

# BRIDGE120 BRIDGE/STRAIN GAUGE DATA LOGGER



## Features

- 20 Hz processing speed
- High speed download
- Low cost
- Programmable start time
- Reusable
- Miniature size
- User-friendly
- Reads in microstrain and engineering units
- Versatile inputs for many applications

## Applications

- Strain gauge
- Load cells
- Pressure transducers
- Torque sensors
- Load bolts
- Position transducers
- Replace costly strip chart recorders



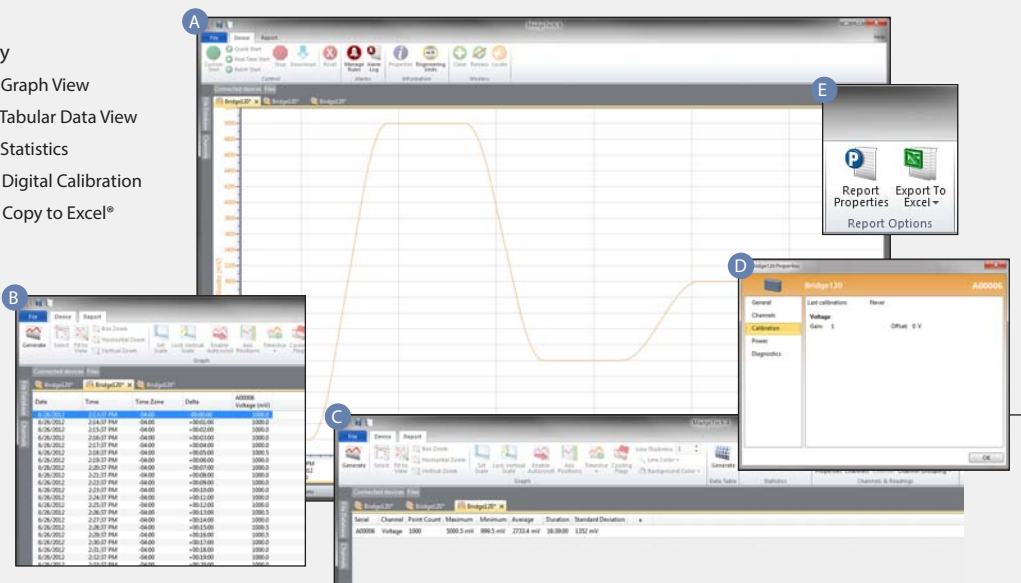
The Bridge120 is a battery powered, miniature, stand alone bridge/strain recorder.

The device features a 20 Hz processing speed and a real-time clock module. This easy-to-use device can measure and record up to 32,767 measurements per channel. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The device can be started and stopped directly from your computer and its small size allows it to fit almost anywhere. The Bridge120 makes data retrieval quick and easy. Simply plug it into an empty COM or USB port and our user-friendly software does the rest.

## 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
- Multilingual

# BRIDGE120 SPECIFICATIONS\*

Nominal Range:	±10 mV	±25 mV	±100 mV	±1000 mV
Measurement Range:	±15 mV	±37.5 mV	±150 mV	±1200 mV
Resolution:	1 µV	2.5 µV	5 µV	50 µV
Calibrated Accuracy:	±0.25 %	±0.10 %	±0.05 %	±0.01 %
Input Range:	0 to 2.5V	0 to 2.5 V	0 to 2.5 V	0 to 2.5 V
Reference Voltage:	2.5 V	2.5 V	2.5 V	2.5 V
Input Connection:	6-position removable screw terminal			
Input Impedance:	>1 MΩ during acquisition, low impedance when inactive			
Reference Output:	2.5 VDC, 2.5 mA (1 kΩ) maximum load			
Maximum Input Signal Impedance:	5 kΩ			
Specified Accuracy:	Nominal range @ 25 °C			
Temperature Effect on Span:	< 25 µV over -40 °C to +80 °C			
Temperature Effect on Offset:	< 25 µV over -40 °C to +80 °C			
Engineering Units:	Stored in device, user may define any desired scale and offset from ±1.0000E-31 to ±9.9999E+31			
350 Ω sensors may be used with series resistors to produce >1 KΩ; 120 Ω gauges may be used in half and quarter bridge configurations				

Start Modes:	Software programmable immediate or delay start up to 1 day
Real Time Recording:	May be used with PC to monitor and record data in real time
Memory:	32,767 readings; software configurable memory wrap.
Reading Rate:	20 Hz to 12 hours
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6 V lithium battery included; user replaceable
Battery Life:	25 days
Data Format:	Date and time stamped %, ppm; ε, µε; V, mV, µV, engineering units specified through software
Time Accuracy:	±1 minute/month (at 20 °C to 30 °C)
Computer Interface:	PC serial or USB (interface cable required); 57,600 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-40 °C to +80 °C, 0 %RH to 95 %RH non-condensing
Dimensions:	0.8 in x 1.7 in x 2.7 in (20 mm x 42 mm x 68 mm)
Weight:	2 oz (60 g)
Approvals:	CE

**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
Bridge120-10	±10 mV Bridge Recorder
Bridge120-25	±25 mV Bridge Recorder
Bridge120-100	±100 mV Bridge Recorder
Bridge120-1000	±1000 mV Bridge Recorder
Calibration Certificate	Calibration Certificate available for data logger
IFC200	Software, manual and USB interface cable
LTC-7PN	Replacement battery for Bridge120

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