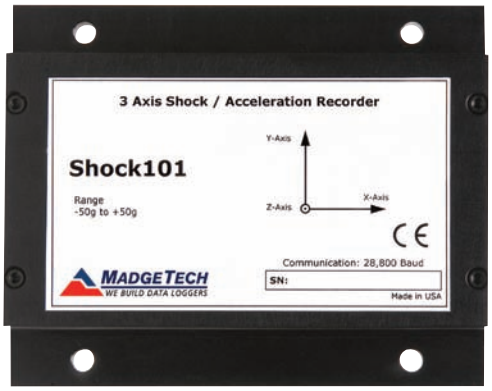
SHOCK101
TRI-AXIAL SHOCK DATA LOGGER

MADGETECH
WE BUILD DATA LOGGERS

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

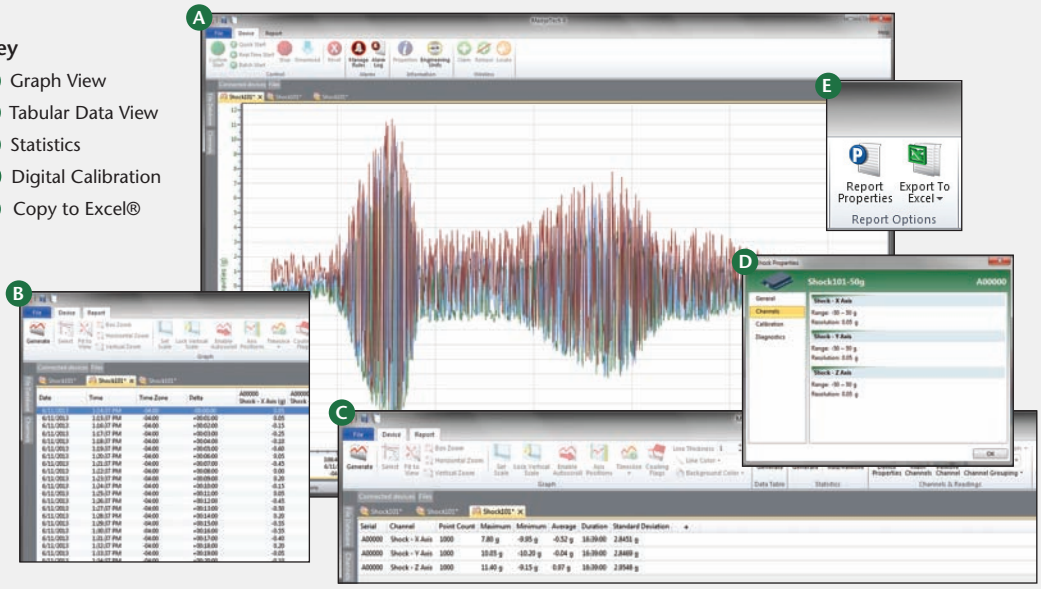
The Shock101 is a battery powered, stand alone 3-axis shock recorder. The Shock101 measures and records shock as the peak acceleration levels over the user defined interval. The Shock101 is specifically designed for documenting dynamic environments such as moving vehicles, trucks, containers, ships, 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 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

SHOCK101 SPECIFICATIONS*

Channels:	Shock (3 axes)			
Accelerometer Type:	MEMS Semiconductor			
Acceleration Range (g):	±5	±50	±100	±250
Calibrated Accuracy (g):	±0.2	±1	±2	±4
Acceleration Resolution (g):	0.01	0.05	0.1	0.2
Sample Rate:	1.953 ms/512 hz (note: data is sampled at this rate, only peak values are written at the end of a recording interval)			
Frequency Response:	0 Hz to approx. 400 Hz			
Memory:	349,525 readings per channel; 1,398,100 total readings			
Reading Rate:	64 Hz 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 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 (interface cable required); 115,200 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-20 °C to +60 °C, 0 %RH to 95 %RH non-condensing
Dimensions:	3.5 in x 4.4 in x 1.0 in (89 mm x 112 mm x 26 mm)
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.

ORDERING INFORMATION

MODEL	DESCRIPTION
SHOCK101-5	±5g Tri-Axial Shock Recorder
SHOCK101-50	±50g Tri-Axial Shock Recorder
SHOCK101-100	±100g Tri-Axial Shock Recorder
SHOCK101-250	±250g Tri-Axial Shock Recorder
IFC200	Software, manual and USB interface cable
U9VL-J	Replacement battery for Shock101

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