

WattWorks Introduces Lighting System for Off-Grid Buildings Powered by Solar PV Panels with DC LED Lights and Battery Bank

Off-Grid nighttime lighting, both outside and inside, is practical and affordable for facilities without a grid connection by using a Solar Power station and efficient DC LED light fixtures.

Lighting was needed for a 7000 sf pole building used for hay storage that was built about ½ mile from existing power lines. Dunkin Run Farms' solution was a WattWorks DCLP Solar Power Station and LED Lighting System to provide outdoor security lighting and indoor work lighting. Since the building is a hay barn for the horse boarding operation, low voltage safety and reduced fire hazard was an important consideration.

The WattWorks DCLP system is composed of several major components including DC LED lights, Control Panel and DC Load Center, Battery Bank, and solar PV panels. Racking needed to mount the solar panels can be provided for a ground mount, pole mount, wall mount, or roof mount where a South facing exposure is available.

Plug-and Play installation is easy with the cables & connectors provided. The wall mounted control panel has sockets for the prefabricated cables that plug into the light fixtures, solar panels, and Battery Bank. An electrician is not needed to make the simple connections so it is easy to re-locate lights as needed. The entire system can be un-plugged and moved to another location if needs change

Other loads, such as a DC refrigerator or Freezer, a DC Well Pump, a DC/AC 120 volt Inverter, and other 24 volt DC devices can be connected. WattWorks will calculate the additional Solar PV panels and Batteries that may may be required for additional loads, depending upon location (latitude), hours of use, and seasons of the year.

An optional Performance Monitoring system records solar power generated, and battery state-of-charge voltages, and power used by lighting & other loads. A cellular modem can be used for remote access to recorded performance data via the Internet. Security cameras can be added for remote monitoring.

The simplicity, effectiveness, and reliability of the Solar Powered DC Lighting System is the result of WattWork's extensive experience in designing and manufacturing reliable products. This includes LED Lighting fixtures, large Utility scale Solar power engineering projects, and battery power storage applications.

About WattWorks, Inc.

WattWorks, based in Columbus, Ohio, is an electrical engineering, product design and manufacturing company with expertise inBAS & HVAC controls, energy efficiency applications, alternative energy projects and leading edge LED lighting technologies. WattWorks provides Utility scale solar power engineering , Innotech building automation controls , LED lighting products, and electronic prototyping and manufacturing services.

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WattWorks DC LED Lighting and Solar PV Power Station will provide lighting and power to a remote building that does not have access to utility power.

An off-grid DC system requires fewer solar panels and batteries than an off-grid AC system, which saves significantly on the cost. Another major benefit is that during 2015 the entire system cost is still eligible for the 30% Solar ITC credit deducted from Federal income taxes.

A Solar Power Station and Lighting System Provides Outdoor Security Lighting and Indoor Work Lighting for a 7000 SF Storage Building at Dunkin Run Farms. Easy Installation, Zero Maintenance Low Voltage LED Fixtures that are cool in operation, and no Electric Bills are the Most Important benefits to Dunkin Run.

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**OFF-GRID LIGHTING INSTALLED AT DUNKIN RUN FARMS HAY BARN
POWERED BY SOLAR ELECTRICITY**