universal data loggers

Swiss made

Ideal for measuring the physiological properties for textiles:

MSR 147WD Wireless Data Logger with plug-in Sensors

The MSR 147WD, which is equipped with Bluetooth Low Energy (BLE) and a memory that is capable of storing 1 million measured values, enables you to reliably record and wirelessly monitor physiological parameters such as skin temperature and moisture level over long periods of time. The mini data logger has 5 connections for plug-in humidity and temperature sensors.

The sensors supplied by MSR Electronics GmbH can be inserted and removed individually. Due to the automatic configuration feature, the data logger instantly recognises when a sensor is inserted. The calibration data is stored in the relevant sensor. You can retrieve the measured values online at any time by means of BLE or USB. The smartphone app «MSR DataLogger» allows you to start, stop and read out data recordings and to transfer it to the MSR SmartCloud.
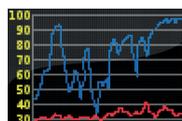

Technical data Bluetooth Low Energy

- Bluetooth Low Energy (Bluetooth 4.0 Smart) 2.4 GHz
- Radio range: approx. 10 m
- Communication with multiple MSR 147WD loggers possible
- Alarm function, transmission to MSR SmartCloud
- Free app for mobile devices (Android 4.4+, iPhone 4S+, iPad 3+)
- Sturdy BLE receiver box available as gateway

Technical data OLED display

- High-contrast, brilliant OLED (organic light-emitting diode) colour display to show data and graphical charts
- Resolution: 96 x 64 pixels
- Display area: 22.14 mm W x 15.42 mm H
- Fast response time: <10 µs
- Wide viewing angle >160 °

Housing and battery selection

Housing	Sheat material	Battery	Size & weight (W x H x L)
Standard IP 60	PC, not encapsulated	260 mAh	35 x 17 x 57 mm, approx. 27 g
Waterproof IP 67	PC, encapsulated	260 mAh	35 x 17 x 57 mm, approx. 36 g

Selection of sensors

Sensors measuring air pressure and 3-axis acceleration (static) are available as internal sensors. Five connections (IP 60) for plug-in, external, pre-calibrated humidity and temperature sensors in cable lengths of 0.20 m, 1.00 m or 1.60 m and a cable diameter of 2.2 mm (black cable, up to +75 °C). A cable diameter of 1.2 mm (white cable, up to +200 °C) is available on request.

Measured parameters	Working range	Accuracy	Storage rate
Temperature (ext. sensor)	-40...+125 °C	0.2 °C (-10...+50 °C) ±1 °C (-40...+125 °C)	1/s to every 12 h
Relative humidity with integrated temperature (ext. sensor)	0…100% rel. humidity -40...+125 °C	±1.8% rel. humidity (10…85%, 0…+40 °C) ±4% rel. humidity (85…95%, 0…+40 °C)	1/s to every 12 h
Air pressure absolute, with integrated temperature (int. sensor)	10…2000 mbar absolute, -20…+65 °C	±2 mbar (750…1100 mbar absolute, +25 °C)	1/s to every 12 h
3-axis-acceleration (static) (int. sensor)	±15 g -20…+65 °C	±0.15 g (+25 °C)	1/s to every 12 h

General technical data on the MSR 147WD Wireless Data Logger

Memory capacity:	Over 1 000 000 measured values.
Key:	Set bookmark or start and stop recording.
LED:	Blue: Record indicator Red: Alarm indicator Yellow: Battery charge indicator
Power supply:	• Lithium-polymer battery, 260 mAh. • The battery is charged via the USB connection.
Options:	Charging station (USB hub) for 7 MSR 147WD (item number B47002).
Interface:	USB
PC-software:	Free Setup, Reader, Viewer and Online software (Windows XP/Vista/7/8/10) to record and evaluate data. All measurement parameters can be rapidly transferred to a PC via USB connection both during the measurement operation and once the measurement task has been completed. Thanks to the integrated clock (RTC), data from as many MSR 147WD units as required can be synchronised and merged into a single data record.
Operating conditions:	Temperature: -20...+65 °C
Optimum storage conditions:	• +5...+45 °C (ideal storage conditions for the battery) • Humidity: 10...95 % relative humidity, non-condensing
Standards:	The MSR 147WD complies with EU-Directives RoHS/ WEEE.

Please contact us for prices and terms of delivery.

External temperature sensor

External humidity sensor

Distributor:

02.18