universal data loggers

Swiss made

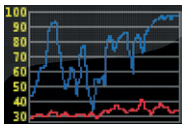
Ideal for measuring the physiological properties of textiles:

MSR147W2D WiFi Data Logger with plug-in sensors

The easy to use MSR 147W2D 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: <10 µs
- Wide viewing angle >160 °

Housing and battery selection

Housing	Case/housing material	Battery	Size & weight (W x H x L)
Standard IP 60	PC, not encapsulated	230 mAh	35 x 17 x 57 mm, approx. 27 g
Waterproof IP 67	PC, encapsulated	230 mAh	35 x 17 x 57 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
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-accele-ration (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

Memory capacity:	Over 1 000 000 measured values.
Key button:	With the button you can activate and deactivate the display, the WiFi-module and the data recording.
LED:	Blue: Record indicator Red: Alarm indicator Yellow: Battery charge indicator
Power supply:	• Lithium-polymer battery, 230 mAh. • The battery is charged via the USB connection.
Options:	Charging station (USB hub) for 7 MSR 147W2D, (item number B47002).
Interface:	USB, WiFi
PC-software:	MSR Setup, Reader, Viewer and Online software MSR WLAN Local Viewer System requirements: Windows 7 or higher, USB port
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 147W2D complies with EU-Directives RoHS/WEEE.

For pricing, or any further, information please contact Omni Instruments Ltd Tel: +44 (0)1382 443000 or visit our website at www.omniinstruments.co.uk

MSR® universal data loggers

ext. temperature sensor

ext. humidity sensor

MSR Electronics GmbH
Authorised Distributor:

omni INSTRUMENTS

Unit 1, 14 Nobel Road
Wester Gourdie Industrial Estate
Dundee DD2 4UH
Email: info@omni.uk.com
Web www.omniinstruments.co.uk
Telephone: +44 (0) 1382 443000