

Description	Bridge101A
Range	See Table Below*
Resolution	
Accuracy	
Memory	1,000,000 readings; software configurable memory wrap 330,000 readings in multiple start/stop
Wrap Around	Yes
Sample Rate	4Hz to 1 every 24 hours
LED Indicator	Red and Green
Units	V, mV, μ V, Engineering Units specified through software
Reg. Interface	IFC200
Baud rate	115,200
Battery Life	10 months typical at a 1 minute reading rate with a 350 Ω load 2 years typical at a 1 minute reading rate with a 1000 Ω load
Operating Environment	-40°C to +80°C (-40°F to +176°F), 0%RH to 90%RH non-condensing
Material	ABS plastic
Dimensions	1.4" x 2.5" x 0.6" (36mm x 64mm x 16mm)
Weight	0.8 oz (24 g)
Approvals	CE

*Bridge101A Range, Resolution and Accuracy

Nominal Range	± 30 mV	± 150 mV	± 1000 mV
Measurement Range	± 30 mV	± 160 mV	± 1200 mV
Resolution	1 μ V	5 μ V	50 μ V
Calibrated Accuracy	$\pm 0.01\%$ FSR; ± 3 Microvolts	$\pm 0.01\%$ FSR; ± 16 Microvolts	$\pm 0.01\%$ FSR; ± 120 Microvolts
Input Range	0 to 2.5V	0 to 2.5 V	0 to 2.5 V
Reference Voltage	2.5 V	2.5 V	2.5 V

Battery Warning

WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80°C (176°F).

Specifications subject to change.



Bridge101A-30

30mV Bridge Data Logger

Bridge101A-150

150mV Bridge Data Logger

Bridge101A-1000

1000mV Bridge Data Logger

Product Notes

The Bridge101A data logger is designed to interface with and measure strain gauges and load cells. The device provides an excitation voltage of 2.5V's and is available in the following millivolt input ranges: $\pm 30\text{mV}$, $\pm 150\text{mV}$, $\pm 1000\text{mV}$.

LEDs

- Green LED: every 10 seconds to indicate logging and 15 seconds to indicate delay start mode.
- Red LED: every 10 seconds to indicate low battery and/or memory and 1 seconds to indicate an alarm condition.

Installation Guide

Installing the Interface cable

- IFC200
- Insert the device into a USB port. The drivers will install automatically.

Installing the software

Insert the Software USB Stick in an open USB port. If the autorun does not appear, locate the drive on the computer and double click on Autorun.exe. Follow the instructions provided in the Wizard.

Device Operation

Connecting and Starting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Connect the USB end of the interface cable into an open USB port on the computer.
- The device will appear in the Connected Devices list, highlight the desired data logger.
- For most applications, select **"Custom Start"** from the menu bar and choose the desired start method, reading rate and other parameters appropriate for the data logging application and click **"Start"**. (*"Quick Start" applies the most recent custom start options, "Batch Start" is used for managing multiple loggers at once, "Real Time Start" stores the dataset as it records while connected to the logger.*)
- The status of the device will change to **"Running"**, **"Waiting to Start"** or **"Waiting to Manual Start"**, depending upon your start method.
- Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

Downloading data from a data logger

- Connect the logger to the interface cable.
- Highlight the data logger in the Connected Devices list. Click **"Stop"** on the menu bar.
- Once the data logger is stopped, with the logger highlighted, click **"Download"**. You will be prompted to name your report.

- Downloading will offload and save all the recorded data to the PC.

Device Maintenance

Battery Replacement

Materials: [Small Phillips Head Screwdriver](#) and a [Replacement Battery \(LTC-7PN\)](#)

- Puncture the center of the back label with the screw driver and unscrew the enclosure.
- Remove the battery by pulling it perpendicular to the circuit board.
- Insert the new battery into the terminals and verify it is secure.
- Screw the enclosure back together securely.

Recalibration

Bridge101A standard calibration values:

Logger Voltage	30mV	150mV	1000mV
Strain (V)	0V and 22.5-25mV	0V and 90-100mV	0V and 900-1000mV