

AUTOMATION ROBOTICS

SUNSIGHT IT 4

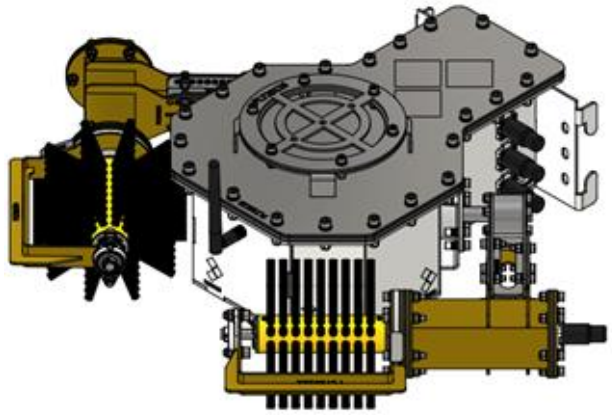
Pyranometer cleaner fully automated to prevent soil deposition over sensors on field. Allows getting precise and consistent irradiance readings

- Uses Inti Tech cleaning brush for an effective and safe soil remotion.
- For independent mountings, in trackers, soiling stations and weather stations.
- With programmable cleaning cycles using the software interfase.
- Up to 50 robots can be controlled in up to 1km round using the control unit.
- Mounting hooks allow easier and faster deploying on field.

The soil deposited over a pyranometer can modify any irradiance reading, giving an inaccurate PV performance calculation.

PR (Performance Ratio) is the name of the indicator used to establish performance goals in a PV power plant. This value is calculated as the ratio of the real generation to the ideal generation.
A low result of this value could mean the plant has a high level of soil deposited over the modules.

$$PR : \frac{\text{Actual Power (MW)}}{\text{Ideal Power (MW)}}$$



SUNSIGHT ROBOT

Nominal input voltage	24 VDC
Supply Type	PV or 24V Power Supply
Nominal Current	2 A
Communication	Wireless
Band frequency	900 Mhz
Transmission Range	1 km
Protection	Dust and waterproof
Cleaning cycle duration	Default: ~3 min (adjustable)
Dimensions (width x length x height)	700 x 510 x 210 mm
Net weight	10 kg
Mounting method	Clamp and Flange



Pyranometer cleaning robot

Clean whenever you want



Control Unit

Sends cleaning instructions and centralizes the information.

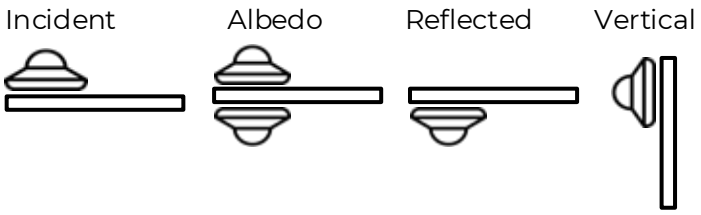
LAYOUT AND MOUNTING

For mounting a stable structure is needed, capable of resist 30 kg, and without any obstruction that could damage the equipment.
Multiple equipments (pyranometers) can be attended by using multiple devices.

FEASIBLE STRUCTURES

- ✓ Trackers
- ✓ Independent structures
- ✓ Weather stations

Feasible pyranometer orientation



Unfeasible disposition

Same surface

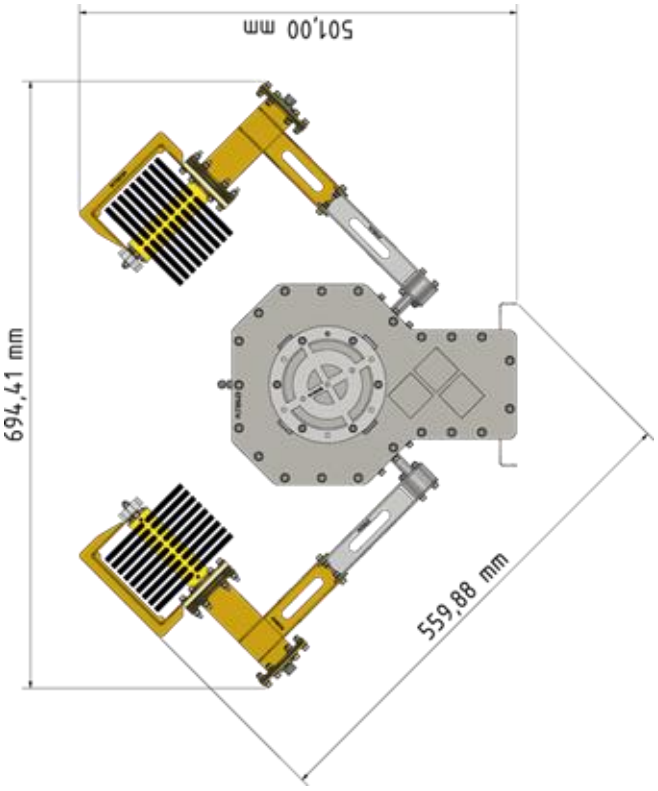


CONTROL UNIT

Nominal Voltage	220 VAC
Nominal Current	1A
Dimensions (width x length x height)	500 x 400 x 200 mm
Net weight	5 kg
Band frequency	900 Mhz / 2,4 GHz
Transmission range	1 km
Ethernet	CAT 5E Rj45 T-568B
Communication protocol	Modbus TCP
Internet Control	Yes

MECHANICAL DRAWINGS

▸ GENERAL DIMENSIONS



▸ MOUNTING FLANGE DIMENSIONS

