![MadgeTech - WE BUILD DATA LOGGERS]

ULTRASHOCK-EB

TEMPERATURE, PRESSURE, HUMIDITY & TRI-AXIAL SHOCK DATA LOGGER WITH EXTENDED BATTERY

Features

- All inclusive design
- Built-in accelerometers
- 60 day battery life
- High speed download
- Low cost
- Reusable
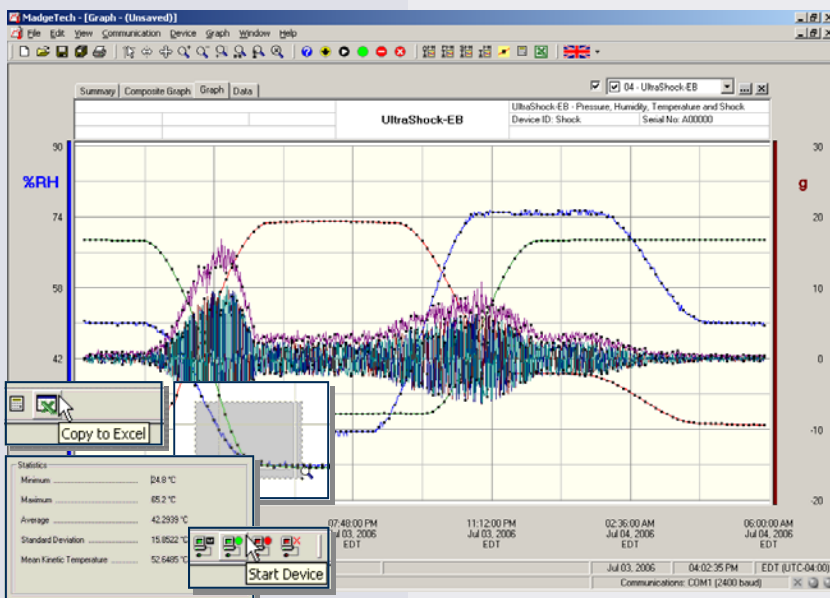- User-friendly
- CE compliant

Applications

- Complete environmental shipment monitoring
- Shipping live cargo
- Aircraft turbulence measurement
- Endurance testing
- Assembly line monitoring
- Brake & crash testing
- Laboratory drop testing
- Machinery monitoring
- Railcar coupling impacts

The UltraShock-EB is a battery powered, stand alone temperature, pressure, humidity and 3-axis shock recorder which offers a battery life of up to 60 days typical. The unit measures and records temperature, pressure and humidity at the selected reading rates, while shock is recorded as the peak acceleration levels over the same interval.

The UltraShock-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 electronics, 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 174,762 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. The UltraShock-EB makes data retrieval quick and easy. Simply plug it into an empty USB port and our user-friendly software does the rest.

MadgeTech Data Recorder Software displays shock, temperature, humidity, and pressure 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.

Supplied in Australia by Instrument Choice
Call our scientists on 1300 737 871
www.instrumentchoice.com.au

ULTRASHOCK-EB SPECIFICATIONS*

TEMPERATURE

Sensor: Semiconductor
Range: -20 to +54°C
Resolution: 0.1°C
Accuracy: ±0.5°C (0 to +50°C)

HUMIDITY

Sensor: Capacitive Polymer
Range: 0 to 95%RH
Resolution: 0.1%RH
Calibrated Accuracy: ±3%RH (±2%RH typical at 25°C)
Specified Accuracy Range: +10 to +40°C; 10 to 80%RH

PRESSURE

Sensor: Semiconductor Strain Gage
Range: 0 to 30PSIA
Resolution: 0.002PSIA
Calibrated Accuracy: ±1.0%FSR at 25°C; ±0.2% typical
Specified Accuracy Range: 0 to 30 PSIA, 25°C

SHOCK

Accelerometer Type: MEMS Semiconductor

Acceleration Range (g):	±5g	±50g	±100g	±250g
Acceleration Resolution (g):	0.01g	0.05g	0.1g	0.2g
Calibrated Accuracy (g):	±0.2g	±1.0g	±2.0g	±4.0g

Absolute Max. Acceleration: 200g (all versions)

Sampling Rate: 1.953ms/512Hz
Accelerometer Freq. Resp.: 0Hz to approx. 400Hz

Memory: 174,762 readings per channel
Reading Rate: 64Hz to 5 minutes for shock, selectable in software. Temperature, pressure and humidity, approximately every 2 seconds at intervals faster than 2 seconds, otherwise sampled at the reading rate.
Start Modes: Software programmable immediate start or delay start up to 180 days from PC launch.
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: 6 D-cell alkaline batteries, **user replaceable**
Battery Life: 60 days typical at 25°C, 1 minute reading rate
Data Format: Date and time stamped gravities (g and mg), temperature (°C, °F, K, °R), humidity (%RH, mg/ml water vapor concentration), pressure (PSIA, inHg, mmHg, bar, atm, Torr, Pa, kPa, MPa)
Time Accuracy: ±1 minute/month at 20 to 30°C
Computer Interface: USB (interface cable required); 115,200 baud
Software: XP SP3/VIsta/Windows 7
Operating Environment: -20 to +54°C, 0 to 95%RH (non-condensing)
Dimensions: 5.5" x 5.4" x 3.2" (140mm x 137mm x 80mm)
Weight: 80 oz. (2.3kg)
Enclosure: Anodized aluminum
Approvals: CE

BATTERY WARNING: DO NOT CONNECT IMPROPERLY, CHARGE OR DISPOSE OF IN FIRE, BATTERY MAY EXPLODE OR LEAK.

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 average, 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

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

*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.)
ULTRASHOCK-5-EB	Temperature, Humidity, Pressure and ±5g Tri-Axial Shock Recorder	$899.00
ULTRASHOCK-50-EB	Temperature, Humidity, Pressure and ±50g Tri-Axial Shock Recorder	$899.00
ULTRASHOCK-100-EB	Temperature, Humidity, Pressure and ±100g Tri-Axial Shock Recorder	$899.00
ULTRASHOCK-250-EB	Temperature, Humidity, Pressure and ±250g Tri-Axial Shock Recorder	$899.00
IFC200	Software, manual and USB interface cable	$119.00
NIST	N.I.S.T. Calibration Certificate	Call for Pricing
MN1300	Replacement battery for UltraShock-EB (6 required)	$30.00 for set

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

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