

Ultrasonic Anemometer Thies Compact

S81100H
(P6000H)

- Wind speed & direction and acoustic-virtual temperature
- Orthogonal wind speed vectors (X- and Y-distance)
- Scalar/vectorial wind speed, wind direction
- Acoustic-virtual temperature
- NMEA data protocol
- ASCII THIES FORMAT
- Analog data

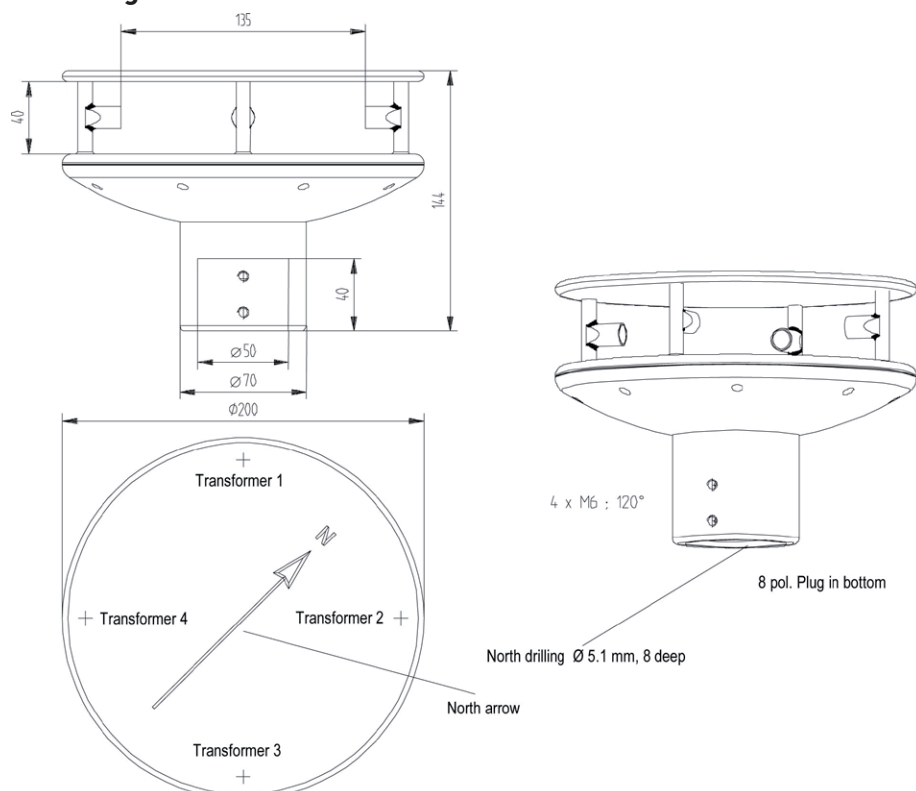


Description

The measurement principle allows, compared to the classic anemometers, an inertia-free measurement of running variable dimensions with highest precision and accuracy. The measuring values can be output digitally and/or in analog form. The serial or analogue output of the data is carried out alternatively as instantaneous value or as gliding mean value with selectable time frame.

If necessary, the instrument is automatically heated in case of critical ambient temperatures. The possibility of malfunction, caused by icing, is minimized. The sensor arms and the ultrasonic sensors are heated.

Dimensional Drawing



Wind Speed	
Measuring range	0...65 m/s
Resolution	0.1 m/s (standard); < 0.1 m/s (user-defined)
Accuracy	≤ 5 m/s: ± 0.2 m/s; > 5 m/s: ± 2% of meas. value
Wind Direction	
Measuring range	0...360°
Resolution	1° (standard), < 1° (user-defined)
Accuracy	±2° with wind speed > 1 m/s
Virtual Temperature	
Measuring range	-50...+70°C
Accuracy	± 2 K
Data Output Digital	
Interface	RS 485 / RS 422
Baud rate	1200 to 921600
Output	Instantaneous values, mean values
Output rate	1 per 10 msec to 1 per 10 sec
Status signal	Heating, distance errors, distance temperature
Data Output Analog	
Electr. output	0...20 mA / 0...10 V or 4...20 mA / 2...10 V
Load	current output: max. 300 Ω voltage output: min. 2000 Ω
Resolution	16 bit
General	
Bus operation	Up to 99 instruments
Operating voltage	Power supply electronics: 8 V to 36 V DC or 24 V AC / 1.2 VA Power supply electronics + heating: 24 V AC/DC, max. 250 VA
Electr. Connection	8-pole plug
Manufacturer	Thies / 4.387x.0x.xxx