













MONILOG®

## ShockDisplay curve 2









EXACT EVIDENCE OF THE TRANSPORT QUALITY









- Extremely robust (IP67)
- Captures and saves the 500 largest mechanical shock events with signal progression
- Measures direction, strength, time, duration, minimum and maximum of impact
- Inclination measurement on board
- Easy operation, display, alarm function, long operating time, multi-level password protection
- Conformity with all relevant norms and standards for measurement of transport shocks
- USB interface
- Powerful analysis software







## ShockDisplay curve 2

## EXACT EVIDENCE OF THE TRANSPORT OUALITY

The extremely robust measuring instrument - programmable via function keys and menu or software - stores the 500 largest shock events as well as inclination values. • The measurement results are displayed on the display with various parameters as well as an alarm function. • The shock and inclination events can also be stored as a signal progression for a later precise evaluation. • The electronics of the data logger is specially optimized for long operating times and works with commercially available batteries. • The real-time measurement makes it possible to record the measured values in a real response time of "zero" milliseconds when events occur. • Via

the USB interface, data can be read out on the PC with a user-friendly software and the measured data can be analysed. • Password protection grants user groups different rights and accesses. • The use of state-of-the-art technology makes it possible to produce this device at a moderate price/performance ratio in compliance with EC directives. • Through its standard compliant measurement, the data logger is ideally suited for the routine transport monitoring of energy equipment such as transformers, switchgear and generators and, thanks to its reliable record and tamper-evident, generally recognized by experts, surveyors and transport insurers.























Technical data of MONILOG® ShockDisplay curve 2	
Shock measurement:	500 shock events with the greatest amplitude, three-dimensional, events are also stored in the form of signal graphs with a duration of 1,024 ms at 2 kHz sampling rate, measuring range ± 14g, accuracy ± (0.32g) as well as special versions; digital signal filtering with bandwidth 1 bis 1,000 Hz, configurable; registration thresholds adjustable for each direction of shock, shock filtering and minimum shock duration
Inclination measurement:	-1 g to +1 g corresponds to -90° to +90° inclination angle, additionally 640 inclination curves in 3 spatial axes • dynamic range from 0 to 1 Hz • measuring interval adjustable in minutes • recording duration up to 200,000 measuring intervals • self-calibrating in relation to the earth axis
Display and operating elements:	illuminated LCD display and four buttons, indication of date, time, room vector, shock strength and duration, minimum, maximum, number of events, alarm for shock events, password-protected menu navigation
Connections:	USB 2.0 and RS-232 to link the device to a PC for configuration and data evaluation
Housing:	Aluminium, hard-anodized • IP67 degree of protection  Weight: 1,070 g incl. batteries (standard configuration), 42 g (each magnetic base, 3 pieces per module optional)  Dimensions: 198 x 100 x 44 mm³, Ø 32 x 7mm² (small magnetic base)  Surface mounting (screw fixing recommended), alternatively magnetic base (upon request)
Operation and storage conditions:	-20°C to +60°C with Alkaline batteries -40°C to +85°C with Lithium batteries
Power supply:	2 battery cells of size D (R20) of type Alkaline, Lithium (on request) or optional connection of external batteries with 2.4 to 12 V • measuring time with alkaline batteries typical 1 year (in case of synchronous interval of 10 min, all options active) • optional via additional external power supply (6 - 24V, < 15W) via IP67 connector
Programmable parameters:	Recording threshold from 0.3g • minimal time of event from 1 ms • alarm threshold to shock amplitude • Recording threshold to inclination measuring • two passwords freely configurable • protection for power on/off • readout and configuration clock-time adjustment • display-language
Software:	for WIN Vista/7/8/10 • graphically and schedular signal analysis with export functions • frequency analysis on DIN EN 13011 • device parametrisation • display of device condition and active times • help function • multilingual menu navigation
Data storage:	Data retention minimum 10 years (independent of battery condition) • Memory type/size: 32 MB flash parameter and data memory • Date / Time as UTC time supported independently from the power supply by an internal battery • exchange at the manufacturer after 6 years needed
Conformity:	Device certification according to CE, UKCA, RoHS, WEEE Shock evaluation according to DIN EN 15433-6 Frequency analysis according to DIN EN 13011 Use according to IEEE C 57150-2012



Use according to IEEE C 57.150-2012



## 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:























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. Product finder online: www.monilog.com/productfinder