



A stand-alone, precision, hand-held instrument for relative humidity and temperature measurements in rooms, air ducts and for material measurements

- Relative humidity : 6...98% rh non-condensing  
 Temperature : -10...50°C  
 -20...80°C with remote sensor  
 Precision : +/- 1% rh 10...90% rh at 25°C and calibration at all 5 reference points  
 +/- 0.3°C  
 Communication : Optional RS-232 interface for a printer (controlled by the ms1), or PC (software available).  
 Further parameters: The ms1 directly shows the relative humidity and the air temperature (dry bulb temperature). The built-in processor also makes it possible to display the following Mollier diagram parameters
- Dewpoint
  - Mixing ratio
  - Wet bulb temperature
  - Specific enthalpy
  - Vapour pressure



## The ms1 humidity & temperature measurement system

*Precise, fast, versatile*

A practical, 1,000-times proven precision, hand instrument for humidity and temperature measurements. Thanks to its resistive electrolyte measurement principle, the ms1 is particularly well suited to high precision humidity measurements in air and other gases. Other special advantages are its robustness and long-term stability, as well as simple checking and recalibration functions using the Novasina Sensor Checks.

The sensor has outstanding repeatability. Hysteresis is essentially not measurable. The integrated computer makes it possible to display a number of Mollier h,x Diagram parameters of particular importance to all climate and ventilation professionals.

The large, clear, multifunction LCD display has excellent contrast. The instrument incorporates a shut down function to conserve battery power. Other options include a power supply and an RS-232 interface to transmit data to a printer or PC (software available).

Typical **ms-1** applications:

- Heating, ventilation and air conditioning
- Room climate measurements in research and development laboratories
- Local climate control in, for example, the electronics, pharmaceutical, chemical, biology, food preparation industries
- Material humidity measurements in for example concrete, wood, paper, and also in pharmaceuticals and chemicals.

### Measurement instrument ms1:

Dimensions : 54x43x265mm  
 Weight : 280 g  
 Power : Battery 9V DC

### Humidity measurement:

Resistive electrolytic measurement cell  
 Range : 6...98% rh  
 Repeatability : +/- 0.3% rh  
 Precision : +/- 1.0% rh  
 (in temp. range from 10...50°C and 10...90% rh)

### Temperature measurement:

very precise NTC resistance  
 Range : -20...80°C  
 Repeatability : +/- 0.1°C  
 Precision : +/- 0.3°C

Note: Application and measurement range with the sensor mounted directly on the ms1: -10...50°C.

With a remote sensor connected by an extension cable or tube: -20...80°C.

### Sensor Checks SC:

Humidity standards based on saturated salt solutions in plastic cylinders with a moisture permeable membrane. Values: 11%, 33%, 53%, 75%, 90%rh.



**111 0534** ms1 basic set

### Basic set ms1

The portable ms1 measurement instrument is supplied in an impact-resistant plastic case with two humidity standards.

The case also has space for further options, including a power supply, RS232 interface, surface temperature sensor etc.

### Carrying case with:

Measurement instrument ms1  
 9V battery  
 Measurement cell enCK-3  
 Plastic rack for the ms1  
 Sensor Check SC 33% rh  
 Sensor Check SC 75% rh  
 Polystyrene box for calibration  
 User manual  
 Manufacturers procedure for the 5-point calibration 11-33-53-75-90%  
 Weight (instrument): 220 g