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GSA Contract No. GS07F-0108J



Commercial Grade Solar Lighting Systems

Applications

- Streets/Roadway Lighting
- Parking Lot Lighting
- Subdivision Lighting
- Military Bases
- College Campuses
- Fence Line Lighting

Standard Features

- Maintenance Free Sealed Batteries
- Dusk Until Dawn Operation or timed ON/OFF operation
- Various RAL Colors Available
- Up To 25 Years Solar Panel Warranty
- 5 Year Controller Warranty
- 2 Year Limited Battery Warranty

Lamp Technology

- Available In LED, Fluorescent, Low Pressure Sodium Lamps or HID Lamps

Battery Technology

- Sealed Battery(s)
- Maintenance Free
- Long Life of up to 7+ Years

Benefits

- No Trenching For Power Cables
- No Utility Bills
- Not Affected By Power Outages
- No Special Skills Required

N S T
NATIONAL SOLAR TECHNOLOGIES

“World Leader in Solar Power Sources and Solar Lighting Systems”



➤ Parking Lot Lighting Systems



➤ Street Lighting Systems



➤ Universal Pole Mount Lighting System For A Wide Range of Applications Including Street Lighting, Parking Lot Lighting and General Area Lighting



➤ Flood Lighting Systems

Notable Customers

- US Military/Dept. of Defense
- Federal Highway Administration
- Defense Intelligence Agency
- National Park Service
- US Dept. of State
- US Army Corps of Engineers
- US Army Reserve
- Federal Aviation Administration

Solar Panel(s)

- Tempered glass / tedlar construction for light weight, durable capsule for solar cells
- Multicrystalline or Monocrystalline solar cells
- Rigid aluminum frame
- Completely sealed from moisture
- Twist and hail stone tested
- 25 Year warranty on power output/5 Year warranty on workmanship

Battery(s)

- Sealed lead acid battery(s)
- Maintenance free, non-spillable
- 12 Volt DC
- Amp hours vary depending on system
- Standard 5 Days battery autonomy
- Typical battery operating life 5-7 years

System Controller

- Solid state solar controller with load (lighting) control- Dusk to Dawn
- Pulse width modulation (PWM) charging
- Low voltage disconnect
- High voltage reconnect
- Regulates battery charging from the solar panel
- 12 Volt DC regulation (some systems regulate 24VDC)
- Typical operating life 15 years

Battery Enclosure

- Steel, powder coated, corrosion resistant enclosure
- Also available in aluminum or stainless steel
- Available in any RAL color choice or standard
- Vented for airflow and heat dissipation
- Pole mount bracket.
- Houses battery(s) and controls
- Life expectancy 25+ years

Circuit Protection

- Fuse block which fuses the solar power input, battery power and light fixture
- System must be fused to protect components from short circuit or surge

Light Fixture Mast Arm Options

- Typically made of aluminum or steel
- Bare aluminum or power coated aluminum mast arms available
- Galvanized steel or powder coated steel mast arms available
- Mast arm lengths can vary based on the area of coverage the light will illuminate and the pole type used
- National Solar Technologies will assist with proper mast arm lengths for your application

Wires and Hardware

- Connecting wire harnesses for the battery, solar and light fixture
- Mounting hardware

Light Fixture Options

- National Solar Technologies will work with our customers to meet or exceed their requirements for light fixture style and light source.
- Below are just a few examples of light fixture styles available from National Solar Technologies



Area/Parking Lot
Full Cutoff



Area/Parking Lot
Full Cutoff



Streetlight
Med. Cutoff



Streetlight
Full Cutoff



Streetlight
Drop Lens



Streetlight
Drop Lens



Area Light
Globe Lens



Floodlight
Wide/Narrow Beam



Floodlight
Wide/Narrow Beam



Ornamental Style

Lamp Options

- **Cool white or warm white outdoor LEDs**
- **Cool white or warm white outdoor fluorescent**
- **Low pressure sodium**
- **High intensity discharge (HID) lamps**