

SOLAR TRAFFIC CONTROLS

“Wireless” Traffic Control Solutions

APPLICATION: *School/Pedestrian-Activated Solar Flashers*

LOCATION: *Mono County, California U.S.A.*

Description

Situated on the eastern slope of the Sierra Nevada, Mono County, California, has completed installation of solar flashers in two communities: Bridgeport and Lee Vining located along Highway 395, the main corridor from the Los Angeles basin to Reno, NV. The project was planned and executed with input from the Bishop, CA office of Caltrans.

The solar flashers are unique: they act as normal school flashers on a time clock and also include a radio activation function. In the morning and afternoon, the flashing lamps warn motorists of children crossing on their way to or from school.

The radio feature was included since the schools in each community are located across the highway from the town libraries that are used by students during the school day. Each school has two hand-held radio transmitters enabling teachers to activate the lights from the curb when taking their students to the library. Each mast arm assembly is equipped with a white 8-inch tram light fixture on the rear of the arm to give the user a visual indication that the lamps on the front have been activated.

Maintenance of the flasher falls within the jurisdiction of Caltrans. To minimize spare parts, the design required solar electric for the primary power source and AC power for the lamp/flasher circuit. The system uses a Solar Traffic Controls' Speed Awareness Display (SPAD) power system, and was modified to include a DC-to-AC inverter to produce AC power for the AC LED lamp modules. A NEMA flasher module was included for the flasher function. Timing and logic functions use a modified version of the STC-01 time clock. A license-free radio receiver unit with digital addressing was included to detect signals from the handheld transmitters. Installation was done by a crew from TDS Engineering and proved somewhat tricky due to the extreme winter weather in the Sierra Nevada range during the early part of the year.

According to Kelly Garcia, assistant director of public works, both communities have expressed a great deal of satisfaction with the systems.



Dual application school/pedestrian-activated solar flashers



Lee Vining, Caltrans installation

Provide Your Requirements to Solar Traffic Controls

Name _____
Company _____
Address _____
City _____ State _____ Zip _____
Telephone (____) _____ Fax (____) _____
Cellular (____) _____
e-mail _____

The success of your solar-powered project is based on three things:

- **Location: where your application site is - nearest town and state**
- **Load: number and size of lamps, timers and other controls - anything which draws power.**
- **Duty Cycle: hours per day and number of days per week the load is active (on).**

The above information enables us to provide you with a Sizing Report which forms the basis of your warranty.

Type of System

(please check your requirements)

Solar Flasher

Lamp Size: 12 inches 8 inches Other - Please indicate size _____
Lamps per pole: 1 2 Other - Please indicate quantity _____
Lamp Color: Amber Red
Type: School Zone 24-Hour Sensor Activated
Run time: _____ hours per day _____ # of days per week
Module Option: Vandal Resistant Activation: Timer Pager

DCUPS Flasher

Lamp Size: 12 inches 8 inches Other - Please indicate size _____
Lamps per pole: 1 2 Other - Please indicate quantity _____
Lamp Color: Amber Red
Type: School Zone 24-Hour Sensor Activated
Run time: _____ hours per day _____ # of days per week
Module Option: Vandal Resistant Activation: Timer Pager

Sensor Power System

Sensor load: _____ amps/watts
Communications Load: _____ amps/watts

Location

Application Site (nearest town): _____
State/Province: _____

Please fill in your requirements with **blue or black pen**. Please **fax** to Solar Traffic Controls at 480-449-9367.

Questions? Please call us at 480-449-0222. We will contact you with a quote for your system.



For more information

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