

# Climagro Lite



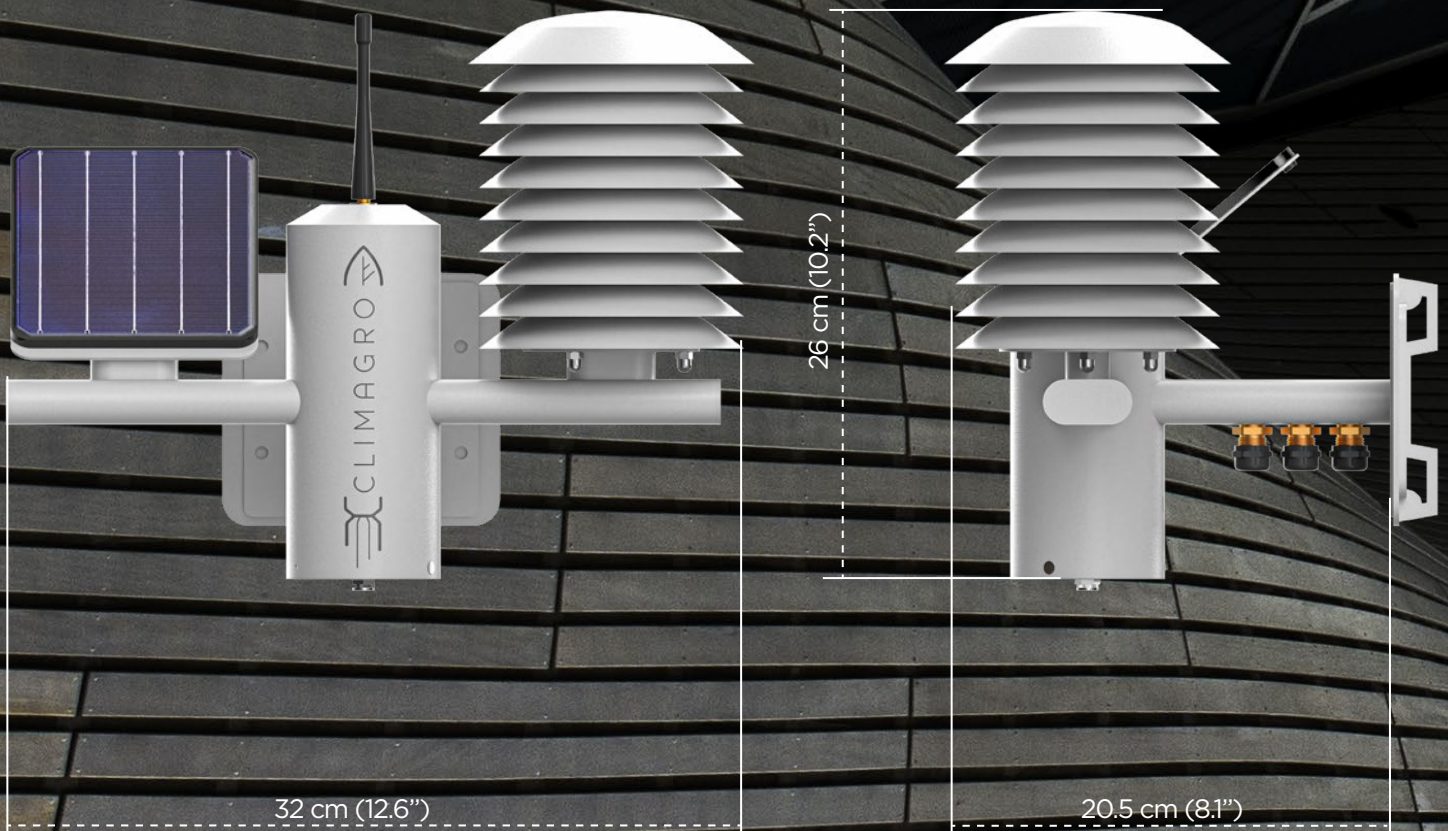


## Features

- A wide **choice of sensors**
- Can be mounted **on existing infrastructure**
- **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 its **small size**
- **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 <sup>3</sup> .m <sup>-3</sup>
Accuracy	
(with soil-specific calibration)	± 0.01 m <sup>3</sup> .m <sup>-3</sup> (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



#### 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



#### 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



Height: 26.0 cm (10.2")
Width: 32.0 cm (12.6")
Depth: 20.5 cm (8.1")
Weight 2.5 kg (5.5 lbs.)

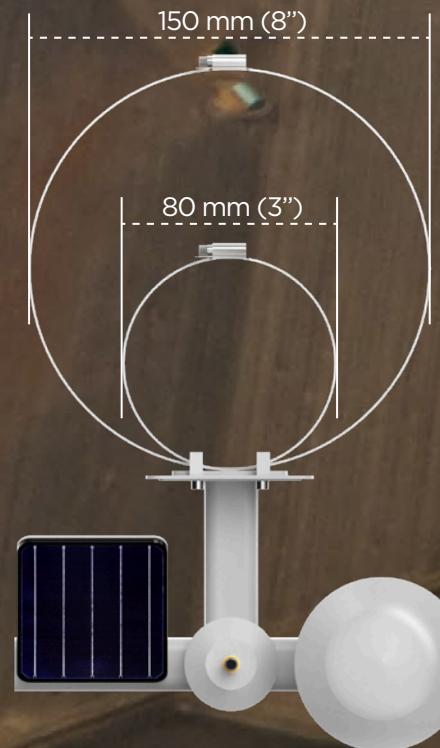
## Materials



Made of stainless steel and aluminium
Powder-coated




Choice of sensors



Climagro\_Lite can be mounted on a pole with diameter from 80 mm (3") up to 150 mm (8") using provided mounting kit.





The CLIMAGRO\_Lite sensory system provides data on soil moisture, soil temperature, leaf wetness, and the diameter of a plant. The system also detects air temperature, relative humidity, and the amount of precipitation. Due to its small size and the wide choice of sensors, it can be mounted on existing infrastructure and used in various applications.

Designed and manufactured in Europe.

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