

**RISK LOGGER**  
for monitoring risk situations.

**MONILOG®**  
RISK LOGGER



**TRANSPORT  
RISK**



**STORAGE  
RISK**



**OPERATIONAL  
RISK**



MONILOG®

# MicroShockDetector plus

SMALL LIGHTWEIGHT SHOCK  
DATA LOGGER



SHOCK



INCLINATION



VIBRATION



TEMPERATURE



HUMIDITY



PRESSURE



GPS  
TRACKING



LIGHT  
INCIDENCE

- + Registers the 200 largest shock events in the X, Y, Z direction
- + Saves up to 10 curve progressions of the largest shocks
- + Intelligent signal filtering and evaluation
- + Indicates limit value overruns with alarm LED
- + Continuous recording of temperature, humidity, air pressure, light
- + Intuitive operation, extremely long and independent operating time
- + Communication via USB and NFC
- + Easy configuration and evaluation with license-free PC software
- + Status report can be read out via NFC with smartphone and free app
- + Configurable recording time over start-stop time
- + Easy mounting with adhesive pad, screws or magnetic feet



MONILOG®

# MicroShockDetector plus

## ECONOMIC SOLUTION – EVEN FOR ONE-TIME USE

High-sensitivity devices, e.g. large, superconducting magnets in medical technology, need a safe and demonstrable protection during transport or during storage. + The compact **MONILOG® MicroShockDetector plus** provides the best services. + It is smaller than a smartphone and weighs only 180 grams. + The measuring device reliably stores all data on shocks of every dimension, assigns them to acceleration classes, provides curve progressions and reports alarms as soon as limit values are exceeded. + In addition, temperature, humidity, air pressure and light are monitored. +

The switch-on time of the **MicroShockDetector plus** is easy to configure. + All data can be read out via the USB port, transferred to a PC and evaluated. + There is also an option to read out the status report with a smartphone via NFC. + The free app **MONILOG® Connect** sends the read status report as a PDF file by e-mail. + The device is quickly installed and dismantled with adhesive pads, screws or supplied magnetic holding feet. + Due to the good economic and ecological parameters, the data logger can also be used only once.



### MONILOG® MicroShockDetector plus



[www.monilog.com/products](http://www.monilog.com/products)



Technical data of MONILOG® MicroShockDetector plus

Shock parameters: 200 data records with the highest space vector amplitude, of which the 10 highest values with a curve-plots over 4 s, resolution 2 ms

Acceleration sensor: 3D-MEMS, measuring range  $\pm 14$  g, 10 mg resolution, accuracy:  $\pm(0.2\text{g}$  and 2% measurement value), registering threshold from 0.25g  
lower limit frequency 1 Hz  
upper filter limit frequency 25 Hz fixed-adjusted

Shock classification: Subdivision of shocks according to space vector amplitude into classes, number of shocks not limited  
>0.25 g, >0.5 g, >1 g, >1.5 g, >2 g, >3 g, >4 g, >5 g

Temperature measurement:  $-40^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$   $\pm 1$  K, 100,000 measurement values

Relative humidity: 0% to 100%, tolerance  $\pm 3,5\%$  (at 20% to 80% relative humidity), 100,000 data records

Air pressure: 260 - 1260 mbar  $\pm 2$ mbar, 100,000 data records

Light: 0 lx - 65000 lx  $\pm 10\%$ , 100,000 data records

Indication: 2 LEDs for status and alarm limit-value overshooting

Operating elements: 1 button for status indicator, ON/OFF switching with password protection

Connections: Mini USB 2.0

NFC: Status report can be read out via NFC with smartphone and free app "MONILOG® Connect"  
Save and / or send the PDF report by e-mail

Operating and storage conditions:  $-40^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$ , max. 98% rel. humidity

Power supply: 1 replaceable lithium cell, 3.6 V type LR06 (AA, Mignon), lithium content  $\sim 0.7\text{g}$   
runtime typically 3 years in switch-on time period (depending on the device configuration)

Data storage: Receipt of measuring data independent of battery status for a minimum of 10 years

Dimensions: 106x48x33 mm (LxWxH), 126x48x40 mm (LxWxH with magnetic feet)

Housing: Plastic housing with stainless steel base

Weight: approx. 172 g (258 g total if mounted on magnetic feet)

Protection type: IP 67

Programmable parameters: X, Y, Z registering threshold, X, Y, Z alarm threshold, minimum shock duration, measurement interval for temperature, humidity, air pressure, light  
Start-Stop time (switch-on time period), password protection by means of free Windows and Android software

Conformity: Device certification according to CE, UKCA, ISED, FCC, RTCA/DO160G, RoHS, WEEE  
Use according to IEEE C 57150-2012

# WHAT ARE YOU LOGGING FOR?

MONILOG® Risk Loggers measure, signal and document the external influences that threaten the value and functional capability of your damageable items.

We offer the ideal product design, software and sensor system for each and every customer requirement:



SHOCK



INCLINATION



VIBRATION



TEMPERATURE



HUMIDITY



PRESSURE



GPS  
TRACKING



LIGHT  
INCIDENCE



TRANSPORT  
RISK



STORAGE  
RISK



OPERATIONAL  
RISK



Where are your freight items located? Which levels of stress are and have the items been exposed to?

Are the ambient conditions correct for your stored items? Were they and will they remain stable?

Do mechanical factors put operation of your offshore plant at risk? When do you, as the operator, need to intervene?



Which device maps your particular risk profile? Our product finder provides the answer and sets the course for specific modifications or for new developments. [Productfinder online: www.monilog.com/productfinder](http://www.monilog.com/productfinder)