

# +SolarControl

## Optimal remote management for your RES park

full compliance with TSO/DSO requirements

**Certified**

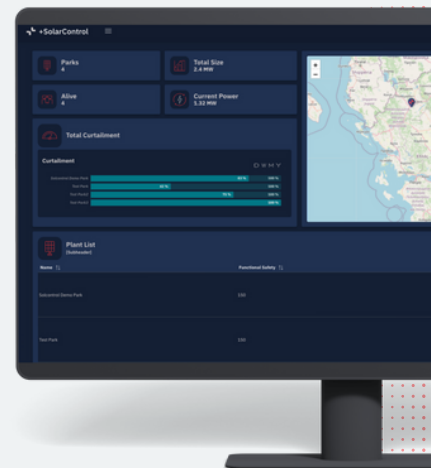


ARISTOTLE  
UNIVERSITY  
OF THESSALONIKI

### Plug-n-play Hardware + Powerful Software

The ultimate hardware and software for RES park control, monitoring and curtailment. +SolarControl combines full telemetry, real-time monitoring, and remote control into a single, ultra-secure cloud platform that works with any plant, regardless of technology or hardware.

- Compatible with 65+ inverter manufacturers and MV protection relays
- Solar, Wind, Hydro, Biogas plants supported
- Guaranteed Compatibility → 100% coverage of the market's needs
- Full & proven compliance with standardised EU DSO specifications
- Supports communication protocols such as IEC-60870-5-104, Modbus TCP/Modbus RTU, IEC61850, OPC-UA/DA/XML-DA, as well as other wired protocols.
- Seamless bidirectional communication with DSO's SCADA/DMS systems.
- Integrates seamlessly with existing router and internet infrastructure, while also offering nanoSIM support for cellular connectivity.
- Remote Over-The-Air (OTA) firmware upgrades.
- Expandable to support additional network or serial communication protocols.
- Ready for compliance with RfG
- Installation within minutes



### User-friendly Online Platform

A user-friendly web interface offering remote telemetry, monitoring, and curtailment control, along with the ability to store historical data on Optimems' Cloud.



#### Maximum Security

Zero-trust framework  
EU hosting servers



#### Future-proof

Interconnected with  
RES aggregators -  
Battery Control



#### MiniPC Architecture

Powerful Edge-  
Controller, fully flexible  
and customizable



#### Easy Monitoring

Cloud-based  
online monitoring  
platform

## Specifications

- Resilient monitoring techniques for continuous real-time data logging
- Robust cybersecurity built on a zero-trust framework
- API for seamless integration with Aggregators
- Future-proof software: supports ancillary services to the Grid
- Full integration and control of energy storage systems
- Operating temperature: -20°C to +60°C, storage temperature: -40°C to +70°C, AC supply: 230V
- Modes: Active, Reactive,  $\cos\phi$ , P(f) and Q(V) droop control
- Monitoring, control, and curtailment capabilities for each individual park within the connected portfolio
- Monitoring and control of the Main Switch at the Point of Common Coupling (PCC)
- Real-time equipment status alerts and fault recognition, installation completed within minutes



- **Certified** for proper operation and full compliance with TSO/DSO requirements by the Power Systems Laboratory of the Aristotle University of Thessaloniki
- **100% successful standardized TSO/DSO connections**

## Custom Firmware



For future customization & scalability



Flexible for the needs of each owner



Secure hardware through mechanical strip

## Edge Controller



MiniPC Capabilities



Unique Device Identifier for direct communication in the field



VPN Client for secure remote access



Image 1. +SolarControl installed in RES park.

## Warranty & Technical Support

Each module comes with a **2 year equipment replacement warranty**. Any defective module within the equipment replacement warranty will be replaced free of charge. The 2-year warranty includes software updates to ensure compliance with HEDNO requirements and technical support.

With the annual **+SolarShield Subscription Plan**, RES owners ensure equipment longevity and unlock a range of value-added services. The annual plan includes software upgrades for new aggregator and battery functions, ancillary services, technical support, remote maintenance, access to the +SolarControl management platform, multi-level technical support, and cloud connectivity for parks.

**100% EU product. +SolarControl units are manufactured in state-of-the-art facilities in Thessaloniki, Greece.**

**+SolarControl has been entirely designed and developed through the collaboration of Optimems and Clockwork Energy.**