

LCT-2 Digital Weight Transmitter



Introduction

The LCT-2 is a digital weight transmitter, combined with an intelligent junction box, for high-speed, individual monitoring of up to four individual load cells. The unit is able to measure and transmit filtered weight data to a programmable logic controller (PLC) or other compatible host device, via MODBUS® protocol or Ethernet/IP protocol.

A calibration-free feature provides for scaling of the LCT-2 to the load cell mV/V calibration data. This eliminates the need for conventional calibration methods utilizing test weights and/or material substitution.

Designed for in-plant applications, several unique capabilities help guard against costly downtime and the resultant product waste. These include real-time scale system diagnostics, capable of immediate fault detection. Based on high-speed analog-to-digital conversion technology, the device can minimize the effects of long, analog homerun cable installations.

The sampling rate is adjustable from 4.7 Hz to 4800 Hz, with a resolution of 24 bits. Dead load cell emulation provides a workaround until a detected fault can be corrected, making the LCT-2 ideal for mission-critical systems requiring single or multiple scales with multiple cells.

The Transcell LCT-2 is designed to be highly flexible, adaptable to virtually any plant environment. Up to 20 industrial network protocols are supported. MODBUS® RTU and MODBUS® ASCII are standard. MODBUS® TCP/IP and EtherNet/IP™ are also available (with additional hardware). Other interface options include PROFIBUS, CAN open, and DeviceNet™.

Features

- EtherNet/IP™ protocol
- MODBUS® RTU, TCP/IP and ASCII protocols
- Individual monitoring of up to four load cells
- Calibration-free feature (mV/V calibration)
- High speed, adjustable sampling rate with 24 bits resolution
- Real-time diagnostics of scale system including dead load cell emulation
- Digital corner calibration
- Remote configuration, calibration and diagnostics
- RS-485 communication interface is standard
- Optional Ethernet interface is also available
- Optional industrial interfaces include PROFIBUS, CAN open, and Device Net™
- Up to twenty(20) industrial network protocols supported in total

Specifications

Load Cell Excitation: +3.3 VDC	A/D Conversion Rate: 4.7 Hz to 4800 Hz (adjustable)
Load Cell Current: Drives up to four 350 Ω Load Cells	A/D Resolution: 24 bits
Analog Signal Input Range: +/- 3.125 mV/V max	No. of ADC channels: Four
Analog Sensitivity: 0.3 μV/grad, minimum 0.6 μV/grad, recommended	Remote Functions: Zero, Start/Stop Stream Data, Demand Data, ADC counts
Serial Port: Half Duplex RS-485 Format	Operating Temperature: -14°F to 104°F (-10°C to 40°C)
Power Requirements: 24 VDC, 0.5 A	Warranty: 1 year limited warranty applies
Dimensions: 9.0" x 7.1" x 2.1" (228 mm x 181 mm x 53 mm)	

Dimensions

