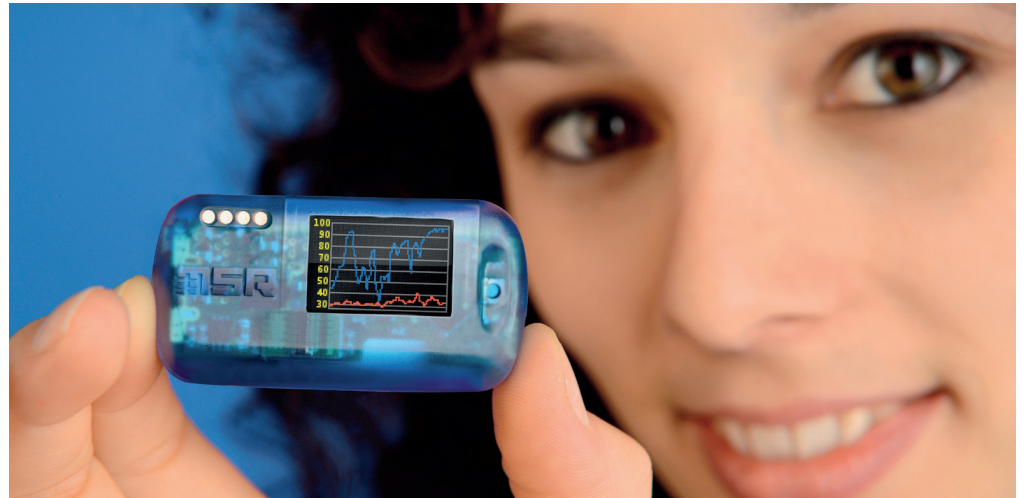


Flexible sensor combination options:

# Wireless Data Logger MSR145WD with BLE, Display, MSR SmartCloud



The MSR145WD wireless data logger, equipped with Bluetooth function, has a memory capacity of one million measured values. The versatile mini-logger can be used to wirelessly monitor measurement data, quickly read measured values, and transfer the data to the MSR SmartCloud as needed.

The use of BLE radio technology is ideal when measurement data from hard-to-reach locations needs to be monitored. Measured values can be retrieved at any time using the MSR DataLogger app on a smartphone. A base station allows you to quickly send data from multiple MSR145WDs to the MSR SmartCloud via BLE/LAN. The MSR SmartCloud allows you to view, manage and store measurement values online and to use alarm actions.



## Technical data Bluetooth Low Energy



- Bluetooth Low Energy (Bluetooth 4.0 Smart) 2.4 GHz
- radio range: approx. 10 m
- communication with multiple MSR145WD loggers possible
- alarm function, transmission to MSR SmartCloud
- MSR DataLogger app (from Android 4.4+, iPhone 4S+, iPad 3+)
- base station (BLE receiver box) available as gateway

## General technical data of the MSR145WD Wireless Data Logger

<b>Memory capacity:</b>	Over 1 000 000 measured values.
<b>Measurement/storage rate</b>	1/s to every 12 h
<b>OLED display:</b>	High-contrast, brilliant OLED colour display to show data and graphical charts, resolution 96 x 64 pixels.
<b>Interface:</b>	USB, Bluetooth Low Energy (BLE)
<b>PC software:</b>	Free MSR Setup, Reader, Viewer and Online software.
<b>Operating conditions:</b>	Temperature: -20...+65 °C
<b>Storage conditions</b>	
Temperature:	+5...+45 °C (ideal storage condition for battery)
Humidity:	10...95 % relative humidity, non-condensing
<b>Standards</b>	The MSR145WD complies with EU-Directives RoHS/WEEE.



## Housing and battery selection


Housing	Sheat material	Battery	Size and weight (W x H x L)
<b>Standard IP 60</b>	PC, not encapsulated	230 mAh	35 x 17 x 57 mm, approx. 27 g
	PC, not encapsulated	900 mAh	35 x 25 x 57 mm, approx. 43 g
<b>Waterproof IP 67</b>	PC, encapsulated	230 mAh	35 x 17 x 57 mm, approx. 36 g
	PC, encapsulated	900 mAh	35 x 25 x 57 mm, approx. 62 g

## Selection of sensors and connections

You can select various internal sensors as well as up to five external sensors or connectors.

Measured parameters	Working range	Accuracy (max. deviation)
<b>Temperature</b>	ext.: -40...+125 °C	0.2 °C (-10...+50 °C) ±1 °C (-40...+125 °C)
	int.: -20...+65 °C	0.2 °C (-10...+50 °C)
<b>Connector for thermal element of type K (without sensor)</b>	-200...+1350 °C	
<b>Humidity</b> with integrated temperatur	0...100% rel. humidity ext. -40...+125 °C int. -20...+65 °C	±1.8% rel. humidity (10...85%, 0...+40 °C) ±4% rel. humidity (85...95%, 0...+40 °C)
<b>Air pressure</b> absolute, with integrated temperature	10...2000 mbar abs. ext.: -40...+85 °C int.: -20...+65 °C	±2 mbar (750...1100 mbar absolute, +25 °C)
	0...14 bar absolute -20...+65 °C	±50 mbar (1...10 bar abs., +25 °C)
<b>Fluid pressure</b> with integrated temperature, material in contact with media: • stainless steel AISI 316L (DIN 1.4404 / 1.4435) • O-rings: Viton® 70° Shore	0...3000 mbar abs. -20...+85 °C	max. ±30 mbar
	0...30 bar absolute -20...+85 °C	max. ±0.3 bar
	0...400 bar absolute -20...+85 °C	max. ±4 bar
<b>3-axis-acceleration (statisch)</b>	-15...+15 g -20...+65 °C	±0.15 g (0...5 g, +25 °C)
<b>3-axis-acceleration with Fast Peak (800 Hz)</b>		±0.25 g (5...10 g, +25 °C) ±0.45 g (10...15 g, +25 °C)
<b>Light</b>	0...65'000 lx	max. sensitivity at 500 nm
<b>Connection for strain gauges</b>	full bridge rated output 1mV/V bridge voltage 3 V	
<b>Flex-Connector</b>	Please find suitable flex sensors on our website.	

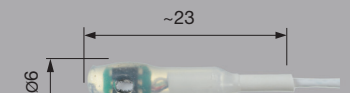
## Additional analogue inputs for connecting third-party sensors

Analogue inputs	Technical data
	<b>4 or 8 analogue inputs</b> with freely selectable input configuration: 0...20 mA; 4...20 mA; 0...3.0 V; 0.5...4.5 V; 0...5.0 V; 1.0...6.0 V; 0...10.0 V; 0...12.0 V; 0...24.0V; 0...36.0V; 0...48.0V, <b>Resolution:</b> 12 bit, <b>Measurement/storage rate:</b> 1/s up to every 12h

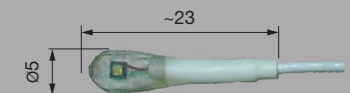
Please contact us for prices and terms of delivery.



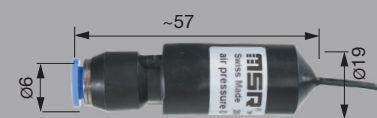
ext. temperature sensor



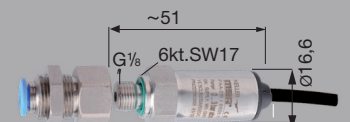
ext. humidity sensor



ext. light sensor



ext. air pressure sensor



ext. fluid pressure sensor

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