Features

- ③ 20Hz processing speed
- ③ High speed download
- ③ Low cost
- ③ Programmable start time
- ③ Reusable
- ③ Miniature size
- ③ User-friendly
- ③ Reads in microstrain and engineering units
- ③ Versatile inputs for many applications

Applications

- ③ Strain gauge
- ③ Load cells
- ③ Pressure transducers
- ③ Torque sensors
- ③ Load bolts
- ③ Position transducers
- ③ Replace costly strip chart recorders

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

The device features a 20Hz 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.
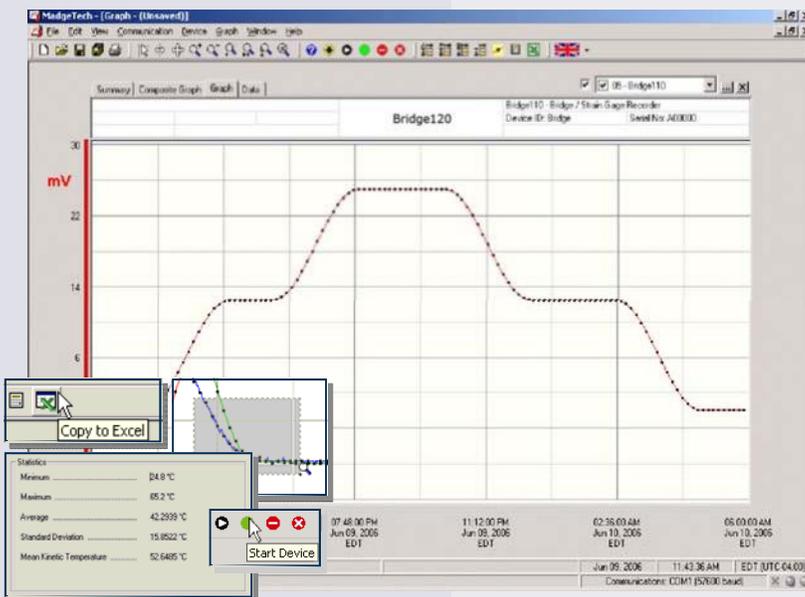
Data Recorder Software
Reports strain data in an easy to use graph.

The Windows®-based software package allows the user to effortlessly collect, display and analyze data. A variety of powerful tools allow you to examine, export, and print professional looking data with just a click of the mouse.

BRIDGE120 SPECIFICATIONS*

	±10 mV	±25 mV	±100 mV	±1000 mV
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: >1MΩ during acquisition, low impedance when inactive

Reference Output: 2.5VDC, 2.5mA (1kΩ) maximum load

Maximum Input Signal Impedance: 5kΩ

Specified Accuracy: Nominal range @ 25ºC

Temperature Effect on Span: < 25µV over -40 to +80 ºC

Temperature Effect on Offset: < 25µV over -40 to +80 ºC

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: 20Hz to 12 hours

Calibration: Digital calibration through software

Calibration Date: Automatically recorded within device

Battery Type: 3.6V 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 to 30ºC)

Computer Interface: PC serial or USB (interface cable required); 57,600 baud

Software: XP SP3/VIsta/Windows 7

Operating Environment: -40 ºC to +80 ºC, 0 to 95 %RH non-condensing

Dimensions: 0.8" x 1.7" x 2.7" (20mm x 42mm x 68mm)

Weight: 2 oz (60 g)

Approvals: CE

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

SOFTWARE FEATURES

Multiple Graphs: Simultaneously analyze data from several units or deployments; easily switch to a single data series

Graphical Cursor: One click displays readings by time, value, parameter or sample number

Data Table: Instantly access tabular view for detailed dates, times, values, and annotations

Scaling Options: Autoscale function fits data to the screen, or allows user to manually enter their own values

Formatting Options: Change colors, line styles, plotting options, show or hide channels quickly

Statistics: Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button

Export Data: Export data in a variety of common formats, or switch to Excel® with a single click

Calibration: Automatically calculate and store calibration parameters

Logger Configuration: Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID

Communications: Automatically sets up communications port, or lets user select configuration