

INTELLIGENT JUNCTION BOX FOR CONTINUOUS MONITORING OF LOAD CELL SIGNALS



Continuous, cost effective load cell monitoring with an instant alarm signal.

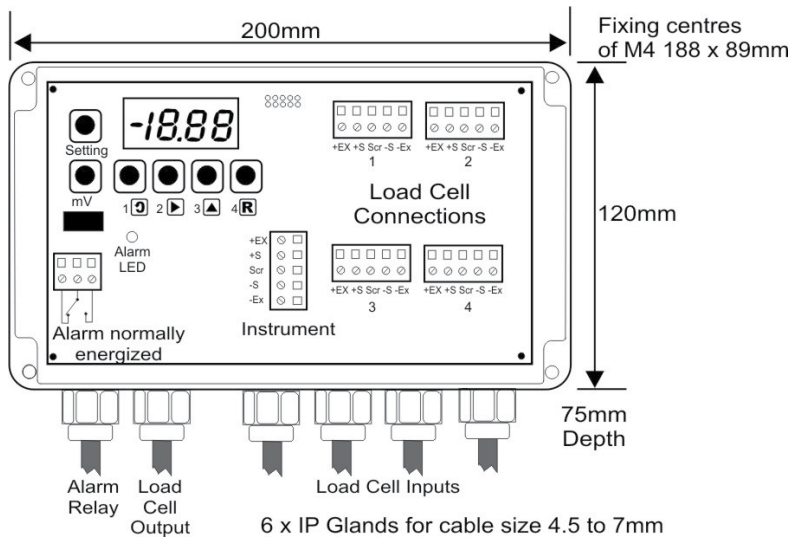
This Intelligent Junction Box is designed to continuously monitor the output signals and Wheatstone bridge circuits of up to 4 load cells connected together in a weighing system; if a fault condition occurs with one or more load cells then an alarm signal is sent via relay.

The avoidance of batch wastage or product recall, reduction in plant downtime and increased safety, together with simple installation and commissioning, all contribute to the JB4T-INTELLIGENT junction box being an essential component in any weighing system. Available in 2 versions (powered by 10V or 5V excitation voltage) this compact IP65 rated unit contains an on-board microprocessor that continuously carries out a number of checks on each load cell; including an out-of-balance load cell signal, a signal outside of a pre-set range, if the excitation voltage drops, or if a load cell is in a short or open circuit state.

- Continuous monitoring of up to 4 load cells
- Checks for Wheatstone bridge faults in the load cell
- Removable terminals for simpler, faster wiring
- IP65 ingress protection
- ABS casing
(option of Stainless Steel or DIN rail mounting)
- Red LED illuminates and relay changes state if a fault condition occurs
- Transparent cover for easy viewing of faults on 4-digit red LED display
- Display shows individual mV/V outputs of the load cells (or the mean mV/V value)
- 10V and 5V excitation versions
- European EMC and CE approval

JB4T-INTELLIGENT

technical specification...



Optional Stainless Steel IP65 casing

Intelligent Junction Box

Specifications	
Faults monitored by junction box	Load Cell out of pre-set balance range
	Load Cell out of pre-set operating range
	Low/high excitation voltage
	Open circuit to any load cell
	Short circuit on any load cell connection
	Internal load cell fault (Wheatstone bridge imbalance)
Power	By Load Cell Excitation from indicator/transmitter (10 V DC or 5 V DC)
Indication	4-digit 7 segment LED display for set up, load cell in error, error type & individual or total mV output
Interface	6 buttons for reading & set up
Connections	2 part terminals, for up to 2.5mm ² cross-section cable
	4 x 5 way, for load cell connections
	1 x 5 way, for load cell output to indicator/transmitter
	1 x 3 way, alarm relay contacts
Dimensions	200 x 120 x 75 mm
Environmental	Sealed to IP65 with cable glands & blanking plugs fitted; CE Compliant
Enclosure	Grey ABS (Stainless Steel IP65 or Die Cast Steel IP65 as options)
Part Numbers	5V excitation version : JB4T-INTELLIGENT-5V
	10V excitation version : JB4T-INTELLIGENT-10V

Performance Parameters	
Allowable voltage from indicator/transmitter	10V version: 8.2 to 12 V DC
	5V version: 4.95 to 6 V DC
Bridge excitation for 350 Ohm load cell	10V version: 8.2 to 12 V DC
	5V version: 4.95 to 6 V DC
Load cell bridge resistance	300 to 1000 Ohms
Load cell sensitivity	1.0 to 5.0 mV/V
Number of load cells	1 to 4
Output load	1M to 100G Ohms
Bandwidth	100 Hz
Linearity	-0.0015 to 0.0015 %FSD
90-day stability	-0.001 to 0.001 %FSD
Operating temperature	-40 to 85 °C
Storage temperature	-40 to 95 °C
Humidity	95% non-condensing
Scan speed for alarm output (with 4 cells)	Typ. 40, Max. 100 ms

DISTRIBUTED BY:



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Our policy is one of continuous product enhancement. We therefore reserve the right to incorporate technical modifications without prior notification.



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