

Solar forecasts for the next minutes

Based on real-time all sky images for intrahour solar forecasting needs



ABOUT





SteadyEye provides advanced solar irradiance and production forecasts up to 30 minutes ahead. This unique nowcasting product combines on-site sky imagery processing with weather forecast, physical models and artificial intelligence. The product is designed to anticipate solar power ramp events and to guarantee PV production.

Sky and weather conditions above solar power plants are continuously monitored using SW-X all sky imager(s) and predicted locally, improving the accuracy of solar forecasts for the next minutes and anticipating the risks of variability.

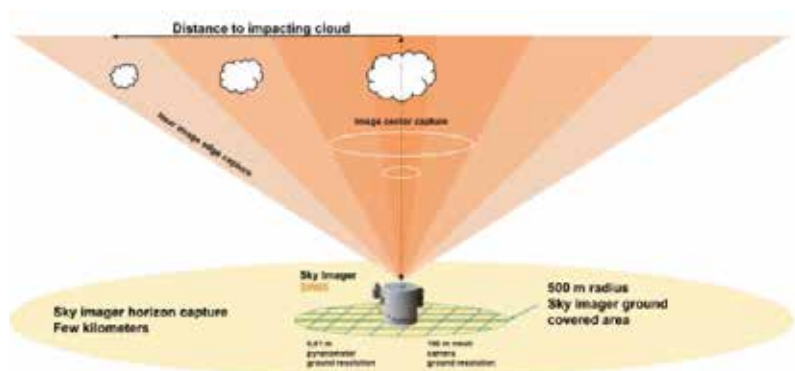
SOLUTIONS

- Hybrid systems & storage
- Off-grid microgrids
- Plant operations
- Grid management
- Insular system management

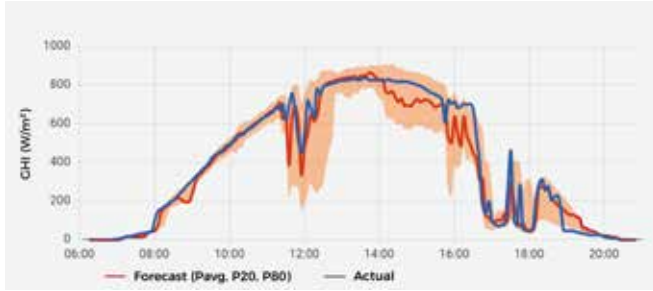
KEY BENEFITS

- 
OPTIMIZE PV POWER RAMP MANAGEMENT
 Thanks to 1 minute forecast update frequency
- 
REDUCE HYBRID PLANT OPERATION COSTS
 By increasing the use of solar energy
- 
FACILITATE BALANCING OF POWER GRIDS
 And manage spinning reserves
- 
IMPROVE OFF-GRID ENERGY SYSTEM OPERATION
 By fostering balancing of the system

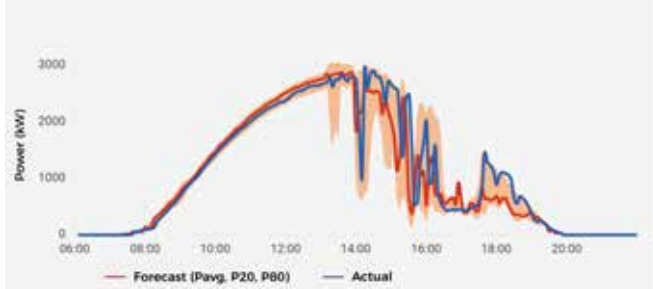
SKY IMAGER COVERAGE



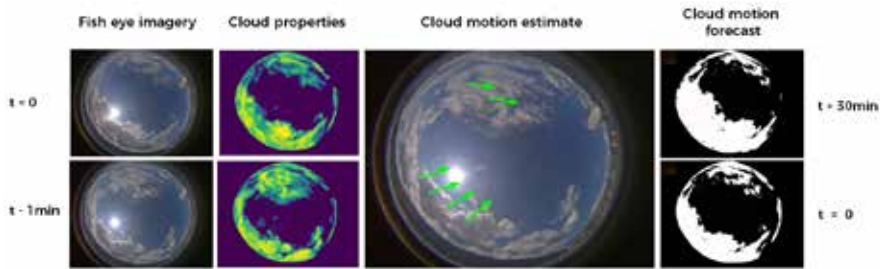
Intrahour GHI forecast for 1 site (France)



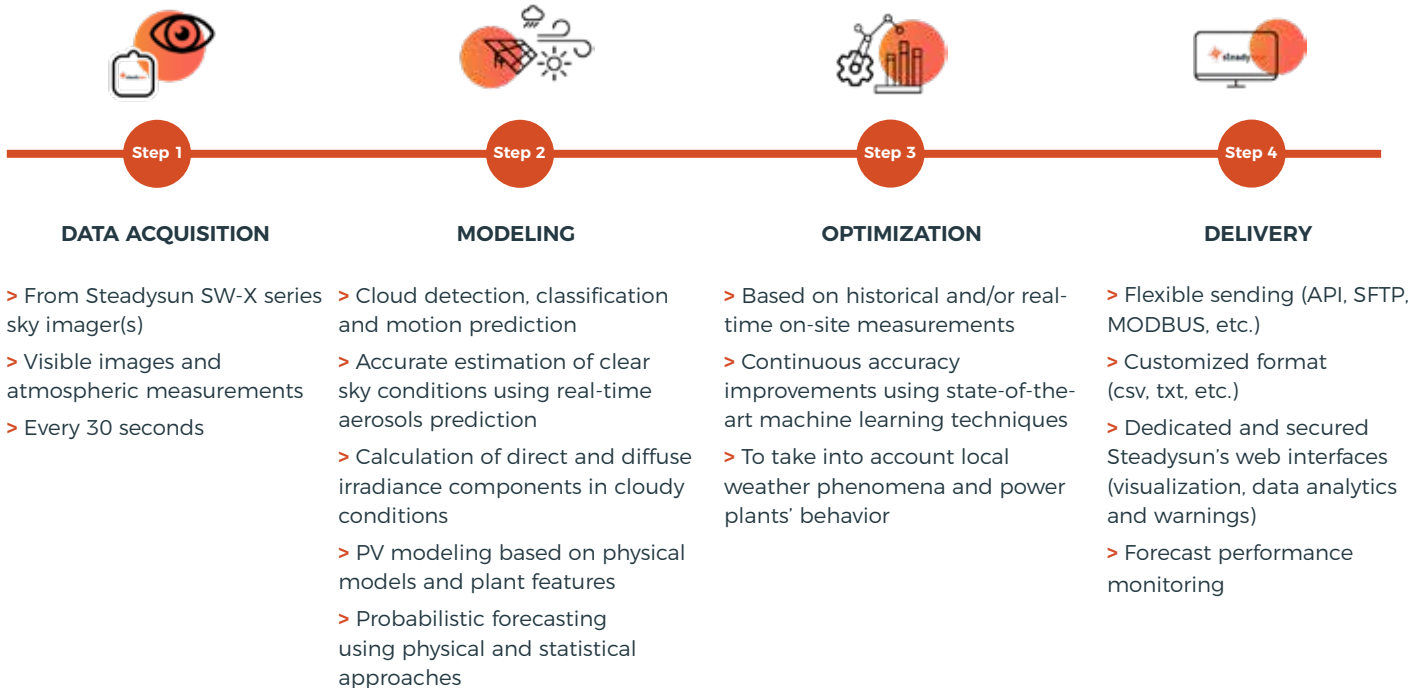
Intrahour power forecast for a 3.2MWp PV-Diesel plant (Australia)



Sky imager-based cloud forecast above one site in France



METHODOLOGY



FEATURES

30 min
Max time horizon

Every 1 min
Update frequency

1 min
Forecast time-step

Power, GHI, DNI, DHI, GTI, Temperature
Available parameters

Site, Portfolio
Coverage

PV, Trackers, Bifacial, CSP
Technology

API, SFTP or Modbus
Data delivery

P10, P20, ..., P80, P90
Confidence levels

