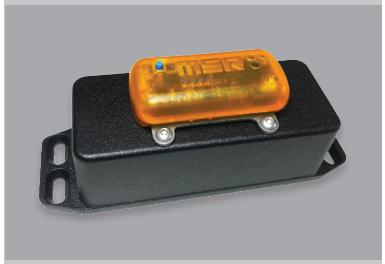
MSR®
universal data loggers
Swiss made



MSR 175 Shock Transportation Data Logger: Protect your goods!

The MSR 175 shock data logger uses high-resolution sensors to continuously record what happens to your goods during transportation. The logger data can then be analysed very accurately – be it in order to ascertain damage or to improve transport packaging – using the «MSR ShockViewer» software.

The two 3-axis acceleration sensors (±15 g and ±200 g) integrated in the MSR 175 record shocks at a measurement frequency of up to 6400/s. The installed memory of the logger is capable of storing over 2 million measured values, which is sufficient for more than 1,000 shocks. In addition, the MSR 175 measures and records temperature profiles from -20° to +65 °C. Additionally, type variants of this data logger are available with internal humidity, pressure and light sensors.

Easy-to-use PC software: The software package for the MSR 175 includes 3 programs: **MSR 175 Dashboard, MSR ReportGenerator** and **MSR ShockViewer.** The MSR Dashboard allows you to configure the loggers with just a few mouse clicks. The data recorded can be quickly transferred to a computer via the USB port. A single click on the MSR ReportGenerator is sufficient to call up a compact report. For a detailed measured data analysis, the MSR ShockViewer, which is integrated in the MSR175 software package as a free basic version, is at your disposal.

Technical Data

Medium:	Air
Memory capacity:	Over 2,000,000 measurement values
Key:	Start measurement/retrieve status
3-axis-acceleration sensors:	2 internal 3-axis-acceleration sensors
Working range:	±15 g and ±200 g (-20…+65 °C)
Accuracy:	**±15 g sensor:** ±0.15 g (0...5 g, +25 °C), ±0.3 g (5...15 g, +25 °C), **±200 g sensor:** ±2 g (0...15 g, +25 °C), ±5 g (15...100 g, +25 °C), ±10 g (100...200 g, +25 °C)
Measurement/ storage rate:	Up to 6400/s (±15 %)
Power supply:	LiPo-battery 230 mAh, charged via the USB connection, recording period up to 8 weeks or replaceable Li-$SOCl_2$ battery, battery operating time at least 2 years
PC software package:	MSR175 Dashboard, MSR ReportGenerator, MSR ShockViewer (basic version)
Interface:	USB
Operating conditions:	Temperature -20…+65 °C
Storage conditions:	• +5 °C…+45 °C (ideal storage condition for the battery) • 10…95 % relative humidity, non-condensing
Standards:	The MSR 175 complies with EU-Directives RoHS/WEEE.

원문: MSR MSR175 데이터시트 · 제조사 원문 자료입니다. 사양은 제조사 사정에 따라 변경될 수 있습니다.

Housing and battery selection

IP	Sheat material	Battery	Size (W x H x L) & Weight
IP 67	PC, encapsulated	LiPo battery 230 mAh	47 x 16 x 54 mm, ~ 28 g
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IP 65	PC, encapsulated	Li-$SOCl_2$ battery 3.6 V, 7700 mAh	49 x 39 x 122 mm, ~ 180 g
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Sensors

The MSR175 data logger is equipped with two internal 3-axis-acceleration sensors (±15 g and ±200 g) and one internal temperatur sensor. Other type variants feature three further internal sensors – one light, one humidity and one pressure sensor.

Measured parameters	Working range	Accuracy	Measurement/ Storage rate
Temperature	-20…+65 °C	±0.5 °C (-10…+65 °C)	every 10 min.
Rel. humidity	0…100 % rel. humidity -20…+65 °C	±2 % rel. humidity (10…85 %, 0…+40 °C) ±4 % rel. humidity (85…95 %, 0…+40 °C)	every 10 min.
Air pressure	0…2000 mbar absolute -20…+65 °C	±2.5 mbar (750…1100 mbar absolute, +25 °C)	every 10 min.
Light	0…83,000 lx	max. sensitivity at 550 nm	every 10 min.

MSR ShockViewer software for analysing the measured data

The MSR ShockViewer analysis software, which specialises in analysing shock events and jolts, facilitates the graphical presentation and extensive data analysis of the values recorded by the MSR175 data logger. The software is capable of quickly processing millions of data points (or values) relating to dynamic processes. It allows you to clearly present the extensive measured data, and to quickly analyse and conclusively document critical events.

The MSR ShockViewer analysis software is integrated in the MSR175 software package as a free basic version.

More information:
https://www.msr.ch/en/msr175/

MSR ShockViewer for MSR175	Features
	• Detailed analysis of shock events • Clearly show and organise environmental data

Please contact us for prices and terms of delivery.

MSR Electronics GmbH
Mettlenstrasse 6
CH-8472 Seuzach
Switzerland

Phone +41 52 316 25 55
Fax +41 52 316 35 21
info@msr.ch
www.msr.ch
www.datalogger.shop

Distributor:

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