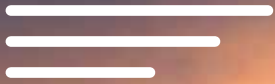


MANAGING ***ENERGIES***



Power management solutions for hybrid power station

- Optimise the production and consumption of your systems
- Effectively control your storage units
- Manage your network services
- Monitor your hybrid power stations

Power management solutions for hybrid power stations

Bertin Technologies' ENERBIRD solutions guarantee optimal control of your power systems thanks to innovative optimisation and real-time control technology based on forecasts.

A customized offer



Features

- Ramp rate control
- Power output curtailment
- Ancillary services (frequency / voltage regulation)
- Start-up and shut-down control
- Load shifting
- Demand response

Main advantages

- Optimal, predictive control
- Real-time management of equipment
- Technologically agnostic
- Modular solution
- Optimised hardware architecture
- Control system simulations
- Plant acceptance testing



Energy Management System

ENERBIRD FORECAST

Power consumption & production forecast

ENERBIRD EMS

Optimisation & real-time control

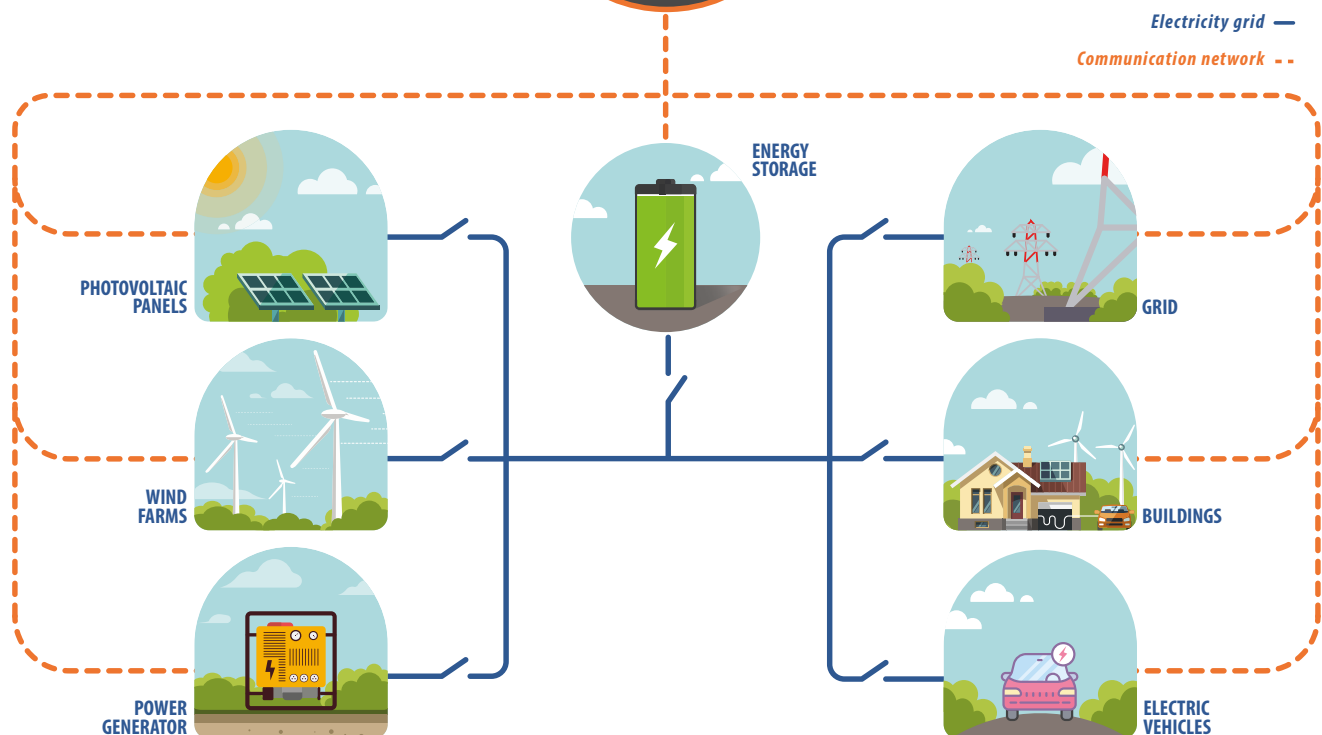


ENERBIRD SCADA

Monitoring the hybrid power station

ENERBIRD WEB

Monitoring and analysis of performance



Applications

ENERBIRD technology is ideal for the storage of renewables, the hybridisation of diesel generators or any other multiple-source power production facility, in isolation or connected to the grid.

- Storage of renewable energies
- Hybridisation of diesel generators
- Charging electric vehicles
- Isolated site power supply
- Thermal storage
- Management of power demand





Saint-Leu solar power station in La Réunion Island (France)

Example of application: Solar power stations with storage

The ENERBIRD solution:

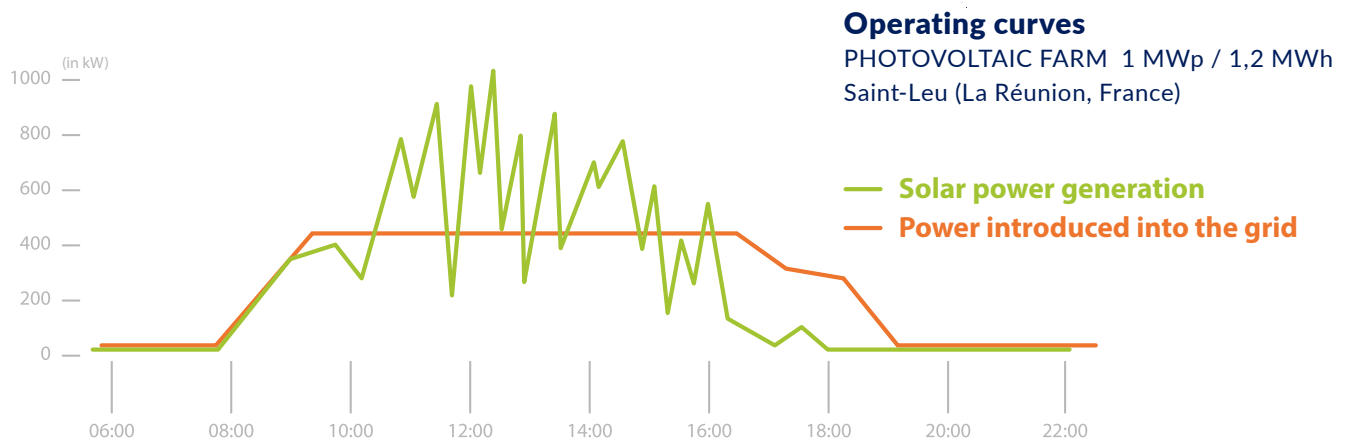
- ✓ Secures revenue
- ✓ Observes the grid manager restrictions
- ✓ Limits damage to batteries

ENERBIRD technologies:

- ✓ Optimal control
- ✓ Predictive, «model based» optimisation
- ✓ Battery aging models

“We were looking for a control solution for our solar power station with storage. We chose the Energy Management System (EMS) from Bertin to manage the power station based on weather forecasts. The EMS proved effective, flexible and robust. The team is readily available and technical support is fast.”

Vincent EUDIER - ALBIOMA



BERTIN TECHNOLOGIES

HEAD OFFICE
Parc d'Activités du Pas du Lac
10 bis, avenue Ampère
78180 Montigny-le-Bretonneux, France

Bertin Technologies is a company
of CNIM Group
www.cnim.com



BERTIN Energy Environment
Espace Technologique Jean-Bertin
19 rue Hélène Boucher
40220 Tarnos, France

Téléphone : +33 (0)5 59 64 86 48
Email : bee@bertin.fr
Web : www.bertin-technologies.com