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GSA Contract No. GS07F-0108J

Applications

- Remote Power
- Communications Power
- Backup Power
- Oil/Gas Telemetry Power
- Camera/Security Systems Power
- Repeater Site Power
- Anywhere You Need Power

Standard Features

- Engineered To Outlast The Competition
- High Efficiency Solar Panels
- System Circuit Protections
- Up to 25 Year Solar Panel Warranty
- 5 Year Controller Warranty
- 2 Year Battery Warranty

Battery Technology

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

Benefits

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

N S T
NATIONAL SOLAR TECHNOLOGIES

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

Commercial Grade Solar Power Systems



➤ POLE MOUNTED
GROUND MOUNTED



➤ ROOF MOUNTED



➤ PORTABLE/MOBILE
POWER



➤ TRAILER MOUNTED

Notable Customers

- US Military/Dept. of Defense
- National Park Service
- US Dept. of State
- US Counter-Terrorism Training Program
- US Army Reserve

Standard Solar Panel Specifications

- Tempered glass / tedlar construction for light weight, durable capsule for solar cells
- Multicrystalline or Monocrystalline solar cells/dark blue solar cell color
- Rigid aluminum frame
- Completely sealed from moisture
- Up to 25 Year warranty on power output/5 Year warranty on workmanship

Standard Battery Specifications

- Sealed lead acid battery(s)
- Maintenance free, non-spillable
- Superior battery technology for extreme climates and high vibration areas
- Amp hours vary depending on system
- Built in battery reserve capacity for cloudy / low sun days
- Typical battery operating life of up to 7+ years

Standard Controller Specifications

- Solid state solar controller with load regulation
- Pulse width modulation (PWM) charging
- Low voltage disconnect
- High voltage reconnect
- Regulates battery charging from the solar panel
- 12/24/48 Volt DC regulation
- Typical operating life 15 years

Standard Battery Enclosure Specifications

- Steel, powder coated, corrosion resistant enclosure
- Available in aluminum and stainless steel
- Available in most RAL color
- 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 power output to load(s)
- System must be fused to protect components from short circuit or surge

Standard Output Voltages Available

- Systems are available with single voltage outputs or multiple DC and or AC voltage outputs
- 5VDC to 48VDC Outputs
- 24VAC to 240VAC Outputs
- Special voltage requirements also available
- Pure sine wave AC voltages (unless otherwise specified)
- Regulated DC voltage outputs available

Standard Solar Panel Mounting Structures

- 6061 aluminum corrosion resistant bracket
- Galvanized steel available
- Powder coated steel/aluminum available

Wires and Hardware

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

System Options

- Wind turbine options
- Generator back-up options
- System ground mount, roof mount, pole mount, trailer mount or custom mounting configurations

Frequently Asked Questions

• How does an NST solar power system work?

An NST solar power system uses the solar module(s) to charge battery(s) using the free solar energy. The sunlight that is absorbed by the solar panel is converted into Direct Current (DC) electricity. Generally the solar DC charging voltage is 12, 24 or 48 Volts DC. This voltage charges the system batteries. From the system batteries you can use the battery voltage to power devices or use DC to DC converters to get a different DC voltage or use a DC to AC power inverter to get AC voltages to power your electrical devices .

• How do I know what system is best for my application?

National Solar Technologies will factor your power requirements, geographic location, load operating time per day and other engineering equations to formulate the perfect NST power system for your application.

• Can I add onto my NST power system at a later time if my power requirements increase?

Yes, most NST power systems are easily adapted to adding on additional solar panels, batteries and regulating controls.

• Where can I purchase my NST solar lights and NST renewable power systems?

Call 1-800-310-7413 and an NST representative will assist you.