



“Wireless” Traffic Control Solutions

APPLICATION: *Solar-Powered Drinking Fountain*

LOCATION: Scottsdale, Arizona, U.S.A.

Description

A cold drink of water in the park in the Phoenix area when it's 115 degrees outside? It used to sound too good to be true until Miles Bublik of the City of Scottsdale came to STC seeking help to produce a solar-powered water chiller station for a drinking fountain in one of the city's parks.

Due to parts and time constraints, a demonstration system was assembled from a 200W solar-powered system, an inverter and a standard one-gallon AC water chiller unit. City personnel worked with STC to determine how to get the system functional with off-the-shelf parts.

Part of making the project function involved overcoming the large power surge needed to start the compressor if the gas had not had enough time to settle from the previous run. Once these details and system timing were worked out on a prototype system at the city's facility, a fully working unit was placed in a park along an exercise path.



Development continues at STC using an on-demand system for cooling the water rather than storing cold water. STC engineering will be designing the necessary control logic to run the first units for the city.

While not in the true vein of traffic signaling products, STC chose to pursue this project with the city since it has been an STC customer for many years. STC is willing to deviate slightly from its main product focus if it sees a reasonable opportunity to assist its client base and improve the community.

Products such as these may prove beneficial throughout most of the U.S. as the need for cold water is generally limited to a few peak months. Plans to add an LED locator lamp for evening users are being worked into the new designs. Various companies in West Africa have expressed an interest in the product as well as various cities in the Phoenix metropolitan area.

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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