

MINISHOCK : SHOCK PEAK RECORDER



- Compact
- Low Cost
- Easy to use
- Acceleration in x, y and z axes
- Temperature and humidity
- Autonomy : 6 months



GENERAL DESCRIPTION

The MINISHOCK is a self-contained recorder, designed for use in the transport and packaging sectors.

By making use of the latest ASIC and silicon based technologies, this compact unit will measure and date shock, temperature and humidity (available as an option).

Shocks are recorded when the acceleration passes a pre-determined threshold in each of the x, y or z axes.

Only the 128 highest shocks are memorized, thus reducing data overload.

Temperature and humidity are measured periodically. External events can also be noted as a n/o or n/c mode.

After the mission, the data is downloaded via a RS 232 link and visualized using the Logishock software.

APPLICATIONS

Shock recorders are essential to analyze the quality of any logistic operation (handling, transport, etc.). They can be used to determine when damage occurred, and thus help to establish responsibility in the case of insurance claims.

By quantifying the possible shock intensity and the risk of damage, suitable preventive methods can be developed and appropriate packaging and protection provided.

In this way the cost of transport, packaging and transport premiums can be reduced.

Typical applications are the transport of delicate or high value goods, container instrumentation, packaging analysis, shock and crash tests, etc...

OPERATION

Dialogue with the MINISHOCK is established via a RS 232 link using the Logishock software. Before the mission, the operator determines the threshold above which the shocks are recorded, and how often the temperature and humidity are measured.

The MINISHOCK is activated immediately or on a pre-determined date. During the mission, the acceleration is measured continuously and recorded, together with the date and time, whenever the threshold is exceeded.

After the mission, the data is downloaded via the RS 232 link. The data can be visualized graphically or analyzed in the form of tables.

Note: The set-up and the data retrieval can be performed on site, via a portable computer

IMPACT MEASUREMENT

MINISHOCK will measure, date and memorise the 128 highest shocks which occur during the mission and exceed the threshold as defined by the user.

Sensor Characteristics

Range	$\pm 10g$	$\pm 50g$
Resolution	0,1g	0,5g
Accuracy (25°C)	$\pm 0,2g$	$\pm 1g$
Accuracy (-40/+85°C)	$\pm 1g$	$\pm 5g$
Threshold	From 1,5g to 10g	From 5g to 50g
Threshold resolution	0,1g	0,5g
Bandwidth	25/50/100/200 Hz	25/50/100/200 Hz

TEMPERATURE AND HUMIDITY MEASUREMENT

MINISHOCK will measure, date and memorise up to 1024 points of temperature and humidity. Eight sampling periods are available, from 1 minute to 4 hours.

Temperature Sensor Characteristics

Range	-40°C / +85°C
Resolution	1°C
Accuracy (-40°C/+85°C)	$\pm 3^\circ C$
Response Time	15 min.

Humidity Sensor Characteristics (available as option)

Range	5% / 95%
Resolution	1%
Accuracy (-40°C/+85°C)	$\pm 5\%$
Response Time	5 min.

Environmental Characteristics


Working Temperature	-40°C to +85°C
Protection	IP65

Autonomy

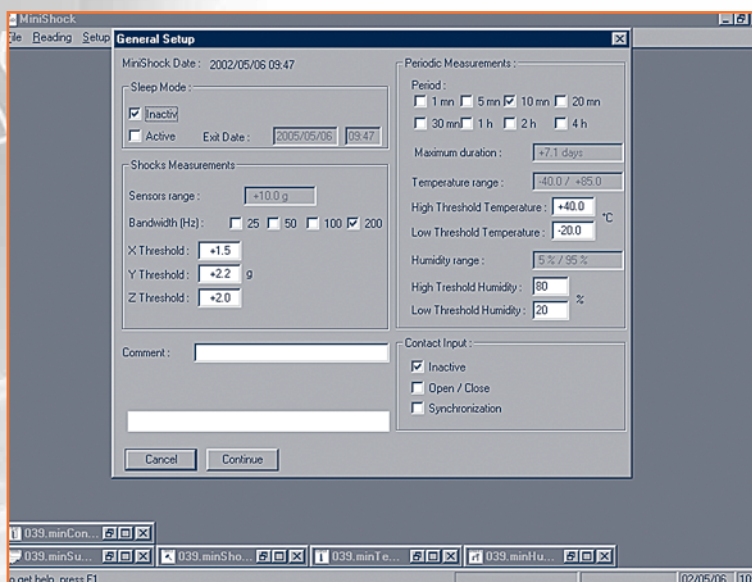
Normal Operating	6 months
Dormant	5 years

Works with a standard lithium battery

SELECTION GUIDE

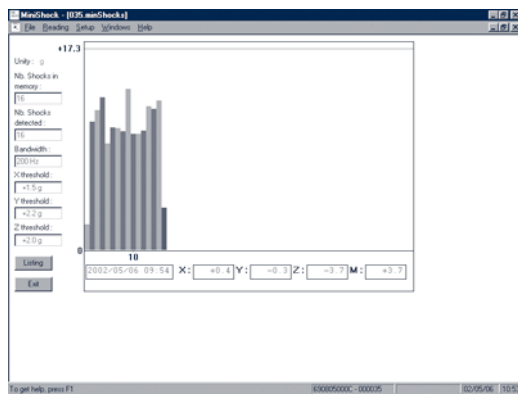
Reference	Designation
690805000	MINISHOCK 10 g Temperature Humidity Contact and Alarm Connector
690805001	MINISHOCK 50 g Temperature Humidity Contact and Alarm Connector
690805002 	MINISHOCK 10 g Temperature Contact and Alarm Connector
690805003	MINISHOCK 50 g Temperature Contact and Alarm Connector
690802100	Lithium Battery
690802101	Communication Cable
690807010	Logishock PC Software
690802103	Metal Sealing Cap
690802104	Plug and Cable for 7 points Connector

SETUP MENU (ALSO IN ENGLISH)

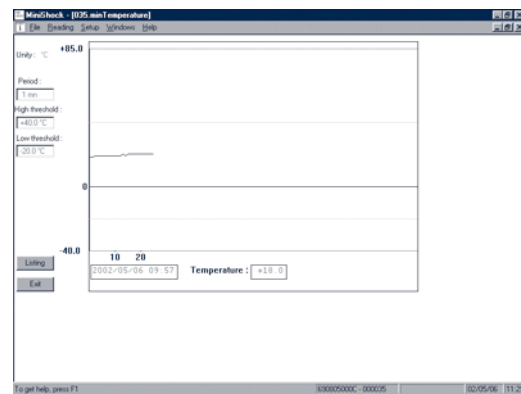


DATA DISPLAY

Shocks



Temperature



INTERFACE DRAWING

