

"Wireless" Traffic Control Solutions

APPLICATION: *DC-UPS for Wavetronix Sensors*LOCATION: Interstate 5 corridor from Olympia to Mt. Vernon, WA

Description

Solar Traffic Controls (STC) has furnished 65 DC-style Uninterruptible Power Supplies (UPS) systems for Wavetronix sensors along the Interstate 5 corridor from Olympia to Mt. Vernon, Washington.

The project consisted of two types of DC-UPS systems depending on what was available at each site, 480VAC or 240VAC. STC worked closely with Advanced Traffic Products (ATP) to create a viable solution to power Wavetronix sensors and radio equipment. Using a solar-powered system was initially considered yet given the poor sunlight levels in Washington, it was not cost efficient to go solar with this particular application.

The DC-UPS systems consist of a step-down transformer (only for the 480VAC systems); a 7 amp marine-grade battery charger; a low battery disconnect device; a valve-regulated, gelled-electrolyte battery; color coded wiring; and a power distribution terminal block. All this equipment was enclosed in a 2B aluminum, NEMA 3R equivalent enclosure designed to be band mounted to a pole or post.

The battery in the UPS system is charged nightly, when AC power is available, and the battery is used to provide power to the roadway sensor equipment continuously. The roadway sensor equipment included Wavetronix and radio equipment supplied by ATP. Information on Advanced Traffic Products and their products can be found at www.advancedtraffic.com. For more information about Traffic Sensor Power Systems see our Product Line at www.solar-traffic-controls.com/systems/productLine.php



Take these steps to insure the success of your solar-powered project:

- 1. Location identify the site of the application; for example, the nearest town, village or city and state.
- 2. Load specify the number and size of lamps, timers or other controls (anything which draws power).
- 3. Duty Cycle determine how many hours per day and which days per week the load will be drawing power.

Go to "Send us your requirements" at www.SolarTrafficControls.com/support/requirements.php for more details.

Solar Power: a free source of energy

STC's solar-powered systems are designed for quick and easy installation in the field. Our careful front-end engineering minimizes your installation costs and provides years of trouble-free operation. The standard solar power system includes the solar array, system enclosure with all the necessary electronics, color-coded wiring harnesses, sealed batteries and full documentation. DC LED lamp kits can also be purchased. These include the LED beacon, lamp housing and mounting hardware.

STC Systems are Cost Effective

Our solar flasher systems allow you to stretch your budget to obtain the traffic safety devices you need at affordable prices. Most systems are equivalent to the cost of obtaining an AC power drop. Battery life is typically three to six years; less expensive than grid electricity for the same period of time.

Solar Traffic Controls (STC) provides solar-powered traffic control systems for city, state and federal DOTs; police, firefighting and public works departments; facility maintenance and plant safety industries. Our primary products are solar-powered flashing beacon systems used for school zones and 24-hour applications. We also supply specialized flasher systems using environmental sensors and custom communications packages to control the flashing beacon systems. Our product spectrum also includes wireless power systems for ITS, EMS and HAR. STC's products and services are sold through a network of regional distributors who offer technical support for your project.