



Pico-Grid All-in-One Solar Power System

Smart Off-Grid for Wi-Fi and IoT devices

A complete Smart Off-Grid solution that delivers highly reliable power for ultra-low-power devices.

Now these devices can be installed anywhere without needing grid access, with powerful remote management and control to maximize uptime and long life.



Pico-Grid is delivered in pre-configured power packs with everything you need:

- **Smart Off-Grid PoE injector** for optimal power management and control
- **Thin-film solar panel**
- **Integrated lithium ion batteries** for back-up power
- **Easy 'plug & play'** power wiring, terminations, and connectors
- **Comprehensive remote control and management** with Illumience.



Pico-Grid Power System Benefits



Maximum Uptime

The system is designed for maximum uptime, with integrated connectivity to Illumience for 24x7 monitoring, alerts and alarms, predictive analytics, weather forecasting and individual load control. Smart Off-Grid enables proactive maintenance to deliver the highest level of availability.



Longest Battery Life

The Clear Blue system ensures that battery power management, lifecycle optimization, and proactive maintenance are easy and cloud-based, so you get the longest life possible out of your product.



Reliable Energy

Pico-Grid is a highly reliable power system using solar or hybrid solar, with built-in communications, and the ability to remotely monitor, control, and proactively manage the system. This allows for effective management of energy consumption and load prioritization, ensuring emergency ride through.



Cost-Effective for Smaller Sites and Applications

Smart Off-Grid technology with remote power management services enables the entire system to be sized to the unique power needs of satellite Wi-Fi or IoT applications, delivering a cost-effective solution for ultra-low-power devices. Pico-Grid is also easily upgradeable as needs evolve.

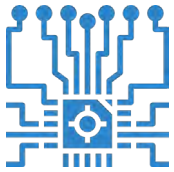


Easy to Install & Maintain

As a plug and play pre-packaged system, the Pico-Grid Power System is easy to install and comes with remote support to ensure successful installation and troubleshooting, with no training needed.

Pico-Grid Power System Components

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Smart Off-Grid PoE Injector

Provides smart energy generation, storage management, and load control for solar and hybrid power systems. With the industry-leading Illumience Energy Management Software and Service, it delivers power anywhere, anytime, with remote operations of mission-critical applications for easy installation and maintenance, maximum uptime, and longer battery life.



Connectivity

Clear Blue's Smart Off-Grid communications connects the system's devices to its Illumience Cloud Management Service via WiFi or cellular networking. This provides reliable connectivity that gives you access to your data while providing a low communications cost, secure platform architecture, and easy maintenance.



Thin-Film Solar Power Panels

Clear Blue's Pico-Grid solution is most often paired with solar-only power, but can also work effectively with hybrid systems like solar/wind, solar/grid, or solar/diesel. The type and size of the system's power panels are selected to fit the needs of the system, with future upgrade capabilities as power requirements grow.



Battery Life

The Pico-Grid comes with integrated Lithium-Iron Phosphate battery cells with Clear Blue BMS, boosting longevity with our intelligent features for safe operations in all conditions, optimized battery health by smart load disconnection, and ensuring efficient performance with safety checks.



Case

The expertly-designed Pico-Grid comes with all electronic components pre-configured and contained in a sturdy housing for a clean look and simple installation. Pole mount or wall mount, UV-resistant enclosure, IPX5.



Illumience: Powerful, Cloud-Based Management and Control

The Smart Off-Grid Advantage



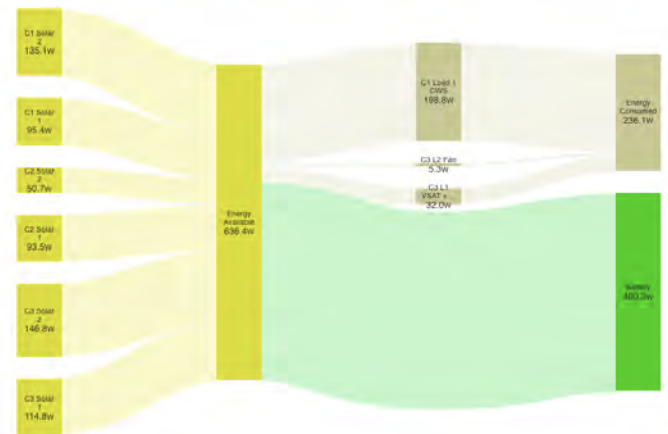
Central Control and Management

Manage all of your Smart Off-Grid systems from one main dashboard. Use the Hub, an essential tool that offers a comprehensive overview of your system's performance. Track performance for any time period, monitor the performance of each solar panel or battery, identify unexpected load outages, and analyze the impact of weather trends on system performance.



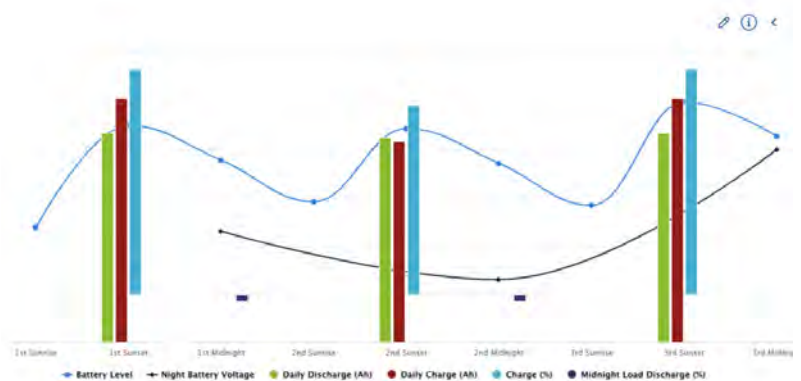
Advanced Energy Forecasting

Energy forecasting is essential for achieving the highest system reliability and maximizing uptime performance. Illumience produces a five day weather forecast for the exact geographic location of each system, based on 30 years of historical weather data. From there, we can develop an energy forecast to predict the amount of energy the system could potentially generate.



Battery Life Cycle Management

Battery management is critical for optimizing the performance of off-grid systems. Illumience provides immense flexibility in battery management. There are numerous settings to specifically manage battery charging and optimize system performance. The wide range of available battery charging settings makes the systems very modular. Systems in a variety of environments can be precisely managed according to customized settings.



Comprehensive Reporting

Illumience Hub provides 24/7 system visibility through a range of standard and entirely customized report and charts, enabling highly efficient energy management.

