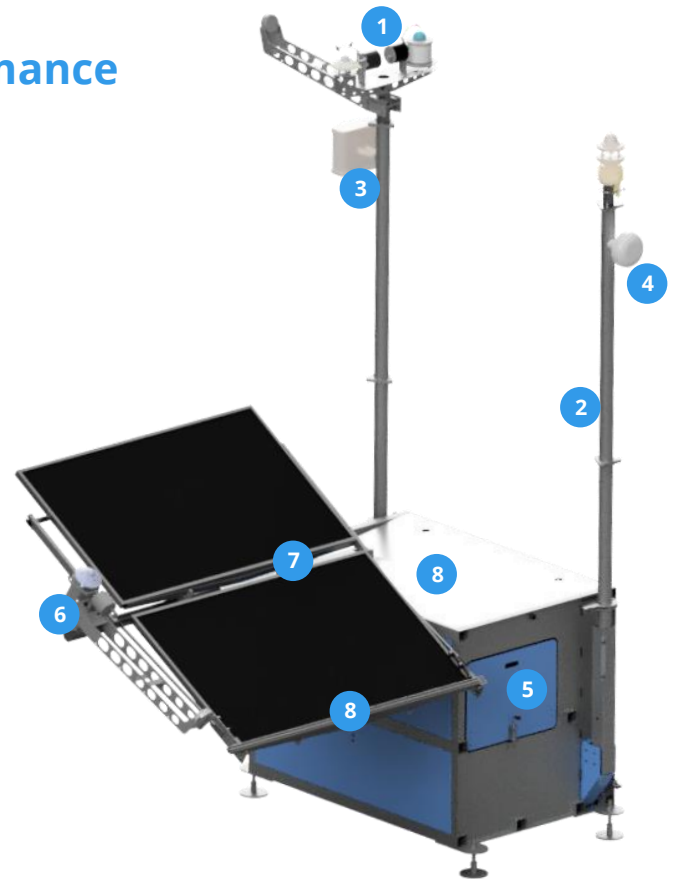


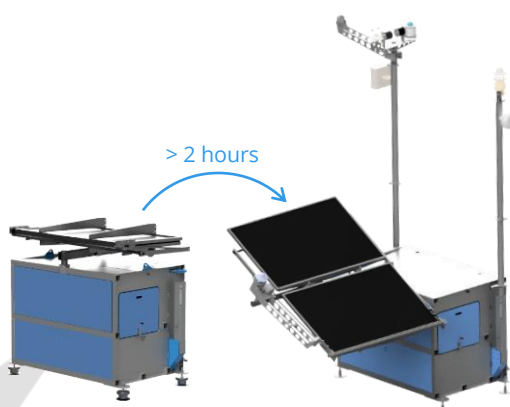
Independent and reliable performance assessment for utility-scale solar

MetCube — Proa’s cutting-edge weather station — ushers in a new era of data accuracy and reliability for solar projects. Engineered to integrate seamlessly with any sensor required throughout a project's lifecycle, MetCube eliminates data accuracy uncertainties with its unique features:

- Self-Sufficient operation
- Bird detection and deterrence system
- Intelligent self-cleaning of sensors
- Built-in soiling station with self-cleaning
- Water capture and recycling



- | | |
|--|---|
| <p>1 Instrumentation plates with self-cleaning of all sensors and bird radar. Sensor brands/ models agnostic</p> <p>2 Hinged masts with different heights available - MetCube supplied with one or two masts, tailored to project needs</p> <p>3 4G/ 5G comms panel antenna – for <i>MetCloud</i> optional services</p> <p>4 Long range point-to-point antenna, for wireless SCADA integration</p> | <p>5 Compartment for storing all instrumentation plates with sensors pre-assembled from the factory for safe shipping</p> <p>6 Plane of Array (POA) irradiation setup with upwards pyranometer and fixed tilt or tracking options</p> <p>7 Soiling station with automatic self-cleaning of “clean” panel and fixed tilt or tracking options</p> <p>8 Water capture points for filtration and demineralisation</p> |
|--|---|



Rapid, Simple, and low-cost deployment

No hard standing or complicated plant integration and cabling required.

Proa’s unique commissioning validation system means that installation and resulting data accuracy can be immediately validated to confirm reliability and independence of future data.

The MetCube can be installed or re-installed in any location across your project within 2 hours by a single person

Revolutionising Weather Data Protection

No more manual cleaning of sensors and high OPEX. All pyranometers installed on the MetCube are cleaned every day (during nighttime) with demineralized water, avoiding traces of minerals on instrumentation domes.



POA and Soiling Station with built-in tracking system and automatic self-cleaning

Both POA and soiling station can be setup for a fixed angle or supplied with a tracking system that replicates in real time the same angle of representative PV arrays.

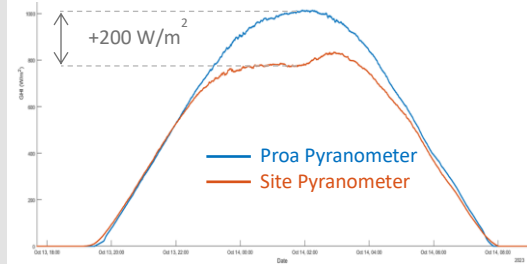
Upwards POA is installed on the MetCube.

Downwards POA and back-of-module temperature sensor are installed on the PV array and all data transmitted to the MetCube wirelessly.

MetCloud – Securing data accuracy and independency

The MetCloud services allow post-processing methods to the raw measurements in the form of data quality checks, data wrangling and aggregation (temporally and across the various MetCube units). It also allows access to a dashboard where all the data (raw, post-processed, and aggregated) is available for visualisation and download.

The installation simplicity, minimal O&M and standalone nature minimise risks and make MetCube the most economical resource monitoring solution for your project, whether under development (greenfield prospecting), construction or operation.



Improper maintenance of pyranometers can falsely reduce the measured irradiance, artificially increasing the PR figure and giving a misleading indication of better performance.



“Clean” panel of MetCube soiling station is automatically cleaned every day, and Soiling ratio calculated from I_{sc} and T_{cell} .



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