

# MSR 145WD Wireless Data Logger with BLE, Display & MSR SmartCloud



Wireless monitoring of measurement data and rapid reading of measured values – this ease of use is offered by the new MSR 145WD wireless data logger. The mini-logger is equipped with Bluetooth Low Energy, a bright OLED graphic display and the optional web-based service MSR SmartCloud for data monitoring from any location.

The BLE wireless radio link is particularly advantageous for applications that require monitoring of measured data from locations that are difficult to access, such as machine rotations. BLE allows the user immediate data visualisation irrespective of the location. You can recall the measured values on your smartphone, receive alarm messages via MSR SmartCloud and, if required, share data from multiple MSR 145WD data loggers with your team any time.

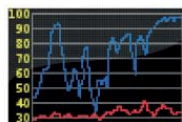


## Technical data Bluetooth Low Energy

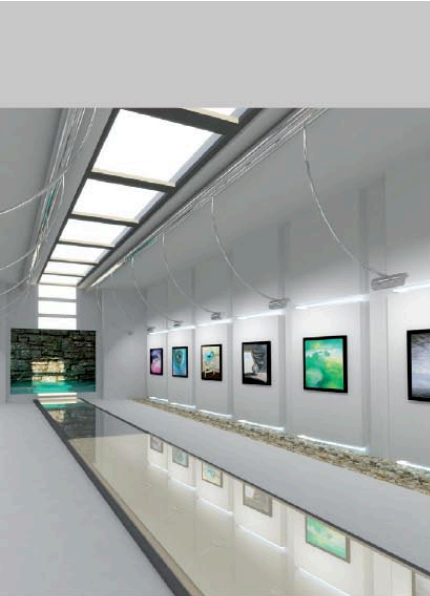


- Bluetooth Low Energy (Bluetooth 4.0 Smart) 2.4 GHz
- Radio range: approx. 10 m
- Communication with multiple MSR145WD loggers possible
- Alarm function, transmission to MSR SmartCloud
- Free app for mobile devices (Android 4.4+, iPhone 4S+, iPad 3+)
- Base station (BLE receiver box) available as gateway

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





## Housing and battery selection


Housing	Sheat material	Battery	Size and weight (W x H x L)
<b>Standard IP 60</b>	PC, not encapsulated	260 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	260 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

Make an individual assembly of your MSR145WD wireless data logger and select up to five internal or external sensors. The sensor combinations that are currently available are published online on the MSR145WD product page.

Measured parameters	Working range	Accuracy	Measurement/storage rate
<b>Temperature</b>	ext.: -40...+125°C	0.2°C (-10...+50°C) ±1°C (-40...+125°C)	1/s to every 12 h
	int.: -20...+65°C	0.2°C (-10...+50°C)	
<b>Relative humidity with integrated temperature</b>	0...100% rel. humidity	±1.8% rel. humidity (10...85%, 0...+40°C)	1/s to every 12 h
	ext. -40...+125°C int. -20...+65°C	±4% rel. humidity (85...95%, 0...+40°C)	
<b>Air pressure absolute, with integrated temperature</b>	10...2000 mbar absolute,	±2 mbar (750...1100 mbar absolute, +25°C)	1/s to every 12 h
	ext. -40...+85°C int. -20...+65°C		
<b>3-axis-acceleration (static), opt. fast peak (800 Hz)</b>	±15 g -20...+65°C	±0.15 g (+25°C)	1/s to every 12 h
<b>Light</b>	0...65 000 lx	max. sensitivity at 500 nm	1/s to every 12 h

## 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 <b>Resolution:</b> 12 Bit <b>Measurement/storage rate:</b> 1/s up to every 12h

## General technical data on the MSR 145WD Wireless Data Logger

<b>Memory capacity:</b>	Over 1 000 000 measured values.
<b>Power supply:</b>	<ul style="list-style-type: none"> <li>Lithium-polymer battery, 260 mAh or 900 mAh.</li> <li>The battery is charged via the USB connection.</li> </ul>
<b>Options:</b>	Charging station B47002 (USB hub) for 7 MSR145WD
<b>Interface:</b>	USB
<b>PC-software:</b>	Free Setup, Reader, Viewer and Online software (Windows XP/Vista/7/8/10) to record and evaluate data.
<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 MSR145WD complies with EU-Directives RoHS/WEEE.

Please contact us for prices and terms of delivery.



External temperature sensor



External humidity sensor



External light sensor



External air pressure sensor



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