



Climagro

Because data is the most
valuable commodity in
the World.

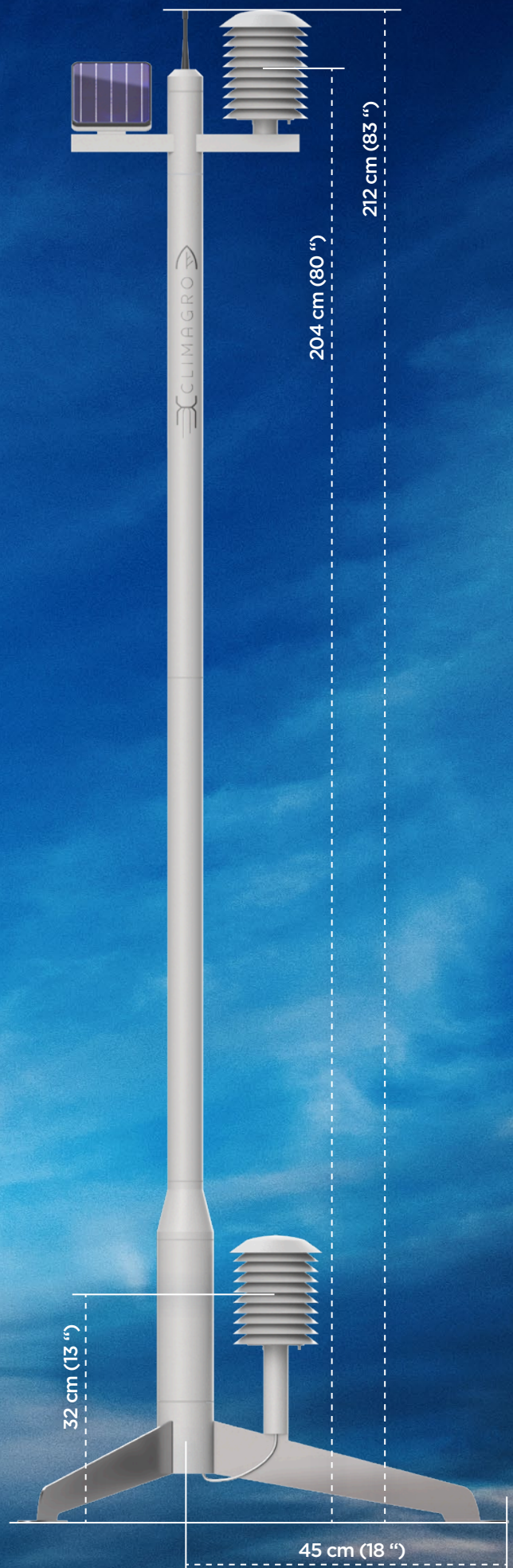


Features

- Wide choice of **sensors**
- **Ultra-low power** consumption
- Connectivity over LoRaWAN (**free of charge**) or NB-IoT
- **Built-in GPS and other modules** for positioning, motion detection, real time clock, and protection against theft
- **Supercapacitor-based energy** storage
- **Corrosion-resistant** IP65 enclosure
- Internal cable routing to **prevent mechanical abuse, UV exposure, and rodent damage**
- **Compact, durable, robust,** and modern design
- **Easy handling, high portability,** and easy calibration due to the modular design
- **Easy assembly and installation**
- **Low maintenance costs**
- **Fully customized;** optional sensors are available
- Compatible with the **Nimbus™** online **software for system and data management**

Typical applications

- **Precision agriculture, Irrigation**
- **Orchards, Vineyards**
- **Forestry, Botanical gardens**
- **Meteorology:** observations, climate
- **Hydrology:** landslide monitoring
- **Geology:** monitoring landfill sites
- **Air quality**
- **Smart cities**
- **Science and research**
- **Outdoor activities:** golf courses, ski resorts, etc.



Technical specifications

Measurement Performance



Air Temperature and Relative Humidity Sensor

Temp. measurement range	-40...80°C, (-40...176°F)
Accuracy	± 0.1°C
RH measurement range	0...100%
Accuracy	± 2%



Soil Moisture and Temperature Sensor

Moisture measurement range	0 to 1.0 m ³ .m ⁻³
Accuracy	
(with soil-specific calibration)	± 0.01 m ³ .m ⁻³ (1%)
Soil Temp. measurement range	-20...60°C, (-4...140°F)
Accuracy	± 0.5°C



Leaf Wetness Sensor

Measurement range	300...1250 mV
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Dendrometer

Plant size diameter	3 – 30 cm, (1.2 - 12")
Measurement range	0...11 mm, (0...0.44")
Accuracy	±1.5 µm ± 0.12% , (±0.06 mil ± 0.12%)

Optional sensors



Wind - 2D ultrasonic anemometer

Range	0...60 m/s
Accuracy	±3% at 10 m/s



Precipitation

Accuracy	±2% up to 25 mm/h
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Operating Environment



Temperature	-40...60°C, (-40...176°F)
Storage (shelf life)	4 years at 25°C



Accessories

Kit for strong winds	> 25 m/s
Mounting Kit	ground screws with special adapter kit



Power supply

Power source	solar panel with internal power storage
Autonomy	3 days (without external power source)



Connectivity

Type	LoraWAN, NB-IoT
Range	Up to 30 km; dependent on the antenna type, terrain and sample rate
Compliance	CE, FCC

Dimensions



Total height	210 cm (83")
Weight	9 kg (19 lbs.)
Air temperature and relative humidity sensor at	204 cm (80")
Air temperature and relative humidity sensor at	32 cm (13")
Tripod diameter	91 cm (36")

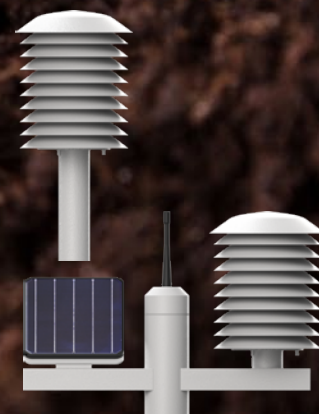
Materials



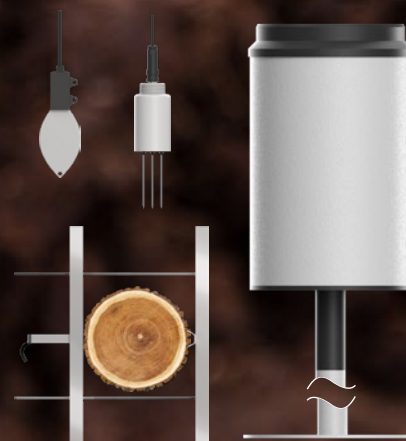
Made of	aluminium and stainless steel
Finish	Powder coated



Frame assembly with main unit



Simple disassembly of the air temperature and relative humidity sensor for calibration in the laboratory



Choice of sensors

The CLIMAGRO sensory system provides information about soil moisture, soil temperature, leaf wetness, and diameter of a plant. The system also detects air temperature and humidity on two levels, the amount of precipitation, and other important parameters for various applications.

Designed and manufactured in Europe.

