

## Using WiFi as a universal measured data network: **MSR145W2D WiFi Data Logger with Flex-Connector**



**Wireless data logger (WiFi) for monitoring temperature, humidity, fluid pressure, air pressure, light, acceleration, strain gauges and more.**

The main features of the new MSR wireless data logger are its ease of use, accurate measurements, quick data transfer and greater flexibility when selecting the sensors.



- 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.
- Store measured data locally or in the MSR SmartCloud.
- Alarm message if limit value is exceeded.
- Retrieve, analyse and export measured data online at any time.
- Compatible with LabVIEW.
- Flex-Connector for customer-specific adaptation of the desired sensors.

### General technical data on the MSR145W2D

<b>Memory capacity:</b>	Over 1 000 000 measured values.
<b>Measurement/Storage rate:</b>	1/s up to every 12 h
<b>OLED display:</b>	Resolution 96 x 64 pixels Display area 22.14 mm W x 15.42 mm H
<b>Interface:</b>	USB, WiFi, MSR SmartCloud
<b>PC software:</b>	MSR Setup, Reader, Viewer and Online software MSR WLAN Dashboard and Viewer
<b>Operating conditions:</b>	Temperature: -20...+65°C
<b>Storage conditions:</b>	Temperature: +5...+45°C (ideal storage conditions for the battery) Humidity: 10...95% relative humidity, non-condensing
<b>Standards:</b>	MSR 145W2D complies with EU-DirectivesRoHS/WEEE.



## Housing and battery selection


Housing	Sheet material	Battery	Size & 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 and connections

You can select various internal sensors and up to five external sensors or connections.

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>Relative humidity</b> with integrated temperature	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 absolute 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 (DIN1.4404/1.4435) • O-Rings: Viton® 70° Shore	0...3000 mbar absolute -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 (static)</b>	-15...+15 g -20...+65 °C	±0.15 g (0...5 g, +25 °C) ±0.25 g (5...10 g, +25 °C) ±0.45 g (10...15 g, +25 °C)
<b>3-axis-acceleration with fast peak (800 Hz)</b>		
<b>Light</b>	0...65 000 lx	max. sensitivity at 500 nm
<b>Connection for strain gauges</b>	full bridge rated output 1 mV/V bridge voltage 3 V	
<b>Flex-Connector</b>	for customer-specific adaptation of the desired sensors	

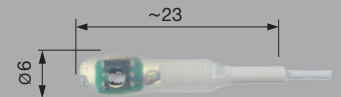
## Additional analogue inputs for connecting third-party sensors

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...5.0 V; 0...10.0 V; 0...12.0 V; 0...24.0 V; 0...36.0 V <b>Resolution:</b> 12 bit <b>Measurement/storage rate:</b> 1/s up to every 12 h

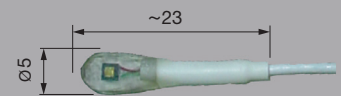
Please contact us for prices and terms of delivery.



ext. temperature sensor



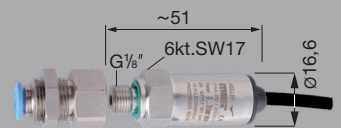
ext. humidity sensor



ext. light sensor



ext. air pressure sensor



ext. fluid pressure sensor

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