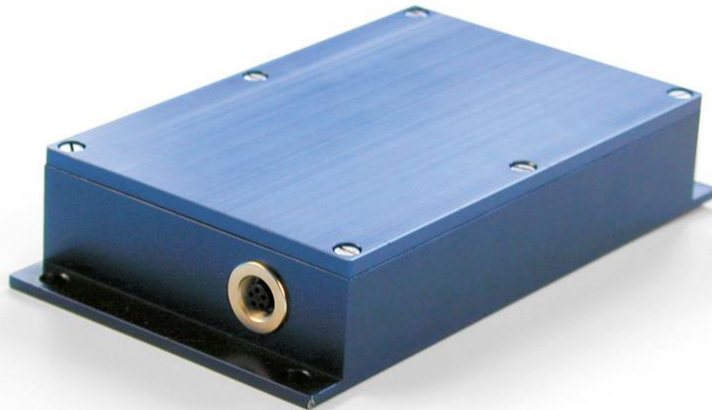


g-log data logger data sheet

g-log vibra E usb



Stand-alone data logger for vibration analysis

Shock measurement on all 3 axes

Internal temperature measurement

Tamper-proof - password protected

Long battery life

Stabile aluminium housing - easy mounting

Extremely simple evaluation with software provided

g-log data loggers

The g-log series meets all requirements: large memory capacity, long battery life, simple operation and evaluation.

Features

With the g-log data logger, accelerations (oscillations, vibrations) and the temperature can be recorded. The progress over time of the accelerations is recorded on all three axes. A measurement can be started manually with the start button or, when the acceleration exceeds a user-defined value (trigger level). The whole measurement is divided into blocks of a user-defined event length which gives a better view of the collected data during later analysis.

The related LogView PC software for programming, graphical and numerical display of the measured values and print-outs enables easy data analysis and logger programming. LogView can be used with all g-log data loggers.

Security

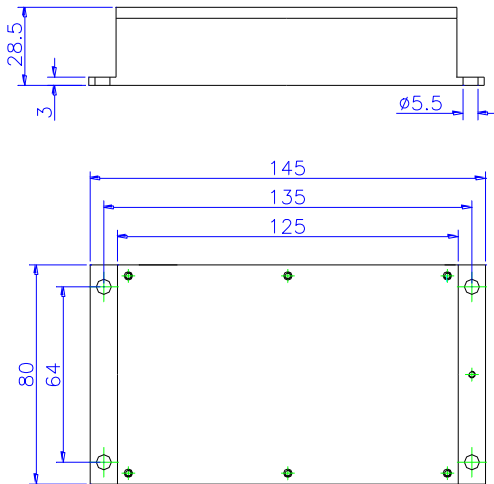
All data are stored in the logger in a non-volatile memory. This means the measured values are retained even in the case of a battery failure.

Any access to the programming of the unit requires a password, and all changes are logged. This ensures that measurements cannot be tampered with and any tampering attempts are detected immediately.

Housing

The g-log series was developed for use under difficult conditions. The measuring electronics is protected with a sturdy, splash-water resistant aluminium housing. (IP 65)

Mounting

Data Logger	Mounting Guidelines
 <p>Technical drawing of the data logger showing dimensions: 28.5mm height, 5mm width, 145mm length, 135mm length, 125mm length, 80mm height, 64mm height, and a diameter of 5.5mm.</p>	<p>Mounting Guidelines</p> <p>The data logger must be rigidly connected to the object to be monitored (screw connection with M5 bolts).</p> <p>When positioning the unit it should be ensured that no damping material is located between the object to be monitored and the data logger, as otherwise the measurements will be falsified.</p> <p>An inadequate mounting of the unit can cause excessively high measured values if vibrations result between the goods to be monitored and the data logger.</p>



Technical Data

General Information	
3-axis curve recorder for acceleration	
Housing	Aluminium anodized, splash-water protected IP 65
Dimensions	145x80x29 mm
Weight	Approx. 470g
Battery	2x UM3 lithium thionylchloride 3.6 V
Current drain standby mode	Approx. 60µA
Current drain measurement	Typ. <30mA, 50mA max.
Battery life	Approx. 200 Vibration measurements for 8 minutes
Memory	Non-volatile, SRAM with buffer battery
Memory capacity	4MByte (ca. 8 min recording time with 2kHz sample rate)
Memory mode	When memory is full, the vibration measurement will be stopped
Internal sensors	Acceleration (wave, vibration), temperature
Digital IO	None
Control Buttons	Start/stop
Indicators	2 LED red/green (unit status, measurement active)
Programming/evaluation	With LogView PC software
Measurement start	Programmable trigger level or with start button
Measurement end	
Connection to PC	RS-232, 57600 Baud, USB 203400 Baud
Operating range	-30°C to 85°C (vibra-5: -20°C to 70°C)

Acceleration sensor	
Unit of measure	g
Measuring sensor	Internal micro-mechanical sensor, static acceleration measurement
Measuring interval	Continuous measurement
Measuring range	vibra-5: -5g to 5g vibra-35: -35g to 35g vibra-70: -70g to 70g
Trigger threshold	vibra-5: 0.2g to 2g vibra-35: 0.4g to 5g vibra-70: 2g to 20g
Sensor resolution	0.3% (of MR)
Sensor accuracy	vibra-5: Full temp. range: 2% (of MR) vibra-35: Full temp. range: 2% (of MR), -10°C to 60°C : 1% (of MR) vibra-70: Full temp. range: 2% (of MR), -10°C to 60°C : 1% (of MR)
Measuring axes	Tri-axial (X, Y, Z)
Event length	User-defined between 1s and 8min
Sampling rate	2 kHz (scan rate = 0.5ms)
Frequency range	1.5 Hz to 500 Hz

Internal Temperature sensor	
Unit of measure	°C or °F
Measuring sensor	Internal temperature sensor
Measuring interval	Temperature measurement for each event (interval defined through the event length parameter)
Measuring range	-40°C to 85°C
Sensor resolution	1 °C
Sensor accuracy	3 °C
Sensor positioning	Internal



Compliance

The device is conform to all requirements of the following standard : EN 15433-6: Transportation loads - Measurement and evaluation of dynamic mechanical loads - Part 6: Automatic recording systems for measuring random shock while monitoring transports

EMC Compliance

The device is conform to all requirements of the following standards:
EN 61326-1: 2006 (IEC 61326-1: 2005)

Calibration and certification

All units of the g-log series are shipped with a calibration record.
EN 15433-6 requires a re-calibration of the units every two years. Our calibration service covers all requirements of these normative documents.

Products and Services

Data logger

g-log vibra E usb (vibration and internal temperature)

Software

LogView / LogView Professional Software to program, analyze data and report generation
LogView Lite: free of charge viewer für LogView data files

Accessories

PC data cable (RS-232C or USB)

Services

Basic test, electrical test of the device and battery replacement.
Acceleration sensor adjustment and factory certification (3 point)