universal data loggers

Swiss made

Transportation Data Logger with GPS: MSR 175plus for shock and climate

The tamper-proof MSR175plus GPS data logger captures potentially damaging shock events as well as recording the geographical position of the event. This robust data logger ensures compliance with transport specifications and provides indispensable data for identifying liability in the event of damage as well as helping with insurance claims.

The two 3-axis-acceleration sensors simultaneously record shocks in the measuring ranges of ±15 g and ±200 g. A measurement/storage rate of up to 6400 times per second is used. In addition, the robust mini data logger measures and stores temperature curves, humidity, air pressure and light. To quickly locate critical transport events, the mini-logger is equipped with a GPS/GNSS receiver.

Easy-to-use PC software: The software package for the data logger 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 4,000,000 measurement values.
GNSS position data:	GPS (optional: GLONASS, Galileo, Beidou)
Key:	Start measurement/retrieve status/test GPS reception.
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)
Shock measurement mode:	measurement always with ±200 g at 6400 Hz and with ±15 g at 1600 Hz simultaneously
Power supply:	LiPo-battery 2400 mAh, rechargeable via USB connection, recording time with activated GPS tracking approx. 8 weeks, without GPS tracking at least 1 year. Removable battery.
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 cond. for the battery) • 10…95 % relative humidity, non-condensing
Standards:	MSR 175plus complies with EU-Directives RoHS/WEEE.

SENSORS

Housing and battery

IP	Sheat material	Battery	Size (W x H x L) & Weight
IP 65	PC, encapsu-lated	Lithium-polymer battery 2400 mAh, rechargeable	51 x 32 x 77 mm, approx. 140 g

Sensors

The MSR175plus data logger contains two 3-axis-acceleration sensors ±15 g/±200 g and one each of temperature, humidity, air pressure and light sensors.

Measured parameters	Working range	Accuracy (max. deviation)	Measurement/ storage rate
3-axis-acceleration	±15 g and ±200 g (-20...+65 °C)	**±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)	**1600/s** (±15 %) **6400/s** (±15 %)
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…65‘000 lx	max. sensitivity at 500 nm	every 10 min.

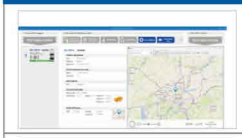
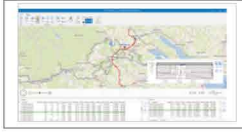
Locate critical transport events using GPS tracking

Where and when exactly did an event take place during transport or storage that was outside the preset tolerance limit? To enable you to answer this question quickly and conclusively, the MSR175plus is equipped with a GPS/GNSS (Global Navigation Satellite System) receiver. The satellite-supported position data is stored by the data logger, allowing the location of a transported item to be quickly determined and documented in the event of a damage.

Simple operation together with extensive evaluation options

The software package for the data logger includes three programs:
MSR175 Dashboard, MSR ReportGenerator and **MSR ShockViewer.**

More information: https://www.msr.ch/en/msr175plus

MSR175 software package	
	**Dashboard software** for easy commissioning of the data logger.
	**MSR ReportGenerator** for automatic report generation.
	Extensive analysis and representation options with the **MSR ShockViewer.**

Please contact us for prices and terms of delivery.

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