

Lodestone

## Loadcell Indicator and Controller LIC 400

Lodestone

The Lodestone Static Weigh Control System is a dual micro-processor based controller, designed to excite a number of loadcells, and perform a series of tasks, depending on which options have been selected.

### THEORY OF OPERATION

The Lodestone control system produces an excitation voltage, which is suitable to drive a number of loadcells. The resultant millivolt signal is amplified within the unit, and is digitised and then scaled into engineering units and displayed accordingly. The system also provides digital filtering and stability control. The calibration and other data are stored in battery backed memory. The battery is rechargeable and should never need replacing.

### SYSTEM CALIBRATION

The Zero and Span are easy to calibrate. The span can either be setup with test weights or live load checking can be employed (Preferred). The engineering units are selectable or special units can be used if required (consult factory). The default is tonnes.

### ALARM RELAYS

Up to four alarm relays can be provided. The setpoint of all relays are selectable via the keypad. Inflight Material Compensation is also available via the keypad when the system batching option has been selected.

### SYSTEM DESIGN

The system has designed to suit precise customer requirements. So if a feature is required that is not currently included in our technical specification, we can, if feasible, include any new requirements.

The system setup is performed via four front panel function keys. These keys are context sensitive with their function being described by the display.



### FEATURES

- Simple Calibration
- Easy to Install
- IP65 Protection
- Rugged Steel Enclosure
- Optional Plastic Enclosure
- AC & DC Power Supply
- High Accuracy
- Up to four Relay Outputs
- Serial Data Output
- Large Clear Display
- System healthy watchdog

### DISPLAY

- Total weight (Gross)
- Ingredient weight (Batching)
- Tare weight (optional)
- Nett Weight optional)
- System Parameter setup data
- Key Functions (context sensitive)
- Batch Number (Optional)
- Batch Progress (optional)



### INPUTS

- Up to 4 loadcells (350 ohm)
- 4 wire input
- Power - AC or DC (Specify with order)
- Remote serial data for setup functions (Optional)
- Remote analogue setpoint (Optional)

### OUTPUTS

- 4 Setpoint Relays ((Optional))
- Additional relays as option (Consult Factory)
- System Watchdog Relay (Healthy) - (optional)
- Analogue output (4-20mA) (Optional)
- Serial Output (Optional)
- Printer output (Optional)
- Multi-Ingredient Batching (Optional)
- System healthy watchdog (optional)

### Technical Specification

- Excitation Voltage 10v (+5 to -5v)
- Linearity 0.03% FS
- Accuracy 0.03% FS
- Resolution 1/16384,000 counts
- Operating Range -10°C to +50°C
- Storage Range -40°C to +80°C
- Housing IP65

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