

Meteobot® Wind Speed – Datasheet

Meteobot® Wind Speed is an accurate and reliable electronic anemometer (wind speed sensor), designed for agriculture, meteorology, environmental monitoring, construction, infrastructure, energy and other industries.

As the rotor (with the three cups) turns in the wind, it produces electric impulses, which can be measured by any datalogger or pulse meter. The wind speed is linearly related to the frequency of the impulses, and can be calculated using the following formula:

$$\text{Wind speed (m/s)} = \text{Hz} * 0.4723 + 0.2$$

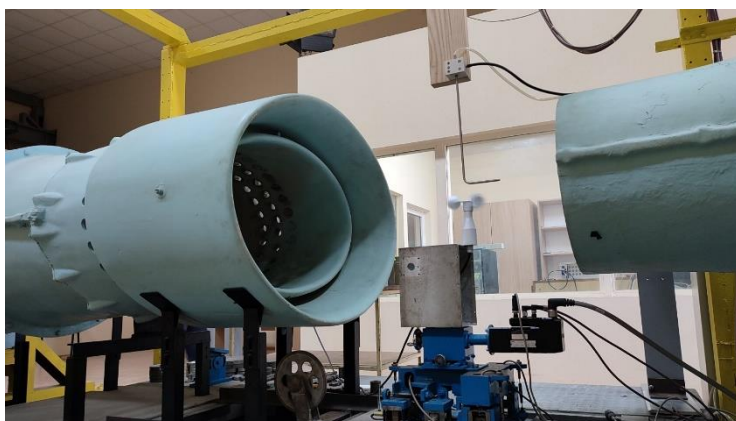
where Hz is the number of impulses per second.

The sensor is very sensitive – it starts measuring wind from as low as 0.2 – 0.3 m/s. This is due to its ceramic bearings, which have many advantages:

- Low friction
- No maintenance
- Corrosion resistance
- Long life

The sensor is made from UV-resistant ABS plastic, which makes it lightweight and ensures a long product life.

It has been tested and calibrated in an aerodynamic tunnel. The accuracy of the sensor is +/- 0.2 m/s, and the maximum speed is 55 m/s (198 km/h).



Meteobot® Wind Speed can be used separately or together with the Meteobot® Wind Direction sensor.

Specifications

Measurement range	0.2 – 55 m/s
Resolution	0.1 m/s
Accuracy	± 0.2 m/s
Operating range	-25°C ÷ 70°C (ice free)
Mechanism	Two rotating magnets with a reed switch
Output	2 impulses per revolution
Hz to m/s conversion	Wind speed (m/s) = Hz * 0.4723 + 0.2
Mounting	Stainless steel plate and hose bracket 40-50 mm diameter (included)
Cable	1.5 m, 2 x 0.5mm ² (can be ordered with up to 12 m)
Dimensions	Height: 160 mm; rotor diameter: 134 mm; mounting plate: 198 x 47 x 39 mm
Weight	0.2 kg (without mounting plate and without cable)

Package

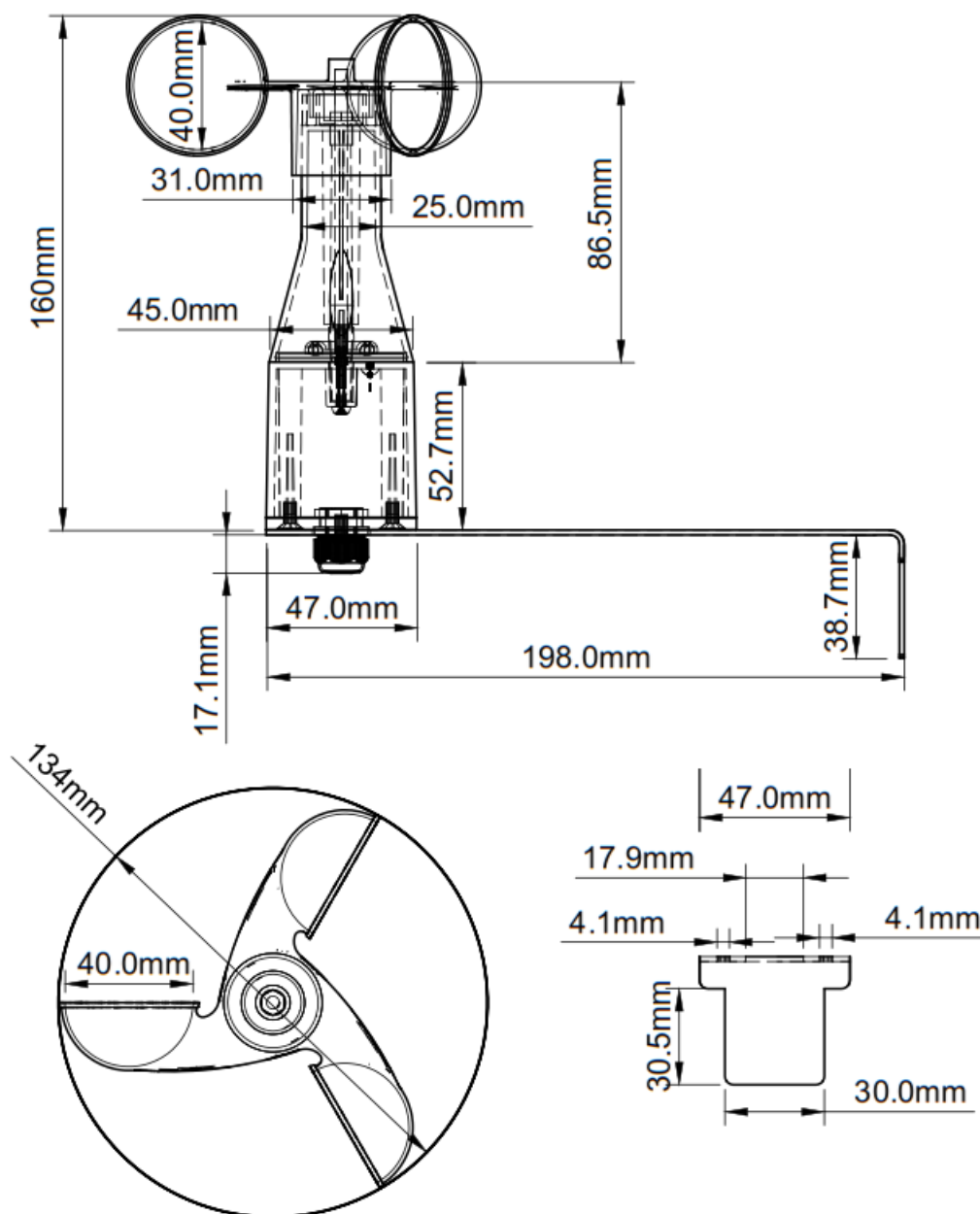
Size	Weight (with mounting plate)	HS Code
19 x 13 x 12.5 cm	0.42 kg	90158020

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Prointegra Ltd.

2 Todor Penev str., Varna 9009, Bulgaria
www.meteobot.com



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