

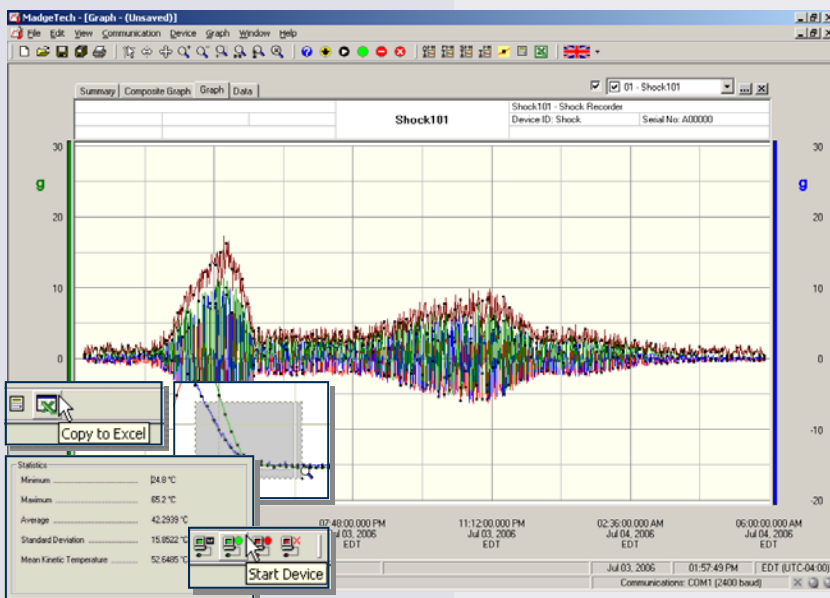
### Features

- Records 3-axis shock
- Built-in accelerometers
- Measures dynamic and static acceleration
- Real-time operation
- Low cost
- Programmable start time
- Reusable
- Compact
- CE compliant
- Optional password protection
- High speed download (115,200 baud)

### Applications

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

The Shock101 is a battery powered, stand alone 3-axis shock recorder. The Shock101 measures and records shock as the peak acceleration levels over the user defined interval. The Shock101 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 device can be started and stopped directly from your computer and it's small size allows it to fit almost anywhere. The Shock101 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®-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 SPECIFICATIONS\*

**Channels:** Shock (3 axes)

**Accelerometer Type:** MEMS Semiconductor

<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

**Sample Rate:** 1.953ms/512hz (note: data is sampled at this rate, only peak values are written at the end of a recording interval)

**Frequency Response:** 0Hz to approx. 400Hz

**Memory:** 349,525 readings per channel; 1,398,100 total readings

**Reading Rate:** 64Hz to 5 minutes for shock, selectable in software

**Real Time Recording:** May be used with PC to monitor and record instantaneous acceleration in real time (1 second or slower reading rate)

**Start Modes:** Software programmable immediate start or delay start up to 180 days in advance

**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

**Calibration:** Digital calibration is available to the user through software

**Calibration Date:** Automatically recorded within device

**Battery Type:** 9V lithium or alkaline battery included; **user replaceable**

**Battery Life:** 7 days typical with lithium battery

**Data Format:** Date and time stamped gravities (g and mg)

**Time Accuracy:** ±1 minute/month (at 20°C to 30°C)

**Computer Interface:** USB or serial interface (interface cable required), 115,200 baud

**Software:** XP SP3/Vista/Windows 7

**Operating Environment:** -20 to +60°C, 0 to 95%RH non-condensing

**Dimensions:** 3.5" x 4.4" x 1.0" (89mm x 112mm x 26mm)

**Weight:** 12 oz (340 g)

**Materials:** Anodized aluminum

**Approvals:** 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>Graphical Cursor:</b>	One click displays readings by time, value, parameter or sample number	<b>Export Data:</b>	Export data in a variety of common formats, or switch to Excel® with a single click
<b>Data Table:</b>	Instantly access tabular view for detailed dates, times, values, and annotations	<b>Calibration:</b>	Automatically calculate and store calibration parameters
<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

<u>Model</u>	<u>Description</u>	<u>Price (U.S.)</u>
SHOCK101-5	±5g Tri-Axial Shock Recorder	\$599.00
SHOCK101-50	±50g Tri-Axial Shock Recorder	\$599.00
SHOCK101-100	±100g Tri-Axial Shock Recorder	\$599.00
SHOCK101-250	±250g Tri-Axial Shock Recorder	\$599.00
IFC110	Software, manual and RS232 interface cable	\$99.00
IFC200	Software, manual and USB interface cable	\$119.00
U9VL-J	Replacement battery for Shock101	\$15.00
Calibration certificates available. Call for pricing.		

### 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-1062009-00 REV F 2010.07.14

879 Maple Street · Contoocook, NH 03229  
PO Box 50 · Warner, NH 03278 · Phone: (603) 456-2011 · Fax: (603) 456-2012