

Ideal for measuring the physiological properties of textiles:  
**MSR147W2D WiFi Data Logger with plug-in sensors**

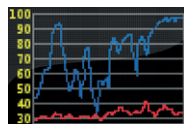


The easy to use MSR147W2D wireless data logger is ideal for remote monitoring of temperature and humidity. This can be of great benefit when testing the material and construction properties of functional clothing, for example. The temperature and humidity sensors, which are available in different cable lengths, can be easily attached to the body of a test person and the physiological parameters determined, such as skin temperature and moisture level can be conveniently accessed online via WiFi/WLAN.



- Integration either into an existing WiFi or via an access point, by means of mobile network access where required, into a separate wireless network.
- WiFi range can be extended with a commercially available repeater.
- Data storage is guaranteed even if the transmitter fails.
- MSR SmartCloud: retrieve, analyse and export measured data online.
- Alarm message if limit value is exceeded.
- MSR WLAN software for graphical visualization, components for LabVIEW available.

**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: <math><10 \mu\text{s}</math>
- Wide viewing angle >160°

## Housing and battery selection

Housing	Case/housing material	Battery	Size & weight (W x H x L)
<b>Standard IP 60</b>	PC, not encapsulated	230 mAh	35x17x57 mm, approx. 27 g
<b>Waterproof IP 67</b>	PC, encapsulated	230 mAh	35x17x57 mm, approx. 36 g

## Selection of 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.

Sensors measuring air pressure and 3-axis acceleration (static) are available as internal sensors.

Measured parameters	Working range	Accuracy	Storage rate
<b>Temperature</b> (ext. sensor)	-40...+125 °C	0.2 °C (-10...+50 °C) ±1 °C (-40...+125 °C)	1/s to every 12 h
<b>Relative humidity</b> 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
<b>Air pressure</b> 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
<b>3-axis-acceleration</b> (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 147W2D Wireless Data Logger

<b>Memory capacity:</b>	Over 1 000 000 measured values.
<b>Key button:</b>	With the button you can activate and deactivate the display, the WiFi-module and the data recording.
<b>LED:</b>	Blue: Record indicator Red: Alarm indicator Yellow: Battery charge indicator
<b>Power supply:</b>	<ul style="list-style-type: none"> <li>Lithium-polymer battery, 230 mAh.</li> <li>The battery is charged via the USB connection.</li> </ul>
<b>Options:</b>	Charging station (USB hub) for 7 MSR147W2D, (item number B47002).
<b>Interface:</b>	USB, WiFi
<b>PC-software:</b>	MSR Setup, Reader, Viewer and Online software MSR WLAN Local Viewer System requirements: Windows 7 or higher, USB port
<b>Operating conditions:</b>	Temperature: -20...+65 °C
<b>Optimum storage conditions:</b>	<ul style="list-style-type: none"> <li>+5...+45 °C (ideal storage conditions for the battery)</li> <li>Humidity: 10...95% relative humidity, non-condensing</li> </ul>
<b>Standards:</b>	The MSR 147W2D complies with EU-Directives RoHS/WEEE.



ext. temperature sensor



ext. humidity sensor

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