

## Technical Data

Measurement range air temperature	-65...+65 °C
Operational temperature range	-65...+65 °C
Resolution:	0.01 K
Measurement accuracy	+/- 0.15K from -20 to +50 °C +/- 0.25K from -65 to -20 °C
Sensor	Copper Constantan
Ventilation	5m/s
<b>Memory</b>	
Memory capacity	about 3500 data sets (corresponds to 10 minute-measurements of 24 days)
Operational options	Various operational options for data storage and comfortable data retrieval
<b>Interfaces</b>	RS232, electrically isolated without Hardware Handshake, or RS485, electrically isolated (Please state when ordering)
<b>Power Supply</b>	
Operating voltage	10...15V DC / 48V AC
Power consumption 12V	max. 170 mA, typ 92mA
Power consumption 48V	max. 310 mA (Ventilator)
<b>Mechanical Data</b>	
Measurement casing	270x160x91mm
Length of tube	600 mm
Weight	4.5 kg

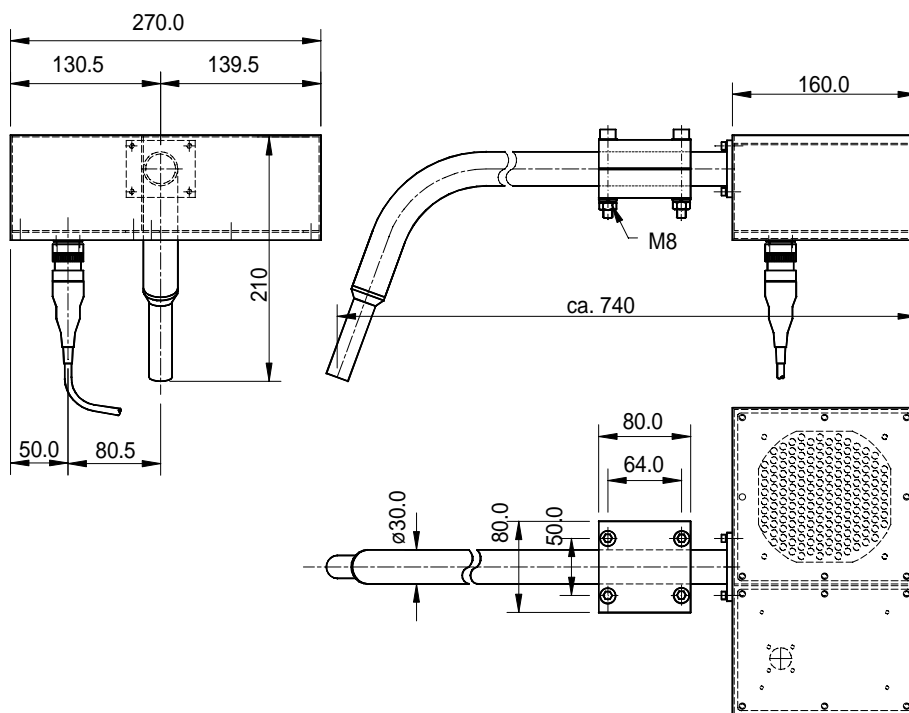
For the operation with a single voltage of 12V, a special version with reduced ventilation is also available.

### Details for ordering

- Thermometer VT36-RS232
- Thermometer VT36-MeteoBus

### Accessories included

- Connecting cable for VT36
- Insulated installation bracket for VT36



# Ventilated Thermometer VT36

(provisional data sheet)



*Ventilated Thermometer VT36*

VT36 is designed for the measurement of outside air temperature. The design meets the highest requirements for reliability and operational safety. The arrangement of double radiation shielding and an effective, dependable ventilation of the thermometer-sensor guarantee a measurement of air temperature independent of radiation (in particular solar radiation).

All outer parts are made from stainless steel. A standard ventilator turns inside the casing. The air which is to be measured is being sucked through the opening of the shielding tube by the ventilator. Thereby, the sensor is being ventilated with an air velocity of 5 m/s.

The temperature sensor consists of a high-precision copper-constantan thermo element.

The electrical components in the sensor are surge protected. The transmitter is connected by a plug which is installed in the base of the casing.

Special features are:

- High measurement precision
- Low maintenance (lifespan of the ventilator > 8 years)
- Direct PC-connection

## Data Output

The VT36 can be connected directly to a data logger, a modem, a GSM-modem or a PC. The micro controller used for controlling and data processing, as well as the surge protection, are built into the water resistant casing. The measuring system works autonomously, which means that the measurements for a maximum of 24 days are being stored and can be collected at any given time through a standard interface (RS232 or RS485). When using a RS485 interface (MeteoBus), several VT36 or other MeteoBus compatible sensors can be operated simultaneously.