

Ventilated Thermohygrometer VTP 6 (Thygan)



Thermohygrometer VTP 6 mounted electrically insulated on a meteorological mast outrigger. The air intake is visible at the bottom. The air leaves the housing through a duct below the lid.

The VTP 6 is a ventilated heated thermometer combined with a mirror-type dew point hygrometer. The instrument is designed for field operation and meets the highest demands for reliability and accuracy, even under the most severe environmental conditions.

Its special features include:

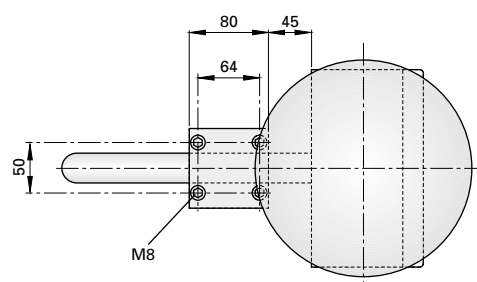
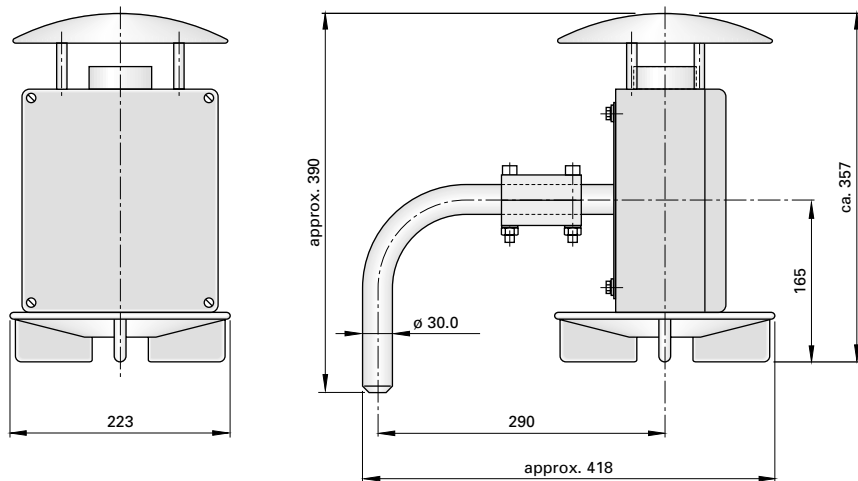
- Cyclic operation which allows automatic control and regulation of the most important functions. The VTP 6 measures the air temperature and dew point temperature some ten times within 40 seconds every ten minutes. The instrument delivers the average values together with their standard deviations, allowing data quality to be checked.
- For special applications, continuous operation can be selected by switch.
- The influence of moisture (psychrometric effect), radiation, icing, wind and electromagnetic interference (from radio transmitters) have been virtually eliminated.
- Low power consumption permits battery operation (without heater).
- The dew point mirror is cleaned automatically, which allows maintenance-free operation.
- The VTP 6 requires very few connecting wires (3 for measurements, 2 each for the 12 VDC and 48 VAC power supplies).
- Automatic differentiation between ice and water films on the mirror. The type of deposit is distinguished in the calculation of the relative humidity.
- The humidity measurements are reported either as relative humidity over water or as dew point/frost point (selection by switch).
- Control identifier indicates the operating state of the sensor.

The VTP 6 requires a control unit. This can be supplied either as a self-contained instrument or as an interface for the KLIMET weather station. The control unit supplies the data either in digital form or as an analog voltage.

Technical data

Temperature range	-50°C...+50°C
Dew point range	-65°C...+50°C
Maximum dew point depression at 20°C	40 K
Sensor type	copper-constantan thermoelements
Temperature resolution	0.1 K
Relative humidity resolution	0.1%
Accuracy	± 0.15 K from -20°C to +50°C ± 0.25 K from -65°C to -20°C
Operating voltage	10...15 VDC / 48 VAC
Power consumption 12 V	average over 10 min cycle approx. 15 mA, peak 180 mA
Power consumption 48 V	max. 3 A (housing heater)
Weight	8 kg

Dimensions



alle measurements in mm

Details for ordering

Thermohygrometer VTP 6

Accessories (order separately)

- Replacement ventilator with heater
- Control unit VTP 6
- Control unit CU-VTP

meteolabor reserves the right to make changes without further notice

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