



The Quality Products People

SOLAR POWERED PERIMETER PROTECTION

The Solarbeam Perimeter Security System is a revolution in the Perimeter Security Industry, rendering traditional hard-wired systems obsolete. The system utilizes solar powered infrared transmissions between synchronized transmitters and receivers.

Benefits of the Solarbeam Solution



DURABILITY

Housed in a sealed polycarbonate tower, the Solarbeam system is protected from interruption caused by insects, dirt, sand or humidity and will not be compromised by rust. The SPT 2000 is also designed to be protected from a corrosive salt-water environment such as a port or marina. The system is designed to be your long-term perimeter security solution.

COST EFFECTIVE

The SPT 2000 is wireless and solar powered. It does not require the labor-intensive and expensive investment that is common with a hardwired installation. The towers arrive pre-wired and ready for photo beam plug in and alignment.

LIGHTNING RESISTANT

This system is guaranteed against lightning strikes.

ADAPTABILITY

The Solarbeam system is designed to be used as a turn-key perimeter security system or adaptable to any control system currently installed. In addition, the system can also power and accommodate CCTV systems for video verification monitoring applications.



THE SOLARBEAM TOWER HOUSING ENCLOSURE

The Solarbeam tower is constructed of polycarbonate composite fiber and stands approximately 7 feet, 7 inches high with the solar panel attached. The main body frame unit is 6 feet high. Lexan face shields protect all components inside the tower housing while allowing beam detection units to transmit infrared light beams and/or microwave detection to the corresponding receiver tower. Because they are opaque, even upon close inspection the location and direction of the active beam cannot be determined.

SOLAR ARRAY PANEL ASSEMBLY

To achieve the Solarbeam standard of high quality, we manufacture custom 20-watt and 40-watt photovoltaic modules; commonly used for wireless perimeter applications.

SOLAR SWIVEL BRACKET ASSEMBLY

A two (2) piece assembly (clamped together) provides vertical and horizontal movement to the Solar Panel Assembly.

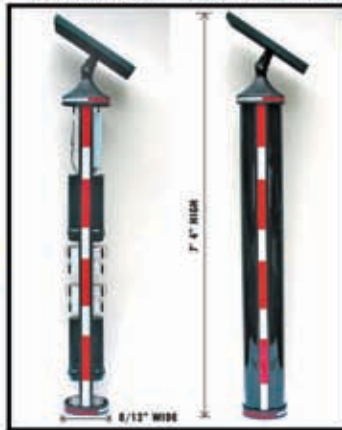
SOLAR BASE CAP

The solar cap unit and opening mechanism (located inside the cap housing) has a recessed opening that allows the swivel solar bracket to be inserted along with the power wire. Four alignment pegs allow vertical movement of the solar cap when it is opened.

STAINLESS STEEL TOP PLATE

Located inside the top Solar Base Cap unit, the stainless steel plate is bolted to the unit's two Frame Support Rods; which are affixed to both the Base Unit and the Frame Tower Unit.

OPEN/CLOSED VIEW OF THE SPT2000 TOWER
OPEN VIEW OF THE SPT2000 CLOSED VIEW OF THE SPT2000



FRAME SUPPORT RODS

Inside the Frame Tower Unit are two aluminum rods that measure six (6') feet high and 3/4" inches wide. Welded to each end, is a 3/8" threaded nut that bolts the Base Unit, Frame Unit and Stainless Steel Top Plate together - giving all three components added strength.

FRAME TOWER UNIT

The 6' main body frame unit slides over the Frame Support Rods and bolts to both the Stainless Steel Top Plate and the Base Unit. Open channels inside the frame tower allow for the wiring of the equipment.

FACE SHIELDS

Two high impact Lexan polycarbonate Face Shields (approximately 6' high and 5 1/2" wide) are located on each side of the Frame Tower Unit. Each "U" shaped Face Shield is first positioned into the Base unit, and then inserted into the channel of the Tower Frame Unit.

BASE UNIT

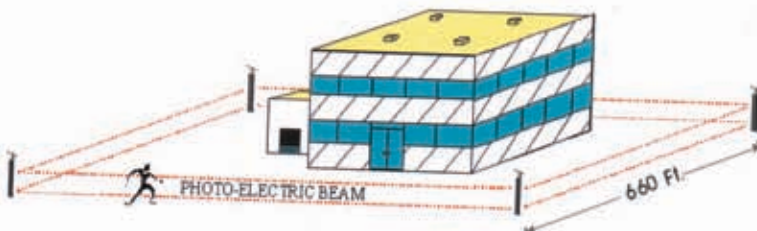
The Base Unit secures the Frame Tower Unit. This oval shaped molded polycarbonate unit is approximately 8" wide, 12" in length and 2" high. It is strengthened by the "Bone" (stainless steel plate) that bolts it to the Frame Support Rods, Frame Tower Unit and the Stainless Steel Top Plate.

Power, Communications and Detection Configuration

Operating Voltage	<ul style="list-style-type: none"> ● 18.5 VDC via 20 Watt/40 Watt Solar Panel charging 4 12V 12A Batteries
Load Factor	<ul style="list-style-type: none"> ● 75 MA Single Beam ● 150 MA Dual Beam ● 50 MA Stand-By, 1 AMP Burst Radio Communication ● 5 Watt One Half Duplex Radio
Autonomy	<ul style="list-style-type: none"> ● 15 Days at 75 MA Single Beam ● 7 Days at 150 MA Double Beam
Communication Range	<ul style="list-style-type: none"> ● Three to five miles from Solar Tower to Base Unit
RF Frequency	<ul style="list-style-type: none"> ● 900 MHz Short Range, 450 to 470 MHz Long Range
Signal Output	<ul style="list-style-type: none"> ● 8 digital, 4 analog channels including temperature, low battery and supervisory signals
Detection System	<ul style="list-style-type: none"> ● Active Infrared intelligent point to point single, dual or quad beam emitter units
Protection Distance	<ul style="list-style-type: none"> ● Up to 650' between towers, determined by beam installed

Sample Applications for the Solarbeam Perimeter Protection System

- Airports
- Sea Ports
- Utility Sub-stations
- Correctional Facilities
- Military Bases
- Water Treatment Plants
- Chemical Treatment Plants
- Oil Refineries
- Nuclear Power Plants
- Golf Courses
- Sports Facilities
- Residential Compounds



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