



MSR BudgetLine: Reusable Climate Data Loggers for Transport and Storage



MSR BudgetLine compact data loggers reliably document (using automatic PDF-report) the temperature and humidity of sensitive goods, such as pharmaceuticals, chemicals and food.

These reusable BudgetLine data loggers are DIN12830 and 21 CFR Part 11 compliant and conform to the EU regulations for storage and transport of cooled and frozen goods, as well as those of the US Food and Drug Administration (FDA).

- free MSR BudgetLine software to configure the data logger on the PC
- 6-point-calibration certificate stored on the logger
- fast data transfer and straight-forward data assessment on the PC
- automatic PDF-report of recorded measured data
- clear status and alarm LEDs

Technical Data	MSR63 Temperature Data Logger	MSR83 Temperature Data Logger with Display	MSR86 Temperature Data Logger with Display and ext. Sensor
Housing: PC, ABS Food Grade, IP54, not encapsulated			
Display:	none	current value minimum, maximum and average value	
Size (W x H x L):	36 x 12 x 71 mm	51 x 15 x 101 mm	51 x 15 x 101 mm, cable with sensor 1 m, sensor Ø6 x 30
Weight:	approx. 17 g	approx. 52 g	approx. 56 g

Technical Data Temperature Data Loggers MSR63, MSR83 and MSR86

Int. temperature range:	-30...+70 °C (MSR63, MSR83)
Ext. temperature range:	-100...+150 °C (MSR86)
Accuracy:	±0.5 °C (-30...+70 °C) (MSR63, MSR83) ±0.4 °C (-100...+150 °C) (MSR86)
Resolution:	0.1 °C
Memory capacity:	16 000 values
Measuring/storage rate:	1 min. up to 10 days (MSR63, MSR83) 1 min. up to 18 hours (MSR86)
Alarm:	min./max. value, indication on LED and Display
Type of battery:	3.0 V lithium battery (Panasonic CR2032)
Life of battery:	approx. 1 year, battery replaceable
Interface:	USB 2.0, A-Type

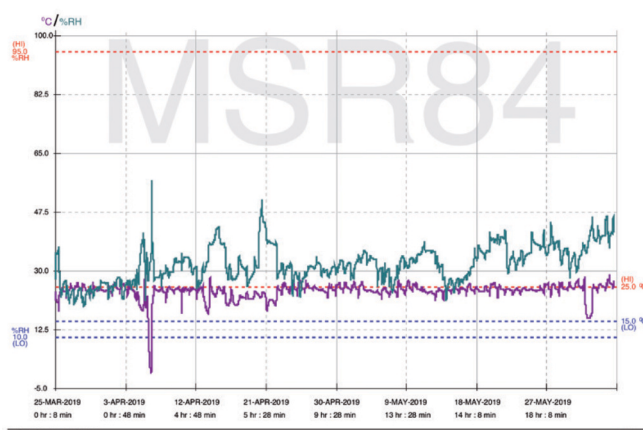
Technical Data	MSR64 Temperature and Humidity Logger	MSR84 Temperature and Humidity Logger with Display
Housing: PC, ABS Food Grade, IP54, not encapsulated		
Display:	none	current value minimum, maximum and average value
Size: (W x H x L)	51 x 15 x 101 mm	51 x 15 x 101 mm
Weight:	approx. 52 g	approx. 52 g

Technical Data Temperature and Humidity Data Loggers MSR64 und MSR84

Temperature sensor,	-30...+70 °C
Range and Accuracy:	±0,5 °C (-30...+70 °C)
Humidity sensor	0...98 % rel. humidity (-30...+70 °C)
Range and Accuracy:	± 3 % rel. humidity
Resolution:	0.1 °C
Memory capacity:	32 000 values (16 000 per canal)
Measuring/storage rate:	1minute up to 10 days
Alarm:	min./max. value, indication on LED and Display
Type of battery:	3.0 V lithium battery (Panasonic CR2032)
Life of battery:	approx. 1 year, battery replaceable
Interface:	USB 2.0, A-Type

Secure monitoring and documenting of transport and storage conditions

TheMSRBudgetLine data loggers are fitted with clear status and alarm LEDs, which indicate instantly if the transport or storage conditions are within the pre-defined values.



Recorded measured data can easily be transferred to a PC using a USB stick. When the data logger is stopped a PDF report is automatically generated, which can be saved or printed for documentation purposes.