprene seal
Enclosure Material	Polycarbonate (grey base, clear lid)
Electrical:	
Maximum excitation voltage	15Vac/dc
Connector Ratings: (7 Way plug-in terminal blocks)	
Wire range	0.2-2.5mm ²
Wire stripping length	7mm
Gland Ratings:	
Clamping/sealing range	4-8mm (0.157-0.314") Diameter wire
Environmental Conditions:	
Operating and Storage temperature	-40°C to 80°C (-40°F to 176°F)
Operating and storage humidity	<85%, RH (non-condensing)

3 Dimension & Template Drawing



4 Installation

Connect load cells “LOAD CELL 1” to “LOAD CELL 2” noting the load cells correct wiring positions (Use the grey glands). Connect a suitable shielded cable from the load cell instrumentation to the junction box connector marked “INSTRUMENT” (Use the black gland).

Excitation LED

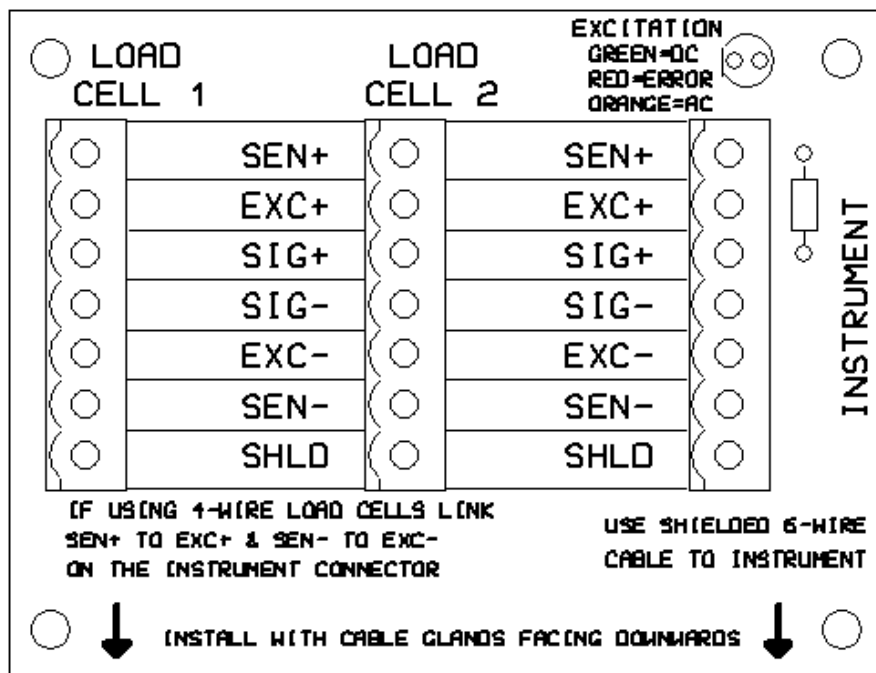
LED Color	Excitation Voltage
Green	dc Excitation (Correct Polarity)
Red	dc Excitation (Incorrect Polarity). Turn off instrumentation and double check connections.
Orange	ac Excitation

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 cable 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.



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

5 Ordering Information

IQ601 – 3 way Junction/summation box

IQ601-PCB – 3 way Junction/summation box PCB only

6 Notice

Specifications of the products displayed herein are subject to change without notice. Infiniteq cc, or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Infiniteq's terms and conditions of sale for such products, Infiniteq assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Infiniteq products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Infiniteq for any damages resulting from such improper use or sale.

7 Warranty

This product carries a warranty for a period of one year from date of purchase against faulty workmanship or defective materials, provided there is no evidence that the unit has been mishandled or misused. Warranty is limited to the replacement of faulty components and includes the cost of labor. Shipping costs are for the account of the purchaser.

Note: Product warranty excludes damages caused by unprotected, unsuitable or incorrectly wired electrical supplies and or sensors, and damage caused by inductive loads.

DISTRIBUTED BY: