



LED LIGHTS

Powered by Solar Energy and Kinetic Tiles



COMMUNICATIONS

Wireless support in over 170 countries

LIGHTINUS

think ahead



REMOTE MANAGEMENT CONTROL



OFF-THE-GRID ENERGY

Volta Technology combines hardware and software solutions, communications and cloud technology with solar and kinetic energy, to design and power innovative, reliable, intelligent and high performance LIGHTINUS smart street lights and charging stations. Our LIGHTINUS off-the-grid system is based on wireless communication and remote management cloud technology that provides real-time 24/7 remote control, monitoring and management of our renewable energy products. Powered by the sun and your footsteps, LIGHTINUS product line can achieve groundbreaking levels of reliability and performance while diminishing installation, maintenance and electricity costs.

Our LIGHTINUS cloud software/Remote Management System (RMS) and wireless network turn our solar and kinetic system into a pro-actively maintained on-line platform, giving owners peace of mind that all functions of the system and the load are being monitored at all times. LIGHTINUS technology provides clients with the power to control and manage their off-the-grid systems anytime, anywhere using an Internet-connected PC, tablet or smart phone.

How LIGHTINUS Enhances Reliability



- **Optimizes Battery Life**

A common misconception is that the weak link in any solar system is the battery itself. In reality, the weak link is not having the ability to monitor and control how the battery is being discharged and recharged. LIGHTINUS off-the-grid smart controller eliminates all the variables which shorten battery life cycle through optimized charging profiles, life cycle management, short circuit, overload protection and low voltage disconnect capabilities.

- **Optimizes Performance with Lighting Profiles and Motion Detection**

With LIGHTINUS RMS it is simple to remotely set up lighting profiles that automatically adjust based on the time of day, the day of week and whether or not motion has been detected (with optional motion sensor option). This allows for a full customization of the lighting profiles at any time and based on different client needs and preferences, which maximizes performance to account for weather or seasonal changes in cloud cover and shortened sunlight hours. This is done easily with the benefit of LIGHTINUS real-time historical data which guides the client on exactly what light profile to set up for maximum energy utilization, and light performance.



- **Fastest Time to Problem Resolution with Real-Time Alerts**

With customizable alarms and real-time alert notifications, system owners can take immediate actions if there is a problem. Furthermore, troubleshooting can be done remotely via PC, tablet or smart phone, saving abundance of time and money on maintenance issues and on-site monitoring.

LIGHTINUS Off-the-Grid System at a Glance

Features	Functions	Benefits
Remote, real-time system monitoring of each system input and output	Lets the owner know system status at all times	Knowledge to determine what needs to be done to assure reliable performance year round
Remote, real-time system control	Dimming and control of light level, with or without motion control sensing	Perform control functions remotely, eliminating the need to be on-site
Remote commissioning, simple plug in and play installation	Set up all site parameters from the office	Does not require an electrician and saves time, with no guess work for the installer
Remote maintenance. Check solar panels. Perform short circuit test. Adjust battery level. Reboot system remotely	Instead of sending technician to site, these tests and changes can be done remotely to determine problem and/or fix problem	Saves time and money on maintenance or troubleshooting
Proactive, versus reactive. Maintenance can determine when batteries or solar panels need to be replaced	Can plan for swap without emergency shipping and service call	Saves time and money on maintenance or troubleshooting
Color coded, keyed and non-arcing connectors on controllers	Easy and fast swap of controller. So simple it does not require a trained professional	It is safe and easy to swap out quickly, saving time and money
Customizable messaging and alerts	Set by user to provide notification of faults to specific email or text	Better service for customer, faster response, less downtime
Dynamic current sensing and power input shedding	Measures current harvesting of solar devices to enable maximum battery charging by allowing up to 1000 watts of power charging	Maximize power harvesting
Weather history	Innovative tool to help correlate events with system anomalies, speeds troubleshooting	Easy problem identification and faster resolution. Minimizes service calls
Group diagnostics	Monitoring and control of multiple lights from one connection. Group comparison data of each pole to determine anomalies	Cost reduction. User friendly interface
Logic and communications powered by solar input or battery	Failsafe redundant power to controller in case either battery or solar panel fail	Increased reliability
Daily, weekly or monthly energy report	Enables a true measure of the battery operating conditions which provides a gauge to expected battery life. It also helps guide you when the load profile needs adjustment or if environmental conditions have changed and require more in-depth investigation	Saves time and money, extends battery life and enhances reliability
Remotely adjusted to data resolution	User can drill down to more high resolution data by historically looking at second by second detail. This data resolution feature enables easier and more reliable site fault resolution by removing the guess work out of problem determination	Saves time and money, and enhances reliability

-  Clean Energy
-  Cloud Based Data Management
-  Wireless Communication Networks
-  Highest ROI

 Our LED lights utilize highest lumen per watt

LIGHTINUS
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100% INTENSITY

50% INTENSITY

25% INTENSITY

12

8

4

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WEEKS

01 02 03 04 05 06 07 08 09 10 11 12

ALL TIME/ 2017 / JANUARY

20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20

365 DAYS OF LIGHT

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