

ULTRASHOCK

Pressure, Humidity, Temperature & Tri-Axial Shock Recorder

FEATURES

- All inclusive design
- High speed download
- N.I.S.T. traceable
- Real-time operation
- Low cost
- Programmable start time
- Reusable
- Compact
- User-friendly
- Built-in accelerometers

APPLICATIONS

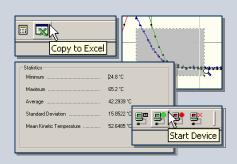
- Total environmental shipment monitoring
- Assembly line monitoring
- Brake testing
- Fragility testing
- Laboratory drop testing
- Aircraft turbulance measurement
- Machinery monitoring
- Railcar coupling impacts

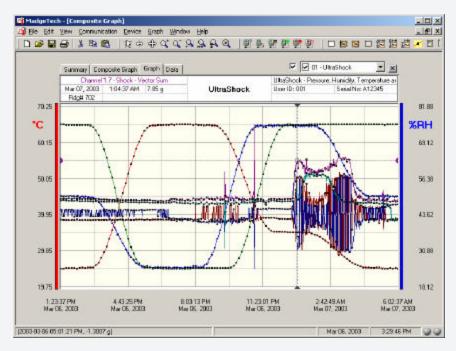


The ULTRASHOCK is a battery powered, stand alone temperature, pressure, humidity and 3-axis shock recorder. The ULTRASHOCK measures and records temperature, pressure and humidity at the selected reading rates, while shock is recorded as the peak acceleration levels over the same interval. The ULTRASHOCK 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 23,831 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 and it's small size allows it to fit almost anywhere. The ULTRASHOCK makes data retrieval quick and easy. Simply plug it into an empty com port and our user-friendly software does the rest.

SOFTWARE

MadgeTech's Data Recorder Software is an easy to use Windows-based software package that 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.





Demo our software at www.madgetech.com

ULTRASHOCK SPECIFICATIONS

Temperature Range: -40 °C to +80 °C

Temperature Resolution: 0.1 °C

Calibrated Accuracy: ±0.5 °C (0 to +50°C)

Humidity Range: 0 to 100% RH

Humidity Resolution: 0.5% RH

Calibrated Accuracy: ±3%RH (±2% RH typical at 25 °C)

Pressure Range: 0 to 30 PSIA

Pressure Resolution: 0.002 PSIA

Calibrated Accuracy: ±1.0% FSR at 25 °C; ±0.2% typical

Acceleration Range: ±50 g

Acceleration Resolution: 0.1g (12 bit)

Calibrated Accuracy: ±0.5 g

Sampling Rate: 2 millisecond (> 500 Hz)

Memory: 23,831 readings per channel

Reading Interval: 1 reading every 2 seconds to 1 every 12 hours

Start Time: Software programmable start time and date. Up to

24 hours in advance

Real Time Recording: May be used with PC to monitor and record data

in real time

Calibration: Digital calibration through software

Calibration Date: Automatically recorded within device

Power: 9V lithium or alkaline battery included

*User Replaceable Battery: 7 days typical

Data Format: Date and time stamped °C, °F, °K, °R; %RH, mg/

ml water vapor concentration; PSIA, inHg, mmHg,

bar, atm, Torr, Pa, kPa, MPa, altitude; g

Time Accuracy: ±1 minute/month (at 20 °C, RS232 port not in use)

Computer Interface: PC serial or RS232C COM (Interface cable

required); 28,800 baud

Software: Windows 95/98/ME/NT/2000/XP based software

Operating Environment: -20 °C to +70 °C, 0 to 90 %RH non-condensing

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

Weight: 15 oz (435 g)

SOFTWARE FEATURES

Multiple Graphs: Simultaneously analyze data from

several units or deployments; easily

switch to a single data series

Real-Time Recording: Collect and display data in real-time

while continuing to log

Graphical Cursor: One click displays readings by time,

value, parameter or sample number

Data Table: Instantly access tabular view for de-

tailed dates, times, values, and an-

notations

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 in an

nstani

Statistics: Calculate averages, min, max, standard devia-

tion, 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

Calibration: Fully digital calibration function automatically

stores parameters in device

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 set configuration

Printing: Automatically print graphical or tabular data

**As part of our commitment to continuous product improvement, MadgeTech reserves the right to change product specifications without notice.

ORDERING INFORMATION

Model Description

ULTRASHOCK Pressure, Humidity & Temperature

Recorder

IFC101 Software, manual and 9-pin computer

interface cable

N.I.S.T. Cert N.I.S.T. Calibration Certificate

ASK ABOUT OUR OTHER DATA RECORDERS

Temperature Voltage
Humidity Current
Pressure Submersible
pH Intrinsically Safe
Level RF Transmitters
Shock/Vibration Multi-parameter
Pulse/Event

