"Wireless" Traffic Control Solutions

APPLICATION: *Solar Covered Parking and Pedestrian Crosswalk*
LOCATION: Phoenix, Arizona, U.S.A.

Description

Knight Transportation, a Phoenix-based LTL carrier, has gone green in more ways than one. The company recently added several kilowatts of solar roofing to its covered parking area at its main facility in Phoenix. The grid intertie system produces electricity from the sun during the day and pushes it back onto the grid to offset the company's energy use.

Furthermore, Knight continued by adding 'green' traffic safety to a crosswalk in their main parking lot. Designed and furnished by Solar Traffic Controls (STC) the system uses four TS500 lamps from Traffic Safety Corporation (www.xwalk.com) which illuminate the crosswalk and warn motorists of pedestrians crossing.

To alert motorists, the system uses 8-inch amber flashers in conjunction with W11-2 signs and W16-7 arrow signs on either side of the crosswalk. The system is activated by a microwave detector as pedestrians approach the crosswalk. Adjustment of the sensors is done with an infrared handheld remote which allows users to tweak the sensitivity, range and other related parameters.

All the in-roadway lamp controls were designed by STC for Traffic Safety Corp. and include an LCD user interface for adjustment of timing parameters. The LCD also displays key system parameters including programmed run time, flash rate, activation source and count since last reset. Because all the indicators are LED and very efficient, the entire system is powered by a 30W solar array. The sealed battery provides up to 5.4 days of backup for the system running in max bright for the projected average daily duty cycle.

Solar Traffic Controls is the Traffic Safety Distributor for Arizona and New Mexico and has fielded many systems like these over the last five years. Many of the systems include radio-activated, advance flashing beacons; some include pedestrian detection mats. Most systems are deployed at municipal, county and state agencies, yet they are equally applicable at industrial facilities to provide a measure of safety for employees.

Most of the components used in the project, including the LED lamps for the flashers, were made in Arizona thus providing benefit to the local economy.

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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.

For more information: Solar Traffic Controls, LLC • 1930 East Third Street, Suite 21 • Tempe, AZ 85281-2929 USA
Tel: 480.449.0222 • Fax: 480.449.9367 • info@solar-traffic-controls.com • www.solar-traffic-controls.com