

MSR 160 mini datalogger with 4 analogue inputs and microSD card



Four integrated analogue inputs, a high measurement rate and its gigantic memory capacity, all packed into a small format are the key characteristics of the new MSR 160 datalogger. The analogue inputs of the robust minilogger can be used for conventional sensors with analogue outputs (e.g. CO₂, conductivity, pH etc). In addition, a multiple output switching power supply is also provided.

This highly versatile datalogger has a measurement rate of up to 1000/s. The analogue measuring instrument can be optionally fitted with additional internal or external temperature, humidity and pressure sensors. With the optional microSD card over one billion measurement parameters can be recorded and saved using the MSR 160. The lightweight device (approx. 80 g) has an anodised aluminium case and a 900 mAh rechargeable lithium polymer battery. All saved data can be rapidly transferred to a PC or laptop via the USB interface. The user-friendly data acquisition and analysis software is supplied free along with the datalogger.

Basic specification and technical data

Analogue inputs:	4 analogue inputs with freely selectable input configuration: 0...20 mA; 4...20 mA; 0...3.0V; 0.5...4.5V; 0...5.0V; 1.0...6.0V; 0...10.0V; 0...12.0V; 0...24.0V Resolution: 12 Bit
Measurement/Storage rate:	1000/s to every 12 h
Housing:	Anodised aluminium case, PC, encapsulated waterproof (IP67), in blue, anthracite
Size & weight:	39x23x72 mm, approx. 80g
Key:	Configurable pushbutton functions
Memory capacity:	Over 2000 000 measurement parameters – expandable to over 1bn measurement parameters with optional microSD card.
Power supply:	<ul style="list-style-type: none"> • Rechargeable lithium polymer battery 900 mAh • The battery is charged via the USB connection
Interface:	USB
PC software:	Free Setup, Reader, Viewer and Online software (Windows 2000 / XP / Vista / 7) for data acquisition and analysis.
Operating conditions: Lagerbedingungen:	<ul style="list-style-type: none"> • Temperature -20...+65 °C • Temperature +5...+45 °C (ideal storage condition for the battery) • 10...95% relative humidity, non-condensing
Standards:	The MSR 160 complies with EU-Directives RoHS/ WEEE.



MSR 160 with external sensor

Measurement parameters of the available sensors (internal and external)

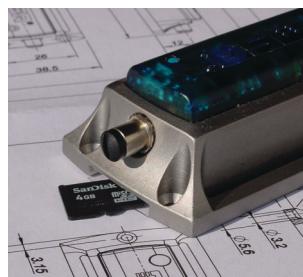
You can specify your MSR 160 with up to four different internal sensors: the options are temperature, humidity, pressure and attitude. If required you can also connect external sensors in place of the internal ones (temperature, humidity or pressure) with the following cable lengths: 0.15 m, 0.4 m, 1.0 m, and 1.6 m (maximum 2 pcs.).

Measured parameters	Working range	Accuracy	Measurement/storage rate
Temperature	int.: -20...+65 °C	±0.5 °C (-10...+65 °C)	1/s to every 12h
	ext.: -55...+125 °C	±0.5 °C (-10...+65 °C) ±2 °C (-55...+125 °C)	
Relative humidity with integrated temperature	0...100% rel. humidity -20...+65 °C	±2% rel. humidity (10...85%, 0...+40 °C) ±4% rel. humidity (85...95%, 0...+40 °C)	1/s to every 12h
Air pressure absolute, with integrated temperature	0...2000 mbar absolute -20...+65 °C	±2.5 mbar (750...1100 mbar absolute, +25 °C)	1/s to every 12h
	optional: 0...14 bar absolute -20...+65 °C	±50 mbar (1...10 bar absolute, +25 °C)	1/s to every 12h
Attitude	±15g -20...+65 °C	±0.15g (+25 °C)	1/s to every 12h

Expanding the memory capacity with a microSD memory card

On request the MSR160 can be supplied with an interface for plugging in a standard microSD card (one ≥4GB microSD card is included). This allows you to increase the memory capacity of your datalogger to over 1 billion measurement parameters.

Please note that this expansion slot with plugged-in microSD-card only meets the protection category IP60.



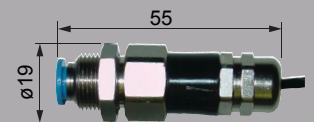
Options:



External temperature sensor



External humidity sensor



External air pressure sensor

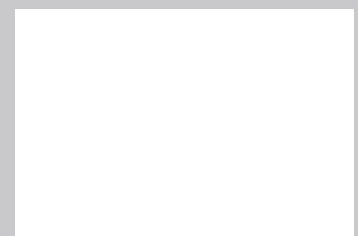


Screw terminal for external connections

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