GaugeBuster 2
Digital Indicator & Controller

Advanced, Versatile, and Accurate.

Next Generation Load, Stress and Load Rate Indicator for tension and compression testing to ASTM requirements.

GaugeBuster 2 is a versatile digital indicator and controller for determining the mechanical properties of materials. The GaugeBuster 2 is also well suited for product, portable and force calibration testing applications. Features include an Auto-Test-Reset mode for hands free operation, bar graph load rate display, permanent storage of test data and easy transfer of results into data base programs. It’s accuracy, which exceeds ASTM E4, ease-of-use and ruggedness results in a system of unrivaled price/performance.

Simply connect the GaugeBuster 2 with a load cell or pressure transducer to a testing machine and measure the strength of materials in tension, compression, or bend.

**Features**

- Display Live Load, Maximum Load, Live Stress and Maximum Stress numerically.
- Indicate Load/Stress Rate numerically or with a bar graph. The bar graph pointer moves between limits. Adjust the upper and lower rate limits depending on the testing requirements. Ex: ASTM C39 28-42 psi/sec.
- Activate average load rate analysis to calculate and report actual test speeds.
- Select between force units of Lb, N, KN, Kg and stress units of psi, MPa, KPa, ksc.
- Define specimen geometries as cylinder, cube, beam center point loading, beam-3rd point loading, round and general area.
- Define cylinder break type according to ASTM C39.
- Perform beam tests according to ASTM C78 and C293.
- Store up to 2,000 test results to permanent memory. Results include Date, Time, Specimen ID#, Maximum Load, Maximum Stress, Average Load Rate plus a statistical summary of each.
- Store up to 6 test methods to permanent memory. Test methods enable the user to define and store cylinder, beam and cube test procedures to memory. With the press of a key they can be quickly recalled for fast efficient testing.
- Activate Auto-Store to automatically store the results of each test.
- Auto-Test-Reset is standard and automatically enables the indicator for the start of the next test without requiring operator interaction.
- Define and detect the end of test with the Sample Break Detector.
- Digital output activates at sample break or machine overload.
- Connect an HP compatible USB printer to generate Single Test Reports which include an XY curve, Group Test Reports that include tabulated results from multiple tests, Test Methods and Calibration Data (option).
- Transmit via the USB communications port (standard) or USB flash drive (option) results, XY data, test methods and calibration data to a remote computer running ADMET’s GaugeSafe Data Exchange Program.
- Store up to 6 load cell calibrations for multiple load cell systems.
- The load calibration algorithm allows up to 10 calibration points per cell with piece wise linear fit between points. Accuracy exceeds ASTM E4 Standards and in general is better than 0.5% from 1% of full scale to full scale.
- GaugeBuster 2 comes standard with one analog input for measuring force and stress. Optional digital encoder and analog inputs can be installed to measure displacement or strain. Ideal for measuring modulus or poisson’s ratio according to ASTM C469.
- With the servo control option, GaugeBuster 2 can be used with ADMET’s MegaForce Automatic Loading System to ensure that all tests are performed according to ASTM standards. The user specifies the loading rates to achieve precise closed loop control.
# System Specifications

## Load Input Compatibility

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>User selectable from 1mv/v to +/- 2.5Vdc</td>
</tr>
<tr>
<td>Excitation</td>
<td>10 Vdc</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Gauge Buster 2 plus Transducer-Better than 0.5% from 1% of full scale to full scale (Exceeds ASTM E4).</td>
</tr>
<tr>
<td>Resolution</td>
<td>1 part in 8 million (approx.)</td>
</tr>
<tr>
<td>Sampling Rate</td>
<td>Up to 1000 Hz</td>
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</tbody>
</table>

## Accessories

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portability</td>
<td>Battery powered portable case</td>
</tr>
<tr>
<td>Inputs</td>
<td>Digital position or analog strain inputs</td>
</tr>
<tr>
<td>Control</td>
<td>Servo control output for MegaForce</td>
</tr>
<tr>
<td>Software</td>
<td>GaugeSafe Data Exchange Software, Concrete Tracker Database Program</td>
</tr>
<tr>
<td>Brackets</td>
<td>Fixed and swivel mounting brackets</td>
</tr>
<tr>
<td>Calibration</td>
<td>Shunt Calibration</td>
</tr>
<tr>
<td>Pressure Transducers</td>
<td>Pressure Transducers: 1,000-3,000-5,000-10,000 psi</td>
</tr>
</tbody>
</table>

## Power Requirements

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Voltage</td>
<td>100-240 VAC 50-60 Hz</td>
</tr>
<tr>
<td>Battery</td>
<td>Battery powered units use eight AA batteries</td>
</tr>
<tr>
<td>Dimensions</td>
<td>9.31&quot;Wx8.56&quot;Hx3&quot;DP</td>
</tr>
</tbody>
</table>

## Input Channels

- Analog Force (standard)
- Analog Axial Strain (option)
- Digital Position or Transverse Strain (option)

## Outputs

- 5V Output Activated on Sample Break or Over Range (standard)
- Servo Control for Automatic Testing Systems (option)

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### Active Test Method

- **M3**
- **136745 LB**

**Live Load Test Rate**

- 2 line x 16 character LCD with 3/8" H characters

- Test Method
- Setup
- Report Opt
- Control
- Print
- (disk)
- (zero)
- (freeze)
- ENT
- Start

- 24 key tactile keypad

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**Gauge Buster 2**

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