

DI-1000 Digital Sensor Interface (USB or Wireless)

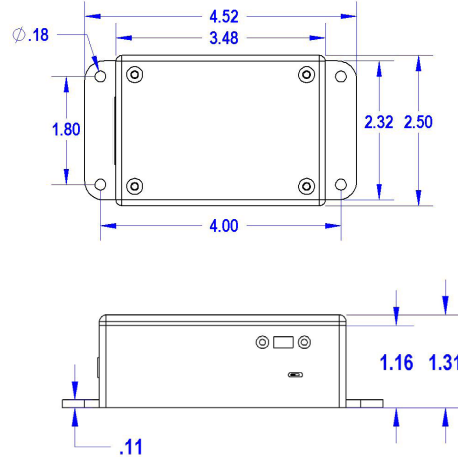


Overview

Loadstar Sensors' DI-1000 Digital Sensor Interface module provide a simple, convenient method to connect existing millivolt output load cells or other sensors with a 0-5 VDC output to Windows PC or tablets. It is available with USB or wireless output. The wireless version comes with a rechargeable battery for cordless operation.



1 Channel, 24-Bit USB or Wireless



(All dimensions in Inches)

Highlights

- ★ 24-bit ADC for finer resolution.
- ★ Configurable gain to optimize resolution for full span of signal.
- ★ Works with 4-wire or 6-wire mv/V load cells.
- ★ Works with displacement sensors, pressure sensors, and other sensors with 0-5VDC output.
- ★ Optional wireless connectivity in addition to USB.
- ★ Offers optional rechargeable battery operation.
- ★ Optional data update rates up to 1 KHz.
- ★ Has an external terminal block for easy access.

Specifications

Model	DI-1000U DI-1000UHS	DI-1000U-5V DI-1000UHS-5V	DI-1000UHS-1K
Accuracy Class	± 0.02%	± 0.05%	± 0.1%
Input Range	3 mV/V (0-15 mV Span)	0 to 5V DC Span	3 mV/V (0-15 mV Span)
ADC Resolution	24 bit	24 bit	24 bit
Channels	1	1	1
Sampling rate	80 Hz (DI-1000U) 16 Hz (DI-1000ZP) 10 Hz (DI-1000BLE) 2 Hz (DI-1000WiFi) 500 Hz (DI-1000UHS)	80 Hz (DI-1000U-5V) 16 Hz (DI-1000ZP-5V) 10 Hz (DI-1000BLE) 2 Hz (DI-1000WiFi) 500 Hz (DI-1000UHS-5V)	Above 1000 Hz
Output Protocol (Interface to PC)	USB (Virtual COM)	USB (Virtual COM)	USB (Virtual COM)
Wireless Option	Yes, DI-1000ZP/DI-1000WiFi	Yes, DI-1000ZP/DI-1000WiFi	No
Battery Option	Yes, DI-1000ZP	Yes, DI-1000U-5VZP	No
Load Cell Compatibility	4 Wire & 6 Wire	4 Wire & 6 Wire	4 Wire & 6 Wire
Load Cell Connector	Screw Terminal Block	Screw Terminal Block	Screw Terminal Block
Compatible Software	LV-100, LV-1000, LV-4000, LV-CG, SensorVUE, ControlVUE, nCounter	SensorVUE, ControlVUE	LV-1000, SensorVUE, ControlVUE

Ordering Information

Available Configurations				
Part No.	ADC(Bits)	Channels	Data Output Rate (Hz.)	Output
DI-1000U	24	1	80	USB
DI-1000UHS	24	1	500	USB
DI-1000U-5V	24	1	80	USB
DI-1000UHS-5V	24	1	500	USB
DI-1000UHS-1K	24	1	1000	USB
DI-1000UHS-1K-5V	24	1	1000	USB
DI-1000ZP	24	1	16	XBee
DI-1000WiFi	24	1	1	WiFi
DI-1000BLE	24	1	1	BLE



USB Configuration



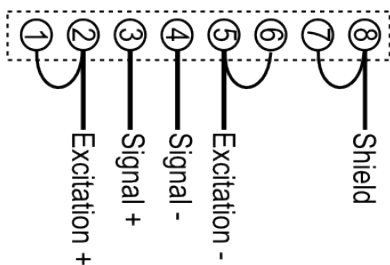
Wireless Configuration



Displacement Sensor Configuration

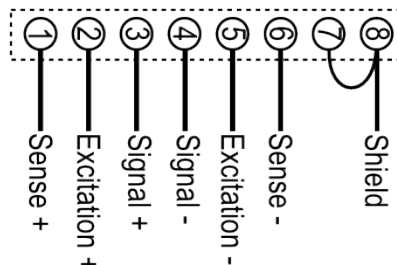


Wiring Diagram: DI-1000



DI-1000U Wiring for 4 wire load cells

(Add external jumpers between pins 1 and 2, between pins 5 and 6 and between pins 7 and 8 as shown.)



DI-1000U Wiring for 6 wire load cells

(Add an external jumper between pins 7 and 8 as shown.)

Wiring Diagram: DI-1000-5V



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.