ULTRASHOCK TEMPERATURE, HUMIDITY, PRESSURE & TRI-AXIAL SHOCK DATA LOGGER



Features

- Compact size
- 3-axis shock
- Temperature, humidity, pressure
- Fully configurable measurements
- Long life rechargeable battery
- Large capacity event memory
- Programmable start time
- Real time operation
- CE compliant
- Separate low-g and high-g accelerometers

Applications

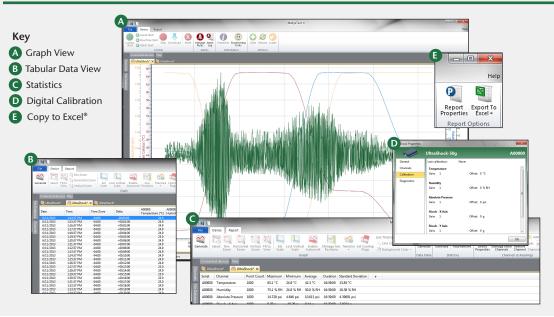
- Complete environmental shipment monitoring
- Shipping live cargo
- Aircraft turbulence measurement
- Endurance testing
- Assembly line monitoring
- Brake testing
- Laboratory drop testing
- Machinery monitoring
- Railcar coupling impacts

The UltraShock is a battery powered, stand alone temperature, pressure, humidity and 3-axis shock data logger. 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.

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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 compact, portable, easy to use device will measure and record up to 4,000,000 measurements (for a single 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 its small size allows it to fit almost anywhere. The UltraShock makes data retrieval quick and easy. Simply plug it into an empty USB port and our user-friendly software does the rest.

The UltraShock provides simple ordering as one model which provides three acceleration ranges. The ranges are implemented on separate low-g and high-g accelerometers for excellent resolution and accuracy.



MADGETECH DATA LOGGER SOFTWARE

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

ULTRASHOCK SPECIFICATIONS*

*Specifications are subject to change without notice. Specific warranty remedy limitations apply. Call (603) 456-2011 or go to madgetech.com for details.

TEMPERATURE				
Sensor:	Semiconduct	or		_
Range:	-20 °C to +60 °C			
Resolution:	0.1 °C			
Accuracy:	±0.5 °C (+5 °	C to +60 °C)		
HUMIDITY				
Sensor:	Capacitive Po	lymer		
Range:	0 %RH to 95	%RH		
Resolution:	0.1 %RH			
Calibrated Accuracy:	±3 %RH (±2 %RH typical at 25 °C)			
Specified Accuracy Range:	+20 °C to +40 °C; 25 %RH to 75 %RH			
PRESSURE				
Sensor:	Semiconduct	or Strain Gage	2	
Range:	100 mbar to	1300 mbar		
Resolution:	0.05 mbar			
Calibrated Accuracy:	±1.5 mbar at 25 °C; at 750 mbar			
SHOCK				
Accelerometer Type:	MEMS Semic	onductor		
Acceleration Range (g):	±15 g	±100 g	±300 g	
Acceleration Resolution (g):	0.02 g	0.05 g	0.2 g	
Calibrated Accuracy (g):	±0.3 g	±2.0 g	±6.0 g	
Sampling Rate:	1000 Hz			
Accelerometer Freq. Resp.:	>1000 Hz (15 >500 Hz (100			C
Reading Rate:	able in softwo & humidity s 2 seconds at	minutes for sh are. Temperatu ampled appro intervals short therwise, sam	ure, pressure x. every er than	

BATTERY WARNING: FIRE, EXPLOSION AND SEVERE BURN HAZARD. DO NOT SHORT CIR-CUIT, CRUSH, PENETRATE, INCINERATE OR DISASSEMBLE. AVOID TEMPERATURES ABOVE THE MAXIMUM OPERATING TEMPERATURE OF THE PRODUCT. DISPOSE OF PROPERLY. CHARGE ONLY WITH THE PROVIDED MADGETECH CHARGER, OR FROM OTHER USB POWER SOURCE VIA THE MADGETECH PROVIDED CABLE.

Memory:	4,000,000 readings (660,000 per channel, all channels in use)	
Start Modes:	Software programmable immediate start or delay start, up to 6 months in advance	
Real Time Recording:	May be used with PC to monitor and record instantaneous measurements in real time	
Password Protection:	An optional password may be programmed into the device to restrict access to configuration options. Data may be read out with the password.	
Calibration:	Digital calibration through software	
Calibration Date:	Automatically recorded within device	
Battery Type:	Internal Lithium Ion pack, charger included	
Battery Life:	90 days typical at 64Hz 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)	
IP Rating:	IP64	
Time Accuracy:	10 seconds/month (at 0 °C to 50 °C)	
Computer Interface:	USB (type C cable required); 1MBaud	
Software:	Windows XP SP3 or later	
Software Compatibility:	Standard Software version 4.2.14.0 or later Secure Software version 4.2.15.0 or later	
Operating Environment:	-20 °C to +60 °C, 0 %RH to 95 %RH non-condensing	
Dimensions:	3.4 in x 1.7 in x 1.3 in (86 mm x 43 mm x 33 mm)	
Weight:	8 oz (227 g)	
Enclosure:	Anodized aluminum	
Approvals:	CE compliant EMC Directive 2014/30/EU RoHS Directive 2011/65/EU	

ORDERING INFORMATION

L PART NUMBER DESCRIPTION
OCK 902121-00 Temperature, Humidity, Pressure and ±15 g / ±100 g / ±300 g Tri-Axial Shock Data Logger, Battery Charger and USB Type C Interface Cable

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



Motion