

# SOLAR TRAFFIC CONTROLS

## “Wireless” Traffic Control Solutions

**APPLICATION:** *In-pavement lighting with Solar PED-X system*

**LOCATION:** *Surprise, Arizona U.S.A.*

### **Description**

Solar Traffic Controls has integrated a Smartstud™ in-pavement lighting system into an existing Solar PED-X system for the City of Surprise. According to the manufacturer, Smartstud is a road marker guidance system: highly visible whatever the weather or road conditions.



*Photo taken at 2 p.m. MST in slightly overcast conditions 100-150 feet from crosswalk.*

The City of Surprise, a long-time user of Solar Traffic Controls equipment, decided to beef up traffic safety around its expanding sports complex. The complex is the spring training facility for the Texas Rangers and Kansas City Royals, which draws large crowds of spectators for training season games. The site is also a popular playing field for many collegiate games.

The city has added solar-powered traffic control devices as the complex has developed. The first stage of the safety program was the installation of dual 12-inch amber LED 24-hour flashers in advance of the two crosswalks serving the ball field, library and water park. The second stage: to install a Solar PED-X wireless crosswalk system at the crosswalk serving foot traffic for the ticket window and main entrance. The city determined the addition of the Smartstud in-pavement lighting system would further enhance motorist's awareness of the crosswalk.

Applying standard design rules for calculating solar power systems, Solar Traffic Controls was able to re-allocate solar equipment resources in the city to accommodate the higher power draw of the combined Smartstud and solar flasher package. A power interface between the nominal 12VDC battery bank and the 24VDC Smartstud system was designed and integrated into the Solar PED-X system. The Smartstud controls were then integrated into the power interface. The installation and re-allocation of the equipment took approximately 2 days, and was performed by city personnel.

**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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