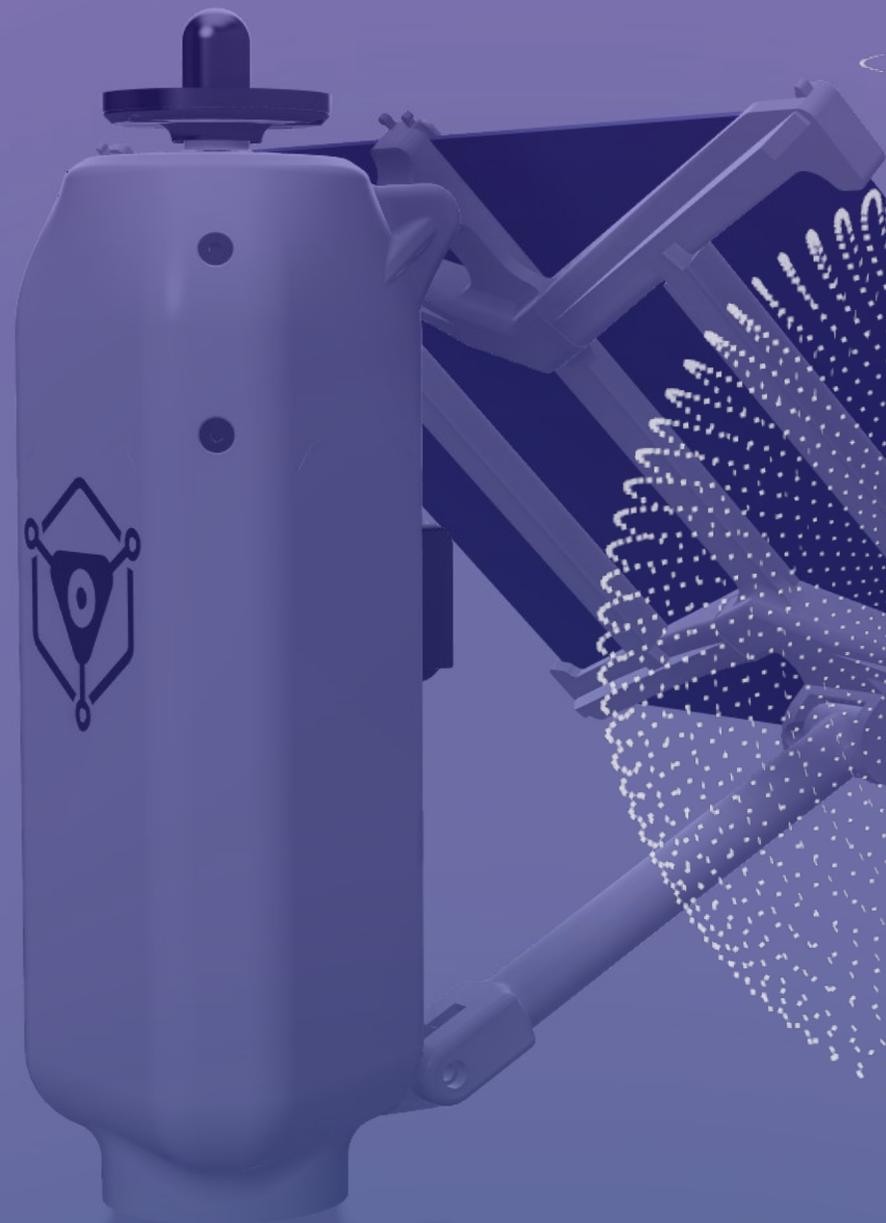


# phiNet<sup>®</sup> voyager

Measurement of environmental and energy variables



### **phiNet<sup>®</sup> voyager**

**WiFi/4G autonomous measuring station**

**Measurement parameters every 1 minute**

**Solar radiation on a horizontal or inclined plane (W/m<sup>2</sup>)**

**Ambient temperature (°C)**

**Atmospheric pressure (bar)**

**\*Wind speed (m/s)**

**\*Wind direction (°)**

**Daily synchronization of date and time with NTP server (Network Time protocol)**

**Calibrated according to standard pyranometer**

**Low level of maintenance**

**\*Included with additional anemometer in special version**

# CHARACTERISTICS

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## Plug & Play

It can be connected by any type of user. It has an autonomous energy system that allows it to operate in low maintenance conditions.



## WiFi & 4G

The information can be transmitted directly to the phiNet® platform for processing and visualization. WiFi wireless network connection and mobile broadband. Internal memory up to 5 years.



## Synchronization

Daily date and time synchronization of its internal clock through an NTP protocol to keep measurements with UTC time as accurate as possible.



## Reports

It has a web platform where it receives information, processes it, and displays it in online reports, PDF reports, or data download in CSV format.

# Optimization of solar plants

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With phiNet®voyager stations it is possible to know where and when to clean.

The stations make it possible to measure the levels of pollution present in photovoltaic plants by sector, in order to predict where and when to clean, strengthening maintenance plans, increasing the energy performance of the plants and, with it, improving the economic returns for electricity generation.



# “Internet of Things”: measurement everywhere

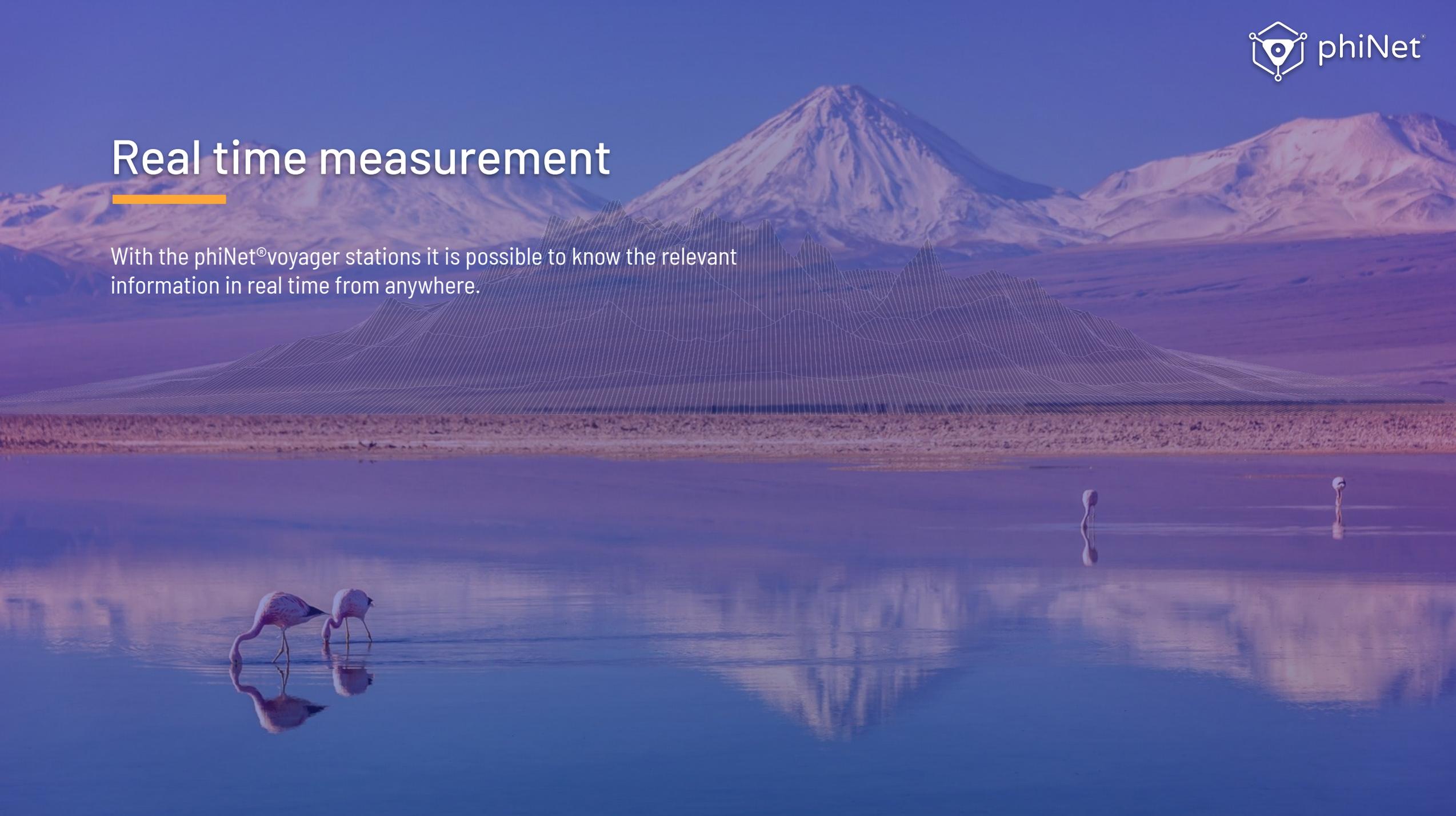
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We connect the phiNet<sup>®</sup> voyager stations with the most advanced technology through communication networks with WiFi, 4G and LoRa<sup>®</sup> connectivity

# Real time measurement

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With the phiNet<sup>®</sup> voyager stations it is possible to know the relevant information in real time from anywhere.



# Multi platform

phiNet<sup>®</sup> voyager allows real-time information to be obtained on the most important environmental variables that influence the generation of photovoltaic plants.

The platform allows you to configure the stations remotely, in addition to managing the information and reports generated.





# NEURALSUN<sup>®</sup>

We connect all the phiNet<sup>®</sup>voyager stations to the neuralsun<sup>®</sup> platform that uses local data and satellite models, generates predictive models to offer multiple services for the energy and environmental sector.

More information in [neuralsun.ai](https://neuralsun.ai)

# Industry 4.0: Additive manufacturing

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# Stations without borders

Additive manufacturing reduces costs and makes it easier for users from different latitudes to implement solutions anywhere in the world.



## **3D print**

It allows to print the stations in any place where you want to do the measurement.



## **Collaborative work**

Local companies provide the service and install the measurement stations.



## **Maintenance and repair**

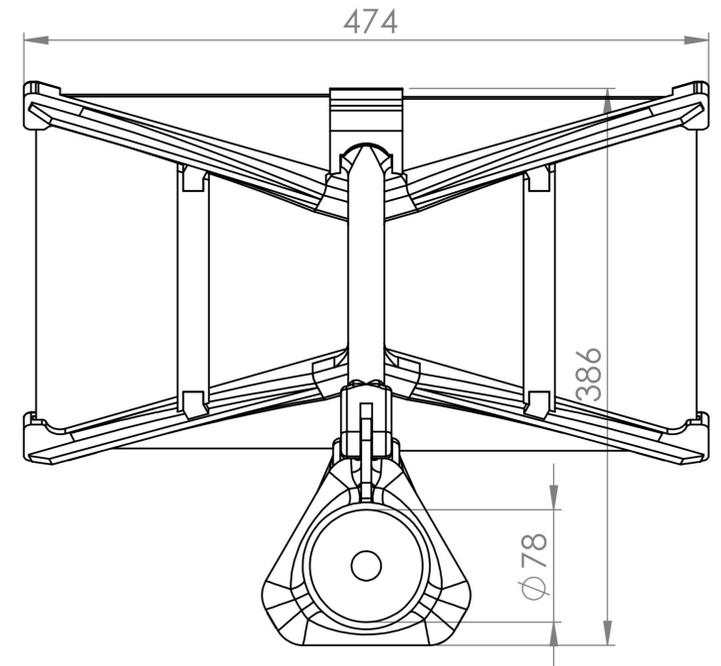
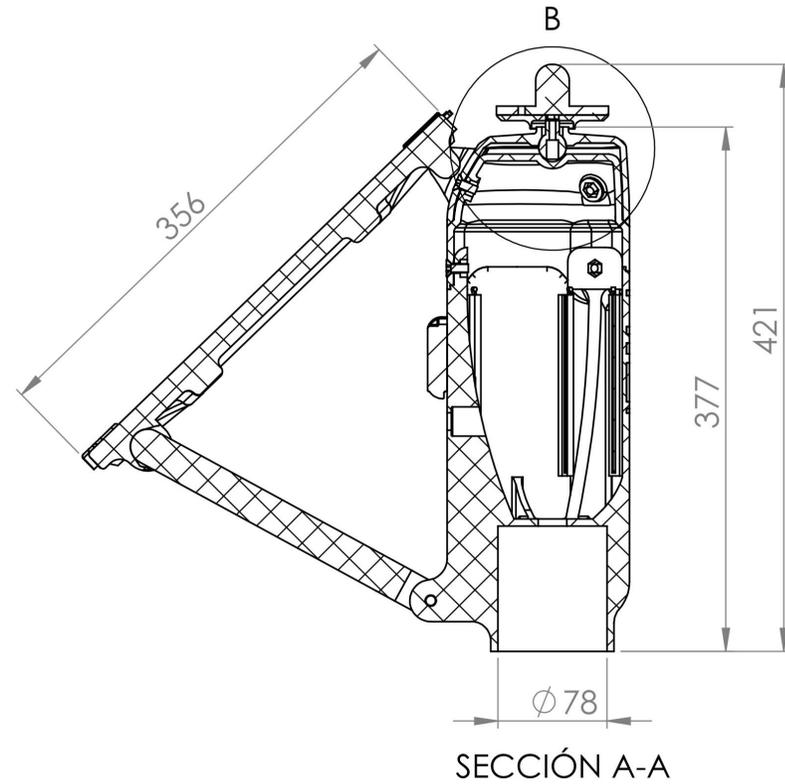
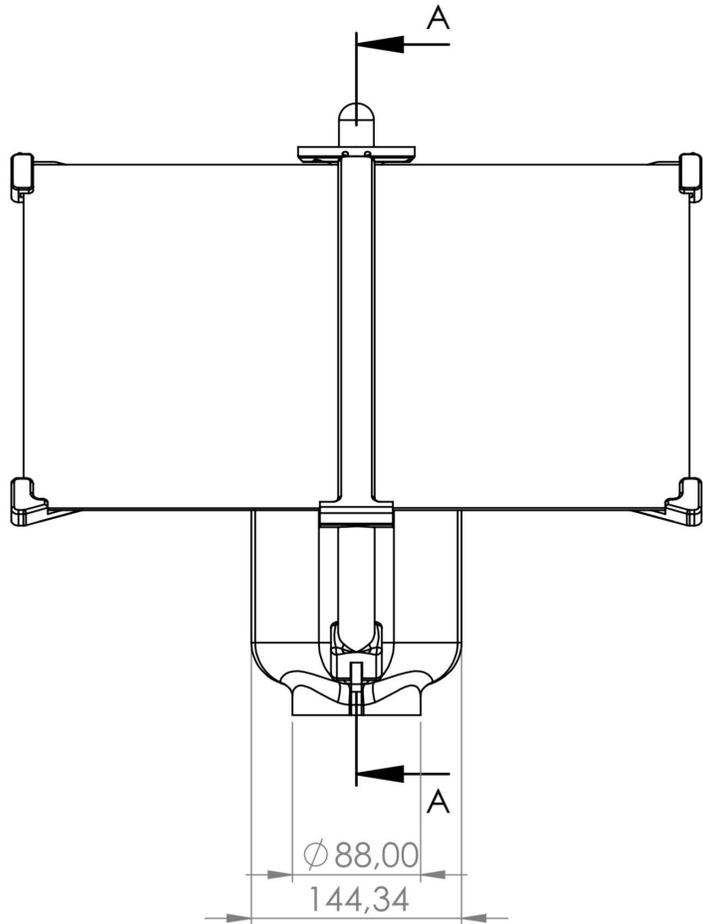
They can be repaired and maintained extending the life of the stations.



## **Manufacturing times**

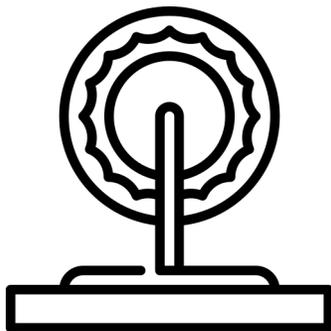
Reduction of manufacturing times in just days to have them installed.

# DIMENSIONS

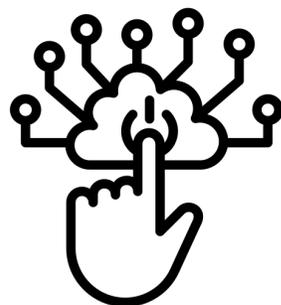


# INSTALLATION

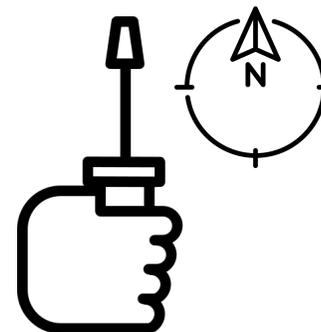
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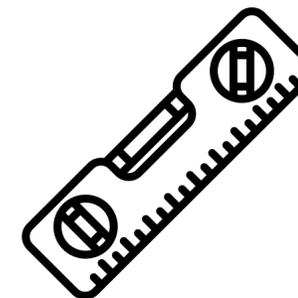
- 1.** Look for a place on a height or pole, in order to avoid the projection of shadows on the station.



- 2.** Turn on the station via the switch located at the bottom of the station.



- 3.** Mount the station on the pole using the bottom base of the station, orienting the modules North in the southern hemisphere and South in the northern hemisphere of the planet.



- 4.** Use a level to ensure the correct inclination of the modules with respect to the horizontal.



v.2023.01

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<https://www.phinet.cl>

A group company

The logo for Phineal, featuring a stylized white 'P' icon followed by the text "Phineal" in a white sans-serif font.

Supported by

The logo for CORFO, featuring the text "CORFO" in a white sans-serif font followed by a stylized white icon of a person.

