

EN THP

Temperature, Humidity and Atmospheric Pressure Sensor

Precise Environmental Monitoring

The **EN-THP sensor from Cesens** is a highly accurate sensor that measures air temperature, relative humidity, and atmospheric pressure, three key variables for agriculture.

These data make it possible to **understand the crop microclimate**, optimize irrigation planning and agronomic treatments, and feed **pest and disease prediction models** that enable preventive action.

Its **robust design and integration with Cesens monitoring systems** ensure reliable and continuous data directly from the field.

Key Advantages

- ✓ **Triple measurement in a single sensor**
Two chips in one unit to measure temperature, humidity, and atmospheric pressure.
- ✓ **Ventilation-optimized design**
Allows the sensors to breathe while protecting them from liquid ingress.
- ✓ **Lightning surge protection**
Integrated grounding rod in the pole for enhanced resistance against electrical discharges.
- ✓ **Ultra-low power supply**
Operating voltage of 2.15–3.6V to minimize field operating costs.

Applications

The EN-THP sensor is a key tool for multiple applications:



Crop microclimate monitoring



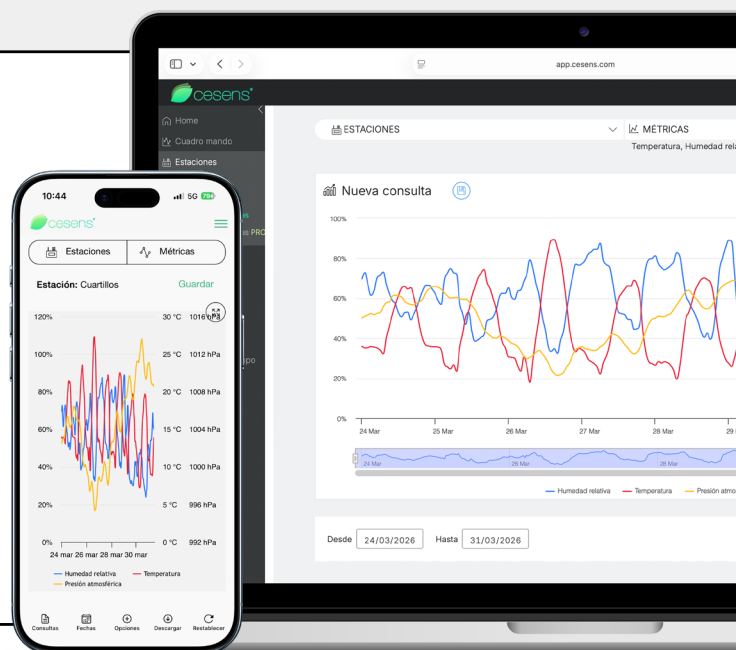
Pest and disease prediction models

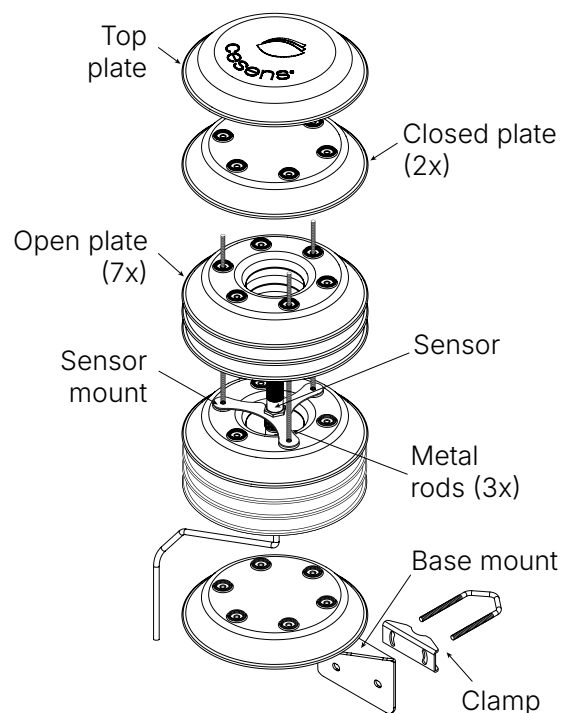


Optimization of phytosanitary treatments



Frost management





Technical Specifications

Dimensions	65 × 20 × 20 mm (without cable or radiation shield)
	270 × 200 × 160 mm (without cable, with radiation shield)
Operating temperature	-40 to 85 °C
Metrics	Temperature (SHT)
	Relative humidity (SHT)
	Atmospheric pressure (BMP)
Range	Temperature: -40 °C to 105 °C
	Humidity: 0–100%
	Pressure: 300–1250 hPa
Resolution	Temperature: 0.01 °C (SHT)
	Humidity: 0.01%
	Pressure: 0.66 Pa
Accuracy	Temperature: ±0.1 °C (20 °C–50 °C), ±0.3 °C (rest of range)
	Humidity: ±1.5%
	Pressure: ±50 Pa (300–1100 hPa, -20 °C to 65 °C)