




MSR385WD: Data Logger with wireless sensors for operating temperatures up to +125 °C and GSM terminal for remote monitoring



Permanently record temperature, humidity and pressure at various measuring points, in inaccessible locations and at operating temperatures from -20 °C to +125 °C, and monitor them globally via the MSR SmartCloud: The MSR385WD data logger offers these options.

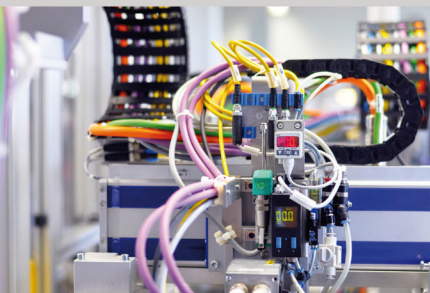
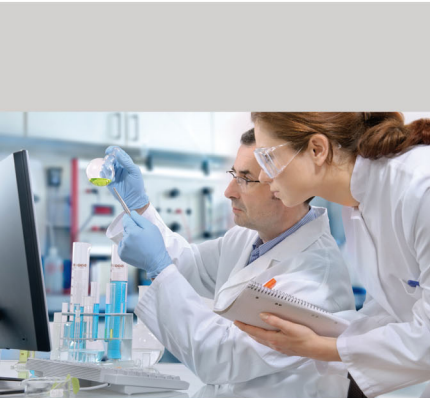
The centrepiece of the wireless measurement system is the MSR385WD data logger, which is equipped with a memory capacity of more than one million measured values. The data logger has an integrated ISM band receiver module through which it receives and stores data from up to ten MSR 385SM transmitter modules. The transmitter modules record temperature profiles, humidity and pressure by means of sensors and send the measured values to the data logger in the 868 MHz ISM band. Depending on the frequency of the measurements and radio transmissions, the power supply to the transmitter modules is warranted for up to five years. Due to their thermal resistance, the MSR385SM – depending on the type of case – facilitate applications even at operating temperatures of up to +125 °C.

Temperature range and housing selection of the MSR385SM transmitter modules

Temperature range	Housing and battery	Picture	Size & weight	Medium
-20...+125 °C	Silicone hose, replaceable 800 mAh Li-SOCl ₂ battery, not encapsulated, IP 60		35x25x55 mm (WxHxL), approx. 25 g	Air
	Silicone hose, replaceable 800 mAh Li-SOCl ₂ battery, encapsulated, waterproof IP 67		35x25x55 mm (WxHxL), approx. 40 g	Air, various liquids
-20...+65 °C	ABS housing, rechargeable 260 mAh LiPo battery, not encapsulated, IP 60		38x15x78 mm (WxHxL), approx. 45 g	Air

Technical data MSR385SM transmitter module

Frequency band:	Unlicensed frequency range at 868 MHz (EU version).
Range:	Up to 500 m (outdoors).
LED	Red, status acknowledgement when button is pushed, on/off, measurement interval setting.
Power supply:	Rechargeable 260 mAh LiPo battery or replaceable 800 mAh Li-SOCl ₂ battery. The LiPo battery is charged via the USB connection. Energy-efficient through optimised power management.
Operating conditions:	-20...+125 °C, in ABS housing -20...+65 °C.
Storage conditions:	+5 °C...+45 °C (ideal storage conditions for battery). 10...95 % relative humidity, non-condensing.



Selection of sensors for the MSR385SM transmitter modules

Up to three different internal or external sensors per transmitter module.

Sensor	Working range of the sensor	Accuracy	Measurement/storage rate
Temperature	-40...+125 °C	±0.2 °C (-10...+50 °C) ±1 °C (-40...+125 °C)	1 s, 10 s, 1 min, 15 min, 1 h
Relative humidity with integrated temperature	0...100 % rel. humidity -40...+125 °C	±1.8 % rel. humidity (10...85 %, 0...+40 °C) ±4 % rel. humidity (85...95 %, 0...+40 °C)	
Air pressure absolute, with integrated temperature	10...1100 mbar absolute -40...+125 °C	±2.5 mbar (750...1100 mbar absolute, 0...+85 °C)	
	10...2000 mbar absolute -40...+85 °C	±2 mbar (750...1100 mbar absolute, +25 °C)	
	0...14 bar absolute -20...+85 °C	±40 mbar (1...10 bar absolute, 0...+40 °C)	



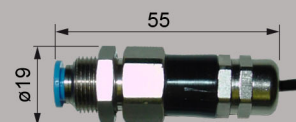
Options:



External temperature sensor



External humidity sensor



External air pressure sensor



GSM terminal

General technical information on the MSR385WD Wireless Data Logger



The data logger, which operates within the 868 MHz ISM frequency band, receives and stores the measured data from up to ten MSR385SM transmitter modules. Flash memory for data security in the event of a power failure. Brilliant, high-contrast OLED colour display.

Dimensions:	Housing without aerial: 75x25x120 mm, Aerial length: 85 mm
Memory capacity:	Over 1 000 000 measured values.
Power supply:	Via USB connection (2 days' autonomous operation possible with integrated 2400 mAh LiPo battery).
LED:	<ul style="list-style-type: none"> • Blue: Data recording indicator • Red: Alarm indicator • Yellow: Charge level indicator
Key button:	To operate the menu functions of the OLED display.
Interface:	USB, GSM terminal (EU version)
PC software:	Free Setup, Reader, Viewer & Online software for recording and analysing the data (Windows XP/Vista/7/8/10).
Operating conditions:	Temperature -20 °C to +65 °C
Storage conditions:	<ul style="list-style-type: none"> • +5 °C...+45 °C (ideal storage conditions for battery). • 10...95 % relative humidity, non-condensing.
Standards:	The MSR385WD complies with the EU Directive RoHS / WEEE.

GSM terminal for transmitting the measured data to the MSR SmartCloud

For retrieving measured data at any time, receiving alarm messages via MSR SmartCloud and sharing the data from several MSR385WD data loggers with other people, wherever you are. GSM terminal, incl. short aerial and connecting cable.

GSM/GPRS frequency band:	Dual band (900/1800 MHz, EU version)
Dimensions, weight:	66x26x77 mm (WxHxL), 80 g
Operating conditions:	-30 °C...+75 °C
Power supply:	via MSR385WD



AE Sensors B.V.
PO Box 9084
NL-3301AB Dordrecht
Netherlands

Tel. +31 78 621 31 52
Fax +31 78 621 31 46
aesensors@aesensors.nl
www.aesensors.nl

We would be pleased to provide you with prices and delivery terms.