

### Features

- High speed download (115,200 baud)
- Built-in accelerometers
- Real-time operation
- Low cost
- Programmable start time
- Reusable
- Compact
- User-friendly
- CE compliant

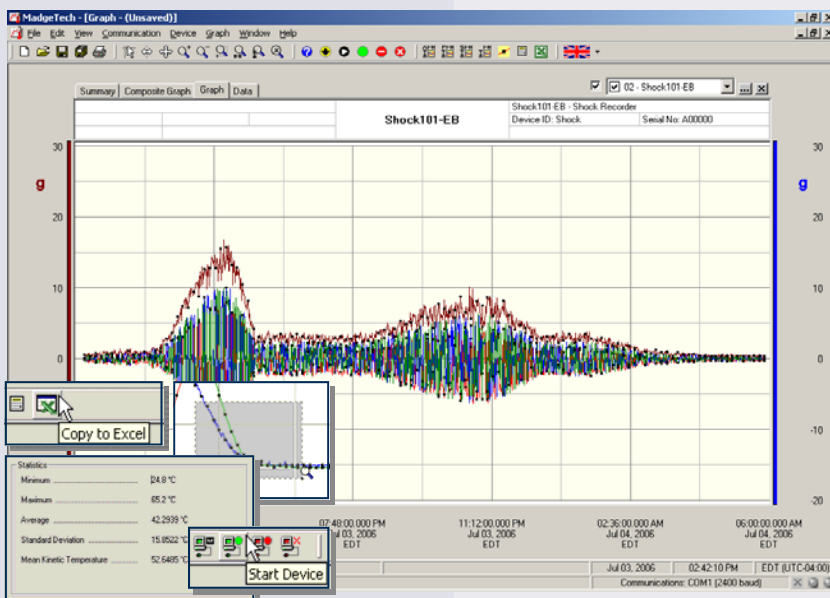
### Applications

- Shipment monitoring
- Assembly line monitoring
- Brake testing
- Fragility testing
- Laboratory drop testing
- Aircraft turbulence measurement
- Machinery monitoring
- Railcar coupling impacts

The Shock101-EB is a battery powered, stand alone 3-axis shock recorder which offers a battery life of up to 60 days typical. The unit measures and records shock as the peak acceleration levels over the user defined interval.



The Shock101-EB is specifically designed for documenting dynamic environments such as moving vehicles, trucks, containers, ships, etc. The device is also valuable in characterizing environments such as production and assembly lines of delicate equipment, IC fabrication, communications and computer components. This is an all-in-one compact, portable, easy to use device that will measure and record up to 349,525 measurements per axis. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The user can start and stop directly from the computer and it's small size allows it to fit almost anywhere. The Shock101-EB 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 Recorder Software** displays shock data in an easy to use graph.

The Windows<sup>®</sup>-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.

Click [MadgeTech Software](#) for more information or to download the software.

# SHOCK101-EB SPECIFICATIONS\*

<b>Channels:</b>	Shock (3 axes)			
<b>Acceleration Range (g):</b>	±5	±50	±100	±250
<b>Calibrated Accuracy (g):</b>	±0.2	±1	±2	±4
<b>Acceleration Resolution (g):</b>	0.01	0.05	0.1	0.2
<b>Sample Rate:</b>	1.953ms/512Hz			
<b>Reading Interval:</b>	64Hz to 5min			
<b>Memory:</b>	349,525 readings per axis, 1,398,100 total readings			
<b>Start Modes:</b>	Software programmable immediate start or delay starts up to 180 days in advance			
<b>Status Indicators:</b>	Red: Blinks to indicate sleep mode Red & Green: Blinks to indicate delay start Green: Blinks to indicate taking sample (blinks at sample rate)			
<b>Password Protection:</b>	An optional password may be programmed into the device to restrict access to configuration options. Data may be downloaded without the password			
<b>Real Time Recording:</b>	Record instantaneous acceleration in real time (1 second or slower reading rate)			

<b>Calibration:</b>	Digital calibration through software
<b>Calibration Date:</b>	Automatically recorded within device
<b>Battery Type:</b>	6 D-cell alkaline batteries included, <b>user replaceable</b>
<b>Battery Life:</b>	60 days typical @25°C, 1 minute reading rate
<b>Data Format:</b>	Date and time stamped gravities (g and mg)
<b>Time Accuracy:</b>	±1 minute/month (at 20°C, RS232 port not in use)
<b>Computer Interface:</b>	PC serial or USB (interface cable required); 115,200 baud
<b>Software:</b>	XP SP3/Vista/Windows 7
<b>Operating Environment:</b>	-20 to +54°C, 0 to 95%RH non-condensing
<b>Dimensions:</b>	5.5" x 5.4" x 3.2" (140mm x 137mm x 80mm)
<b>Weight:</b>	5 lbs (2.3 kg)
<b>Materials:</b>	Anodized aluminum
<b>Approvals:</b>	CE

**BATTERY WARNING:** DISCARD USED BATTERY PROMPTLY. KEEP OUT OF REACH OF CHILDREN. DO NOT DISPOSE OF IN FIRE, RECHARGE, PUT IN BACKWARDS, DISASSEMBLE, OR MIX WITH OTHER BATTERY TYPES. MAY EXPLODE, FLAME OR LEAK AND CAUSE PERSONAL INJURY.

## SOFTWARE FEATURES

<b>Multiple Graphs:</b>	Simultaneously analyze data from several units or deployments; easily switch to a single data series	<b>Statistics:</b>	Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button
<b>Real-Time Recording:</b>	Collect and display data in real-time while continuing to log	<b>Export Data:</b>	Export data in a variety of common formats, or switch to Excel® with a single click
<b>Graphical Cursor:</b>	One click displays readings by time, value, parameter or sample number	<b>Calibration:</b>	Automatically calculate and store calibration parameters
<b>Data Table:</b>	Instantly access tabular view for detailed dates, times, values, and annotations	<b>Logger Configuration:</b>	Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID
<b>Scaling Options:</b>	Autoscale function fits data to the screen, or allows user to manually enter their own values	<b>Communications:</b>	Automatically sets up communications port, or lets user select configuration
<b>Formatting Options:</b>	Change colors, line styles, plotting options, show or hide channels quickly	<b>Printing:</b>	Automatically print graphical or tabular data

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

## ORDERING INFORMATION

Model	Description	Price (U.S.)
SHOCK101-5-EB	±5g Tri-Axial Shock Recorder with extended battery	\$749.00
SHOCK101-50-EB	±50g Tri-Axial Shock Recorder with extended battery	\$749.00
SHOCK101-100-EB	±100g Tri-Axial Shock Recorder with extended battery	\$749.00
SHOCK101-250-EB	±250g Tri-Axial Shock Recorder with extended battery	\$749.00
IFC110	Software, manual and RS232 interface cable	\$99.00
IFC200	Software, manual and USB interface cable	\$119.00
NIST	N.I.S.T. Calibration Certificate	Call for Pricing
MN1300	Replacement battery for Shock101-EB	\$5.00

### ASK ABOUT OUR OTHER DATA RECORDERS

Temperature	Pulse/Event/State
Humidity	Low Level Current
Pressure	Low Level Voltage
pH	RF Transmitters
Level	Intrinsically Safe
Shock	Spectral Vibration
LCD Display	

For Quantity Discounts call 603-456-2011 or email [sales@madgetech.com](mailto:sales@madgetech.com)



DOC-1065009-00 REV G 2010.07.14