


CLEAN ENERGY

Harness energy from solar and wind


COMMUNICATIONS

Wireless support in over 170 countries

Smart Off-Grid

Powerful, reliable, and remotely controlled

CLOUD SOFTWARE

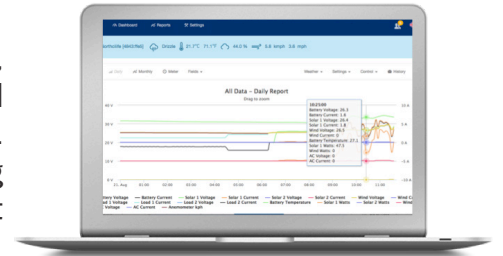
Full remote control and maintenance


OFF GRID POWER

Fully off the grid, available anywhere

Clear Blue's Smart Off-Grid is advanced technology that provides real-time, 24x7, remote control, monitoring and management of solar and hybrid-powered devices. With Smart Off-Grid, streetlights, security systems, mobile power, and Internet of Things devices can achieve the industry's highest performance and reliability with drastically reduced installation and maintenance costs.

Clear Blue's Smart Off-Grid system includes our hybrid controller, an integrated communications network and the Illumience Cloud software for full remote control and management over the Internet. Our solution includes the entire network and cloud software - just plug in the system and it works -no software to install, no network to set up.



- **Easy installation and validation**
 Installer smartphone provisioning tool, customer and installer provisioning report
 No software installation and configuration - plug it in and it works with our Illumience Cloud management service, anywhere in the world!
 No telecom configuration or setup - all telecom and network connectivity is integrated and built in
- **Have it your way**
 Supports ANY light
 Supports many types of loads
 Highly customizable light profiles and other load management configurations
 Hybrid wind/solar, grid/solar and diesel/solar support
 A/C and D/C load support
 Surge current management
- **Long battery life**
 Lifecycle forecaster
 Remote battery maintenance and revitalizer
 Patented dynamic charging
- **Industry leading platform security and encryption**
- **Remote troubleshooting tools including**
 Solar panel test, cabling and connectivity integrity, remote short circuit reset
 Load reboot and control
 User-defined and configured alarms
- **Remote monitoring and reporting**
 Monthly, daily and hourly REAL-TIME monitoring
 Global performance, data analytics
 Dashboard map with location
 Monthly status reporting, system health check report
- **Patented forward-looking weather forecasting**
- **Carbon credit measurement**
- **Internet of Things platform and support for motion detection, people counters, air quality monitoring and much more**
- **Ongoing feature update with software download**
- **Expert support from Clear Blue**
 Emergency service management and uptime guarantee

Smart Off-Grid Benefit	Without Smart Off-Grid	With Smart Off-Grid
Smaller batteries	30-50% larger batteries are required, the lack of real-time alerts and dynamic load shedding forces inefficient asset utilization.	Smaller, less costly battery configurations can be used as seasonal and extreme weather events are handled by Smart Off-Grid. Load shedding enables energy optimization.
Longer Battery Life	Lack of sophisticated power management and proactive maintenance reduces battery life. More frequent replacement means higher costs.	Power and life cycle optimization and proactive maintenance ensure longer life. Includes ability to detect and perform equalize charge remotely.
Remote Load Control and Management	Need to change a lighting profile or reboot a device? Drive out to the pole!	Change lighting profiles or reboot smart devices remotely, over the Internet
Higher Uptime and Reliability	No way to know if the system is working, no ability to do proactive maintenance.	24x7 automated monitoring. Automatic alerts and alarms sent via text and email. Proactive maintenance ensures high performance and reliability.
Lower Installation Cost	Complex wiring. Experienced personnel needed. Primitive testing tools, if any.	Plug and play pre-packaged cable harnesses. Smartphone app validates proper installation with 14 simultaneous meter measurements. No training needed.
Lower Ongoing Maintenance Costs	Because no data is available to diagnose a root cause, multiple trips to the pole occur, with associated truck and personnel cost. Expensive components are often swapped unnecessarily with this iterative approach.	Real-time data on all components plus data history. Troubleshooting occurs remotely, in advance, from an office. If a part is required, that part accompanies the first service call. More than 70% of issues are managed remotely.
Ongoing Service and Support with Every System	You're on your own.	Clear Blue operates and manages the systems with you. We provide management support and troubleshooting assistance, and our technical team manages all alarms on an ongoing basis through our bronze, gold and platinum service offering.