

BRIDGE101A BRIDGE/STRAIN GAUGE DATA LOGGER

Features

- Multiple Start/Stop Function
- Ultra High Speed Download
- 1 Million Reading Storage Capacity
- Memory Wrap
- Battery Life Indicator
- Optional Password Protection
- Programmable Alarm
- Field Upgradeable



The Bridge101A Data Logger measures and records voltage, typically used in conjunction with strain gauges, load cells or other low-level DC voltage sources. This device is designed to accurately measure and record the output of the gauge to determine parameter levels such as stress, torque, strain, and pressure on a structure or item over a period of time.

Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Available in three different measurement ranges (± 30 mV, ± 160 mV or ± 1200 mV), the Bridge101A offers a reading rate of up to 4 Hz with memory capacity of 1,000,000 readings (memory wrap optional). The device can be configured to start at a specified date and time up to 24 months in advance and the pushbutton start/stop feature allows the user to initiate or cease logging data in the field if desired.

Applications

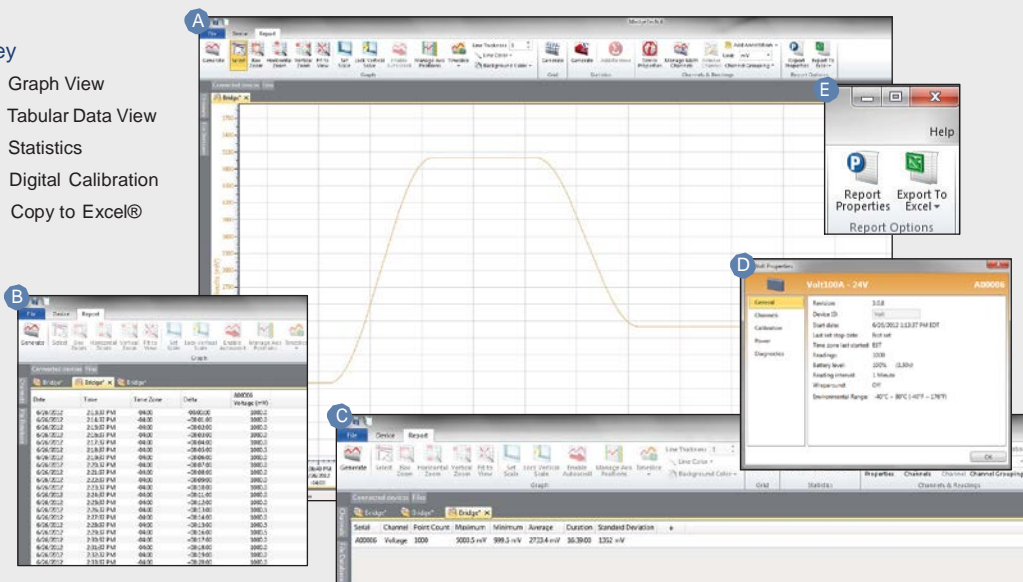
- Strain Gauge
- Load Cell
- Pressure Transducer
- Torque Sensors
- Load Bolts
- Position Transducer

The MadgeTech Data Logger Software offers user programmable Engineering Units which allows collected data to be presented in the established unit being measured. Equipped with endless data analysis and reporting tools, the MadgeTech software simplifies device management and provides the user with graph, tabular or summary reports with the ability to export data to Excel as needed.

MADGETECH DATA LOGGER SOFTWARE

Key

- A Graph View
- B Tabular Data View
- C Statistics
- D Digital Calibration
- E Copy to Excel®



Software Features:

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Data table view
- Automatic report generation
- Summary view

BRIDGE101A SPECIFICATIONS*

*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

Nominal Range:	±30 mV	±150 mV	±1000 mV
Measurement Range:	±30 mV	±160 mV	±1200 mV
Resolution:	1 µV	5 µV	50 µV
Calibrated Accuracy:	±0.01% FSR; ±3 Microvolts	±0.01% FSR; ±16 Microvolts	±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
Reading Rate:	4Hz to 1 every 24 hours		
Memory:	<ul style="list-style-type: none"> 1,000,000 readings; software configurable memory wrap 330,000 readings in multiple start/stop 		
Wrap Around:	Yes		
Start Modes:	<ul style="list-style-type: none"> Immediate start Delay start up to 24 months Multiple pushbutton start/stop 		
Stop Modes:	<ul style="list-style-type: none"> Manual through software Timed (specific date and time) 		
Multiple Start/Stop Mode:	Start and stop the device multiple times without having to download data or communicate with a PC.		
Multiple Start/Stop Mode Activation:	<ul style="list-style-type: none"> To start the device: Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging. To stop the device: Press and hold the pushbutton for 5 seconds, the red LED will flash during this time. The device has stopped logging. 		
Real Time Recording:	The device may be used with PC to monitor and record data in real time		
LED Functionality:	<ul style="list-style-type: none"> Green LED blinks: 10 second rate to indicate logging 15 second rate to indicate delay start Red LED blinks: 10 second rate to indicate low battery and/or full memory 1 second rate to indicate an alarm condition 		

Password Protection:	An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password.
Engineering Units:	Native measurement units can be scaled to display measurement units of another type. This is useful when monitoring voltage outputs from different types of sensors such as strain gauges and load cells.
Battery Type:	3.6V lithium battery included; user replaceable
*Battery Life:	<p>10 months typical at a 1 minute reading rate with a 350 Ω load</p> <p>2 years typical at a 1 minute reading rate with a 1000 Ω load</p>
Time Accuracy:	±1 minute/month (at 20 °C/68 °F, stand alone data logging)
Computer Interface:	USB (interface cable required); 115,200 baud
Software:	XP SP3/Vista/Windows 7/Windows 8 (MadgeTech 4 Only)
Operating Environment:	-40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 90 %RH non-condensing
Dimensions:	1.4 in x 2.5 in x 0.6 in (36 mm x 64 mm x 16 mm)
Weight:	0.8 oz (24 g)
Materials:	ABS Plastic
Approvals:	CE

*MadgeTech recommends using 350 or 1000 Ω strain gages. 120 Ω strain gauges can be used with the Bridge101A but it is not recommended as it will reduce the battery life, potentially increase noise level and limit the low end temperature operation.

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212 °F, INCINERATE OR EXPOSE CONTENTS TO WATER.

ORDERING INFORMATION

MODEL	DESCRIPTION
Bridge101A-30	±30 mV Bridge/Strain Data Logger
Bridge101A-150	±150 mV Bridge/Strain Data Logger
Bridge101A-1000	±1000 mV Bridge/Strain Data Logger
Calibration Certificate	Calibration Certificate available for data logger
IFC200	Software, manual and USB interface cable
LTC-7PN	Replacement battery for Bridge101A

ASK ABOUT
OUR OTHER
DATA
LOGGERS

- Temperature
- Humidity
- Pressure
- pH
- Level
- Shock
- LCD Display
- Pulse/Event/State
- Current
- Voltage
- Wireless
- Intrinsically Safe
- Spectral Vibration
- Motion