

## Product Overview of MSR Data Loggers

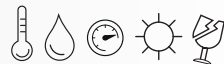


### Detect transport damages

How do you ensure that your products reach the client undamaged? How do you protect your goods from transport damage and your company from the risk of financial losses and loss of reputation due to damaged deliveries?

We recommend the following MSR data loggers for monitoring your supply chain:

#### Data Logger MSR175



##### Transportation data logger for shocks, jolts, climate

2 internal 3-axis-acceleration sensors  $\pm 15$  g and  $\pm 200$  g • 3 shock measurement modes: either  $\pm 200$  g at 6400 Hz or  $\pm 200$  g at 3200 Hz or  $\pm 15$  g at 1600 Hz • temperature sensor included • internal sensors for humidity, pressure and light available • stores more than 2 m readings • rechargeable 230 mAh lithium-polymer battery, recording time up to 8 weeks or replaceable Li-SOCl<sub>2</sub> battery, operating time at least 2 years • MSR175 software package



#### Data Logger MSR175plus with GPS Tracking



##### Revolutionary: simultaneous shock detection $\pm 15$ g and $\pm 200$ g

2 internal 3-axis-acceleration sensors  $\pm 15$  g and  $\pm 200$  g • shock measurement mode:  $\pm 200$  g at 6400 Hz and  $\pm 15$  g at 1600 Hz simultaneously • internal sensors for temperature, humidity, pressure, light • GPS/GNSS receiver • stores over 4 m readings • Li-Po battery 2400 mAh • removable battery • MSR175 software package

#### Data Logger MSR165



##### Shock and vibration data logger with up to 5 years recording capacity

stores more than 2 m or 1 bn (SDcard) total readings • internal or external 3-axis-acceleration sensor  $\pm 15$  g or  $\pm 200$  g • measuring rate up to 1600/s • additional internal or external temperature, humidity, pressure and light sensors available • 4 analogue inputs • MSR ShockViewer analysis software



#### MSR BudgetLine MSR63, MSR64, MSR83, MSR84



##### Low cost temperature and humidity loggers for transport and storage

reusable • ideal for mass application • temperature • humidity • 6-point-calibration certificate included • software included • automatic PDF report • DIN12830, 21 CFR Part 11 • produced by MSR sales partner



## Monitor your measured values – even from a distance

If you want to monitor measured data in places that are difficult to access, and share those measured values with several users, our wireless data loggers are just what you need. Via web access to the MSR SmartCloud, you can view and manage the measured values from your MSR data loggers during operation, and also use the alarm function.

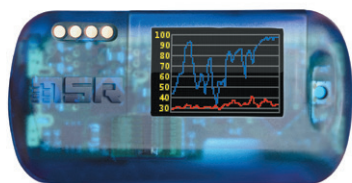
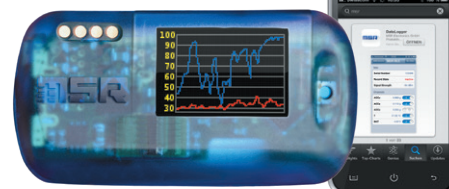
### Wireless Data Logger MSR145WD (Bluetooth Low Energy)



**Data logger with bluetooth function, for temperature, humidity, air pressure, fluid pressure, light, acceleration, strain gauges, FlexSensor and more**

measurement data can be called up on a smartphone using the MSR DataLogger app

- various internal sensors, up to 5 external sensors or connections
- 4 or 8 analogue inputs
- FlexConnector plug connection for interchangeable FlexSensors
- MSR SmartCloud
- stores more than 1 m readings
- base station (BLE receiver box)
- MSR PC software



### Wireless Data Logger MSR145W2D (WiFi)



**Data logger with WiFi function, for monitoring temperature, humidity, air pressure, fluid pressure, acceleration, strain gauges, FlexSensor and more**

integration into a WiFi or into a separate wireless network • various internal sensors, up to five external sensors or connections • 4 or 8 analogue inputs • FlexConnector plug connection for interchangeable FlexSensors • store measured data locally or in the MSR SmartCloud • compatible with LabVIEW • stores more than 1 m readings • MSR WLAN software

### Wireless Data Logger MSR147WD (Bluetooth Low Energy)



**Data logger with bluetooth function, with plug-in sensors**

ideal for measuring the physiological properties for textiles • 5 connections for plug-in humidity and temperature sensors • Bluetooth Low Energy • MSR DataLogger App • MSR SmartCloud • stores more than 1 m readings • base station (BLE receiver box) • MSR SmartCloud • MSR PC software



### Wireless Data Logger MSR385WD



**Wireless measurement system with data logger, transmitter modules for operating temperatures up to +125 °C, GSM/LAN terminal, MSR SmartCloud**

data logger with integrated ISM band receiver module • stores data from up to ten transmitter modules. • sensors for temperature, humidity, air pressure • for operating temperatures up to +125 °C • power supply to the transmitter modules for more than 10 years • MSR SmartCloud • optional GSM/LAN terminal • MSR PC software





## Our versatile solutions to your measurement technology challenges

MSR data loggers are modular in design, so you can put together your desired logger from a wide range of different options to suit your specific needs. Didn't find anything suitable? Contact us; we also develop customized solutions!

### Data Logger MSR145

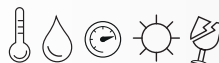


**Mini data logger for temperature, humidity, air pressure, fluid pressure, light, acceleration and more**

multifunctional, measures up to 5 different measured variables simultaneously  
 • 2 or 4 analogue inputs available • stores more than 2 m or 1 bn (SDcard) total readings • large selection of housings, battery capacities, sensors and connectors  
 • MSR PC software



### Data Logger MSR160



**Data logger with 4 analogue inputs for connecting conventional sensors**

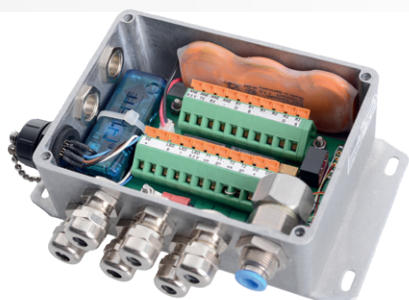
4 analogue inputs, freely selectable input configuration • measurement/storage rate up to 1000/s per channel • multiple output switching power supply • stores more than 2 m or 1 bn (SDcard) total readings • sensors for temperature, humidity, pressure, attitude • MSR PC software

### Data Logger MSR255

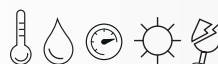


**Multifunctional data logger with LCD display**

4-row backlit LCD display with 4 individually configurable views • sensors for temperature, humidity, pressure, 3-axis-acceleration • optional 4 analogue inputs with multiple output switching power supply • stores more than 2 m total readings • lithium-polymer battery 2300 mAh • MSR PC software



### MSR Special Data Loggers



**Customized OEM solutions**

In addition to developing our own products, we also process client-specific orders and projects for national and international OEM clients and institutions. Please contact us. We will be happy to advise you: Phone +41 52 316 25 55.

For pricing or any further information, please contact Omni Instruments Ltd.

## Overview MSR Data Loggers

MSR data loggers have a modular design. For most models, you can customize the housing, sensors, and battery. On our website, [www.msr.ch](http://www.msr.ch), you will find our latest product enhancements, user reviews, FAQ's, and much more.

	MSR145	MSR145WD	MSR145W2D	MSR147WD	MSR160	MSR165	MSR175	MSR175plus	MSR255	MSR385WD	BudgetLine
<b>Measured parameter</b>											
Temperature	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rel. humidity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Air pressure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Fluid pressure	✓	✓	✓								
Light	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Acceleration/Attitude	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Shock						✓	✓	✓			
Vibration						✓					
Voltage	✓	✓	✓		✓	✓			✓		
Current	✓	✓	✓		✓	✓			✓		
Strain gauges		✓	✓								
Analogue Inputs	✓	✓	✓		✓	✓			✓		
FlexSensor		✓	✓								
<b>Measurement/storage rate</b>											
Up to 1/min to every 12 h	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Up to 1/s to every 12 h	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Up to 50/s to every 12 h	✓				✓	✓	✓	✓	✓		
Up to 1000/s to every 12 h					✓	✓	✓	✓			
Up to 1600/s to every 12 h						✓	✓	✓			
Up to 6400/s to every 12 h							✓	✓			
<b>Memory</b>											
Capacity	2 m	1 m	1 m	1 m	2 m	2 m	2 m	4 m	2 m	1 m	16'000
MicroSD card 4GB	1				1	1					
<b>Special functions</b>											
Wireless technology		✓	✓	✓						✓	
GPS/GNSS								✓			
<b>Power supply</b>											
LiPo-battery 230 mAh	✓	✓	✓	✓			✓				
LiPo-battery 900 mAh	✓	✓	✓		✓	✓					
LiPo-battery 2300 mAh									✓		
LiPo-battery 2400 mAh								✓		✓	
Li SOCl <sub>2</sub> battery 7700 mAh						✓	✓				
3.0V Lithium battery											✓
<b>Protection class</b>											
IP	IP60/67	IP60/67	IP60/67	IP60/67	IP60/67	IP60/67	IP65/67	IP65	IP60/67	IP60/64/67	IP54

Thank you for your interest in our products. For more extensive information or individual consulting, please do not hesitate to contact your local MSR distributor. More than 90 MSR sales partners in over 50 countries around the world are at your disposal.