OM-CP-ULTRASHOCK Temperature, Humidity, Pressure and Tri-Axial Shock Data Logger Part of the NOMAD® Family



- Built-In Accelerometers
- All Inclusive Design
- Compact
- Programmable Start Time
- Real-Time Operation
- Reusable
- User Friendly

The OM-CP-ULTRASHOCK is a battery powered, stand alone temperature, pressure, humidity and 3-axis shock recorder.

The OM-CP-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 OM-CP-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 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 and it's small size allows it to fit almost anywhere.



OM-CP-ULTRASHOCK-50 data logger, \$799, shown smaller than actual size.

The OM-CP-ULTRASHOCK makes data retrieval quick and easy. Simply plug it into an empty COM or USB port and our user-friendly software does the rest.

Specifications TEMPERATURE

Sensor: Semiconductor Range: -20 to 60°C (-4 to 140°F) Resolution: 0.1°C Accuracy: ±0.5°C (0 to 50°C)

HUMIDITY

Sensor: Capacitive Polymer Range: 5 to 95% RH Accuracy: ±3% RH (±2% RH Typical at 25°C) Resolution: 0.1% RH Specified Accuracy Range: 10 to 40°C; 10 to 80% RH

PRESSURE Sensor: Semiconductor strain gage Range: 0 to 30 psia Resolution: 0.002 psia Calibrated Accuracy: ±1.0% FSR 25°C; ±0.2% typical

SHOCK Accelerometer Type: MEMS Semiconductor

Acceleration Range (g)	±5	±50	±100
Calibrated Accuracy (g)	±0.2	±1	±2
Acceleration Resolution (g)	0.01	0.03	0.05

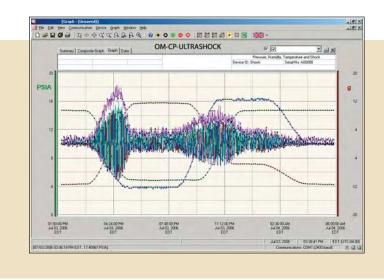
Sampling Rate:

1.953 millisecond (512 Hz) Acceleration Frequency Response: 0 Hz to approximately 400 Hz Readings: 64 readings every second to 1 every 5 minutes Recording Interval: 64 Hz to 5 minutes for shock, selectable in software. Temperature, pressure and humidity sampled approximately every 2 seconds at intervals shorter than 2 seconds. Otherwise, sampled at the reading rate. Memory: 174,762 readings per channel (1,572,858 readings total)

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Real-Time Recording:

Device can be used with PC to monitor and record data in real-time



Reading	X-Axis	Y-axis	Z-axis	Vec-Sum		
No.	G	G	G	G	Date and Time	Annotation
1	0.07	-0.01	-0.85	0.85	May 02, 2000 12:54:41 PM	
2	0.07	-0.01	-0.85	0.85	May 02, 2000 12:54:43 PM	
3	0.04	-0.05	-0.82	0.82	May 02, 2000 12:54:45 PM	
4	0.04	-0.05	-0.82	0.82	May 02, 2000 12:54:47 PM	
5	0.10	-0.01	-0.82	0.83	May 02, 2000 12:54:49 PM	
6	0.17	-0.05	-0.82	0.84	May 02, 2000 12:54:51 PM	
7	0.04	-0.08	-0.88	0.88	May 02, 2000 12:54:53 PM	
8	0.07	-0.05	-0.82	0.82	May 02, 2000 12:54:55 PM	
9	0.04	-0.01	-0.82	0.82	May 02, 2000 12:54:57 PM	
10	0.04	-0.01	-0.82	0.82	May 02, 2000 12:54:59 PM	
11	0.17	-0.01	-0.85	0.87	May 02, 2000 12:55:01 PM	
12	0.07	-0.14	-0.88	0.89	May 02, 2000 12:55:03 PM	
13	0.04	-0.11	-0.82	0.83	May 02, 2000 12:55:05 PM	

OM-CP-IFC110, \$99, Windows software displays data in graphical or tabular format.

	Min	Max
Peak X	-34.40 G	19.12 G
Peak Y	-33.04 G	13.58 G
Peak Z	-42.87 G	38.63 G

Pasword 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 Power: 9V lithium or alkaline (battery included) **Data Format:** Date and time stamped; °C, °F, °K, °R, %RH, mg/ml water vapor concentration, psia, inHg, mm Hg, bar, atm, torr, Pa, kPa, MPa, g

Time Accuracy:

±1 min per month at 2 to 30°C Battery Life: 3 to 7 days typical with lithium battery, 1 min reading rate @ 25°C Computer Interface: PC or USB (interface cable required); 115,200 baud Software: WIN98/NT/2000/XP/VISTA 32-bit (VISTA 32-bit version only; VISTA 64-bit is not supported)

Operating Environment: -20 to 60°C (-4 to 140°F) 0 to 95% RH non-condensing **Dimensions:** 89 H x 111 W x 26 mm D (3.5 x 4.4 x 1.0") Weight: 341 g (12 oz) Material: Anodized aluminum

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)				
Model No.	Price	Description		
OM-CP-ULTRASHOCK-50	\$799	Tri-axial shock data logger, ±50 g		
OM-CP-ULTRASHOCK-50-CERT	859	Tri-axial shock data logger, ±50 g with NIST calibration certificate		
OM-CP-ULTRASHOCK-5	799	Tri-axial shock data logger, ±5 g		
OM-CP-ULTRASHOCK-5-CERT	859	Tri-axial shock data logger, ±5 g with NIST calibration certificate		
OM-CP-ULTRASHOCK-100	799	Tri-axial shock data logger, ±100 g		
OM-CP-ULTRASHOCK-100-CERT	859	Tri-axial shock data logger, ±100 g with NIST calibration certificate		
OM-CP-IFC110	99	Windows software and 1.2 m (4') RS-232 cable with DB9F termination		
OM-CP-IFC200	119	Windows software and 3.7 m (12') USB interface cable		
OM-CP-BAT103	20	Replacement 9V lithium battery		

Operator's manual and RS-232 cable are included with the OM-CP-IFC110 Windows software (required to operate the data logger and sold separately). Ordering Example: OM-CP-ULTRASHOCK-50-CERT humidity, temperature, pressure and tri-axial shock data logger,

OM-CP-IFC110 Windows software with RS-232 cable, \$859 + 99 = \$958.

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