

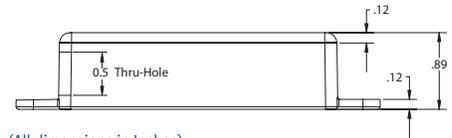
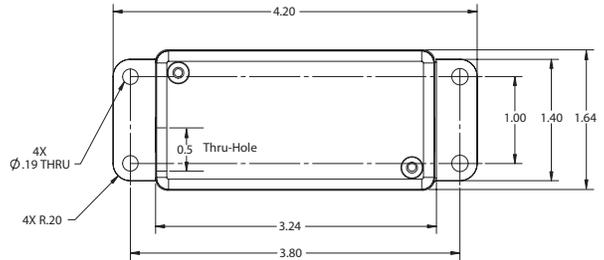
# DI-100U 16-bit Digital Sensor Interface

## Overview

Loadstar Sensors' DI-100U Digital Sensor Interface modules provide a simple, convenient method to connect existing millivolt output load cells or other sensors with mV/V output to Windows PC or tablets via USB.



**Single Channel, 16-Bit USB**



(All dimensions in Inches)

## Highlights

- ★ Powered by USB port; no external power needed.
- ★ Works with most 4-wire 0-3 mV/V load cells (wires with E+, E-, S+, S-).
- ★ Offers 16-bit resolution & provides accuracies to +/- 0.1% of full scale for most load cells.
- ★ Appears as a Virtual COM port on a Windows PC.
- ★ Works with LabVIEW, Matlab, VisualStudio etc.
- ★ ASCII command set to allow users to get calibrated data into their own software applications.
- ★ Provides UART/Serial TTL output, USB output using S2R serial to USB Dongle.
- ★ Works with LoadVUE, SensorVUE or ControlVUE software to display, log or plot this data.

## Specifications

Accuracy Class	0.1%
Input Range	3 mV/V (0-15 mV Span)
ADC Resolution	16 bit
Channels	1
Sampling rate	40 Hz (DI-100U) 275 Hz (D-100UHS)
Output Protocol (Interface to PC)	UART (Tx, Rx) or USB (Virtual COM) using Serial to USB Dongle (S2U)
Wireless Option	No
Battery Option	No
Load Cell Compatibility	4 Wire
Compatible Software	LV-100, LV-1000, LV-4000, LV-CG, SensorVUE, ControlVUE, nCounter

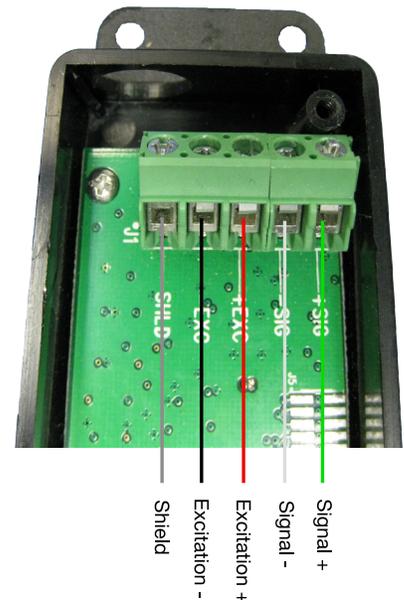
## Ordering Information

Available Configurations				
Part No.	ADC (Bits)	Channels	Data Output Rate (Hz.)	Output
DI-100U	16	1	40	USB
DI-100UHS	16	1	275	USB

## Certifications



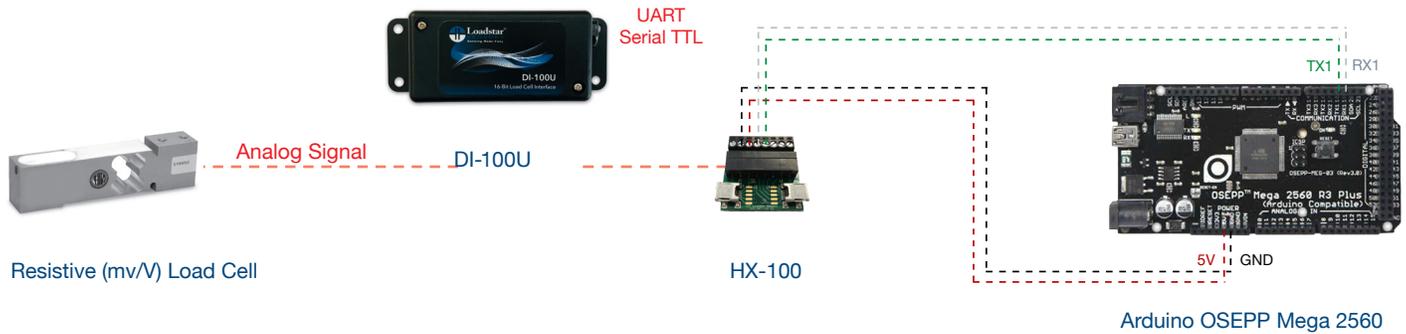
## Wiring Diagram: DI-100U



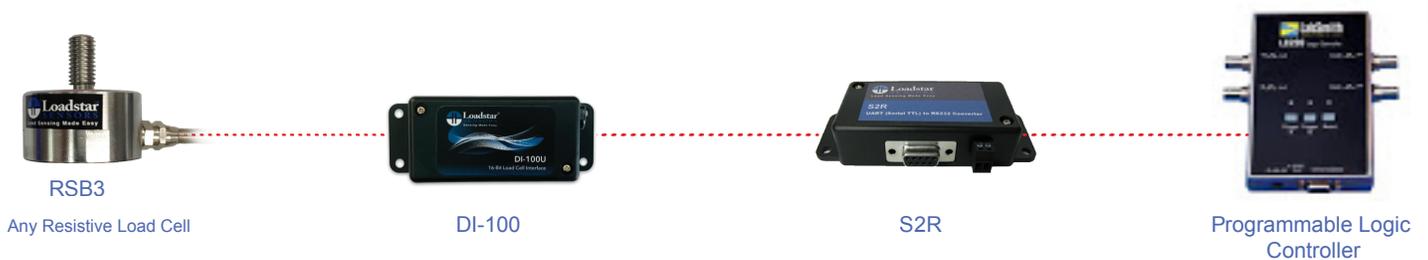
### USB Configuration



### UART / Serial TTL Configuration



### Resistive Load Cell + DI-100 to RS-232 Configuration



### NOTE

The Interface needs to be mated and calibrated with the sensor. Once calibrated, these need to be used as a pair. You can not use the interface(s) interchangeably with other sensors. We recommend using our Calibration utility within LoadVUE Pro, SensorVUE, and ControlVUE software for calibration.