

+SolarControl

Optimal remote management for your RES park

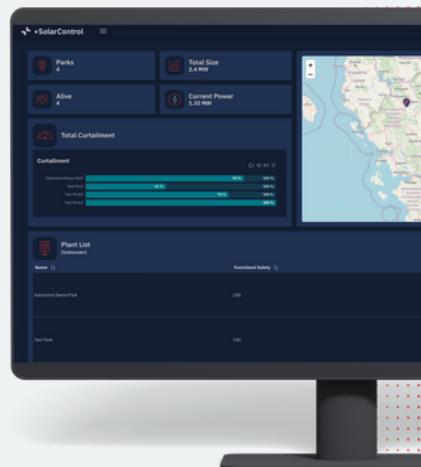
full compliance with TSO/DSO requirements



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

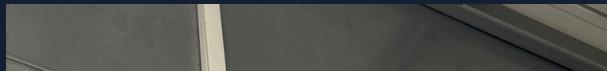
Cloud-based
online monitoring
platform

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**



Over **1200** +SolarControl installations all around Greece.



Image 1. +SolarControl installed in RES park.

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

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.