"Wireless" Traffic Control Solutions

APPLICATION: ***High-Water Warning System for the U.S.G.S.***
LOCATION: U.S. Army Base

Description

Solar Traffic Controls has fielded a two-stage high water warning system for the United States Geological Survey (USGS) to protect users at unbridged stream crossings on an U. S. Army base.

The system is designed to fit on standard stream flow gauge stations around the base. It can run for several hours per event, on up to 3 days per week during rainy season from a battery charged by a solar module.

The system includes two signal heads in each direction: one amber, one red. When the water rises to the first depth of concern the system activates in the flashing yellow mode after staying at the target depth for at least 10 seconds. If the water continues to rise, and reaches a critical level at which no vehicles should attempt to cross, the lamps change to flashing red. As the water recedes the lamps cycle back through the different alarm stages.

STC included smart controls in the package with time delays for both the rising and falling water levels. The controls allow time-delayed response to the level changes thereby decreasing false triggering of the indications. All parameters are adjustable on the control's LCD screen. The controls display the span of time the system ran on its last activation. A custom built sensor assembly including a stilling tube is included with the equipment as a prototype for the USGS to base the final design on.

The system made use of STC's amber and red DC LED lamps which include high efficiency LED elements as the base light source. All the equipment had to be designed to accommodate special mounting requirements. After a week's testing in the USGS shop, the agency installed the system and reported it working accurately during several rain storms.

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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.

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