



Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

SOLAR POWER

Common applications for solar-powered remote data acquisition and equipment monitoring are:

- Oil and gas Pipelines, wells, flow measurement, control valves
- **Telecommunications** Signal power and Data Transmission
- Water collection, treatment and distribution Pump station, water flow, quality, turbidity
- ✤ Wastewater Lift station and pumping
- Public works and infrastructure Roads, bridges, dams, canals, tunnels, cameras, Wi-Fi Tower, Bus Shelters, Billboards etc
- ✤ Landfill Flare, methane, effluent, leach ate
- * **Remote power** Mobile and standby generator, power quality, failure alarm
- Public health Emissions, toxins, contaminants (air, water, land)
- Science and research Environmental/climate change studies. Measure air, water and land.
- **Weather forecasting** Meteorological station, water flow, ice movement

HOW SOLAR WORKS:

Features and Benefits

Unsurpassed Industry Experience

- Our Manufacturer has over 28 years of experience
- 4 They are the pioneer of the solar electric lighting industry in Florida and the Globe.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Solar Electric Power Assemblies



- Riveted aluminum frames and vented panel pans w/ welded rear channel mounting brackets
 - Allows for durability while providing flexibility during harsh conditions 0
 - Protects back of solar panels and electrical connections from the elements 0
- Liquid tight connectors and flex tube
 - Creates a water tight connection from the panel array to the battery box 0
- Vented aluminum battery storage assembly
 - Added protection for batteries and control electronics 0
- Full wire harness w/ battery cables and quick connect terminals
 - All wiring pre-designed with easy to follow manual
 - All components easily plug together 0
 - Decreased installation time 0
- Unique welded one piece power bracket





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

- Allows for tilting the solar panel assembly at 5°, 15°, or 45° for maximum sun exposure in all geographical locations
- Provides a secure mounting point for severe weather.

Solar Power Assemblies

- 4 Riveted Aluminum Frames and Vented Panel Pans w/ Welded Rear Channel Mounting Brackets
 - Allows for durability, while providing flexibility in harsh conditions
 - o Protects back of solar panels and electrical connections from the elements
- Liquid Tight Connectors and Flex-Tube
 - o Creates a water tight connection from the panel array to the battery box



- High-Gauge Vented Aluminum Battery Storage Assembly
 - o Added protection for batteries and all control electronics
 - o Full Wire Harness w/ Battery Cables and Quick Connect Terminals
 - All wiring pre-designed with easy to follow manual
 - All components easily plug together
 - Decreased installation time
 - Unique Welded One Piece Power Bracket
 - Allows for tilting the solar panel assembly at 5, 15, or 45 degrees for maximum sun exposure in all geographical locations
 - Provides a secure mounting point for severe weather conditions
 - Meets AASHTO wind force requirements





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com



- Solar Modules
- Single Crystal Solar Panels
- Designed for highest durability
- Allows for smallest size and weight for desired output
- Output power tolerance of +/- 5%



- •
- Deka Deep-Cycle Solar Photovoltaic Batteries
 - Maintenance Free
 - High Durability
 - Sealed Gel-Cell
 - Non-Spill able, Non Hazardous
 - Air-shippable
 - No special containers needed for transport





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com



Solar Lighting Fixtures

- Diverse line of many different fixtures for use in almost any application
 - Relationships with industry leading manufacturers such as Hubbell Outdoor, Beacon Products, Architectural Area Lighting, Spaulding Lighting, and Kim Lighting
 - Available for signs, parking lots, streets, areas, security lightings, and more



- Reflectors designed to maximize light output
 - Highly secular aluminum polished for peak performance
 - Lamps positioned in reflector center for optimum light distribution
 - Manufacturer supplied photometry
 - Provide technical data as well as visualizations of light levels
 - Able to upload CAD's in order to optimize lighting plans
 - Light Emitting Diode (LED)
 - High efficiency and delivers over 100 lumens per watt.
 - Longer life span with over 50,000 of life expectancy
 - Environmentally friendly mercury free construction
 - LED and Solar are perfect as they operate from the same low voltage DC power source





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Target efficient light source

High Performance Lamps

- Light Emitting Diode (LED)
- o Lower Wattage requirements and Lower power consumption
- Dimming options available
- Instant On / No Flicker
- Non-Toxic as LEDs contain no lead or mercury and is recyclable
- o Full cutoff features allowing no light pollution and complies with Dark Sky compliances
- Over 50,000 hour lifespan
- No ballast changes needed
- Better color rendering for security cameras



- Compact Fluorescent Lamps (CFL)
 - \circ $\;$ Best combination of low cost, long life, and lumens per Watt $\;$
 - Over 20,000 hour lifespan
 - Field proven lifespan of 5 to 7 years
 - Available in color temperatures from 2,700°K to 6,500°K
 - Available in 5 to 65 Watts
 - Readily available
- LPS, HPS, and MH Also Available

Common Terms

Current—a flow of electrical energy

Diode—a device through which electrical current can move freely only in one direction





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Electron—subatomic particle having a negative charge

Inverter—a device capable of converting electrical energy from DC to AC or vice versa.

Photovoltaic—produces electrical voltage when exposed to light

Semiconductor—a crystalline substance having electrical conductivity somewhere between a conductor and an insulator

Silicon—a nonmetallic element used often as a semiconductor

Basics

Solar power is the technology of harnessing usable energy from the sun. Solar panels are made up of photovoltaic (PV) cells. A module is a group of cells electrically connected and packaged in one frame. PV cells are composed of special materials called semiconductors, most commonly silicon. When energy in the form of heat from the sun is added to the silicon, it causes electrons to break free from their orbit around the nuclei of the silicon atoms. These atoms are left with a positive charge, while the electrons carry a negative charge. The electrons, or free carriers, carry an electrical current. The free carriers roam around until they find atoms lacking an electron and then fall into the orbit of these atoms. The electrons to flow in a certain direction. This flow is an electrical current. When using metal on the top and bottom of the cells, we can direct that current to be usable outside of the panel.

Energy Storage

A solar power system requires an energy storage unit called a battery in order to use the energy obtained throughout the day. The batteries need to be deep-cycle, which can discharge a great portion of their stored energy while maintaining a long lifespan. The batteries are 100% recyclable and qualify as non-hazardous goods for air, land, and sea shipment.

The use of batteries requires a charge controller. The charge controller ensures that the batteries are not overcharged during the day or drained too much at night. Once the battery has been drained down to a certain level, the controller will not allow more current to be drained in order to protect the battery from damage.

Current

The electricity produced by the solar power system is direct current or DC. These systems can run DC electric devices directly. If the device requires AC, our manufacturer product line offers an inverter upgrade to run these devices.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Lighting Terminology

Watt – A quantifiable measure of power consumed Lumen – A quantifiable measurement of total power of light emitted Foot Candle (FC) – A unit of illumination of one square meter which is one meter away from a uniform light source. 1 FC = 1 Lumen / Square Foot

Kelvin K^o (colors of light) – measured in degrees, is a quantifiable measure of color temperature Min – Minimum amount of light

Max – Maximum measurement of light

Uniform – Lighting that has even illumination across an area with a low min to max lighting ratio

Spacing – measurement of space usually in feet from one light pole to the next

Color Rendition Index (CRI) – a way to assess how light sources make objects appear. Any CRI greater than 80 has good color properties

Average Rated Life – referred to in lamp life is actually the median

Mounting Height – the measurement from the ground to the light source

Distribution (I-V) – Determines how far light is emitted to each side of a fixture and to the front (street side) and back (house side)

- **Type I** long linear pattern, long distance to the sides with a short pattern out to the front and back
- Type II Progressively growing distance to the front and back and shortening of the linear sides
- Type III most commonly available in most fixture types has a perfect oval shape
- Type IV has a more circular pattern with linear sides that extend farther on the sides
- **Type V** Round circular pattern same distance from front to back and side to side

Optics for Streetlights – control of light distribution

- Non-cutoff light is emitted in all directions
- Semi-cutoff most of the light is emitted below 90 degrees
- **Cutoff** controlled lighting where less than 2.5% of the light is allowed to escape the fixture above 90 degrees
- **Full-cutoff** used in dark sky friendly locations, optics put the light on the ground below the fixture not allowing light to emit above 90 degrees





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Solar Power Systems

Solar power is becoming the go to power source for most projects. Our manufacturer offers a wide variety of solar power stations for stand alone power applications that offer an environmentally friendly alternative to standard electrical power. Our systems range from 10 Watts to 425 Watts, and can also be integrated together for an even higher power output for larger applications. The solar electric power assemblies provide power on a 24/7 basis at any voltage or current required and include our patented LCU1 load computer unit with many different control options.

To ensure long life and reliability, our manufacturer's design team will be glad to assist you in selecting the system size. The Solar Electric Power Assemblies are used for applications such as: Wi-Fi; Communications; RTU/SCADA; Oil, Gas, and Water Flow Meters; DATA Acquisition; Seismic Monitoring; Catholic Protection; Camera Security; Remote Security; Railroad Applications; Stand-By Power; and Industrial, Commercial, Military, and Government Operational Applications.

Solar Lighting Fixtures

All of our below lighting fixtures have been designed to run from our solar power systems. Choose the fixture that best suit your application and let one of our solar lighting specialists know by using the form to the left. We are working hard to get specifications online to provide additional information on the below fixtures.

Overhead Solar Lighting

Overhead solar lights are an efficient means to provide lighting and continuous power with no utility lines. They provide cost savings by eliminating the need to trench wires and the recurring cost of power bills after installation.

Overhead solar lights have been installed on highways, freeways, neighborhood streets, parking lots, rural roads, parks, boat ramps, pathways, perimeters, jogging paths, and many other applications. These solar lights provide security, sustainability, and an overall green image.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Every overhead solar light comes complete with a solar power system ranging from 10 Watts to 425 Watts, solar battery assembly to power the light for a minimum four days autonomy, fixture mounting bracket, and control electronics.

Various fixture styles are available for all applications. Please consult a manufacturing representative for assistance with your project.

Our solar lighting specialists optimize each project design by cross referencing the location with provided Auto-CAD files, Google Earth, and project specifications to make sure every system will provide flawless operation and performance.

Features and Benefits Include:

- Comprehensive System Warranty
- LED, CFL, LPS, HPS, and MH Lamp Options
- No Trenching
- Grid Free Operation / No Electric Costs
- Easy Installation
- Environmentally Friendly
- Safe Low Voltage DC Power
- AASHTO Wind Load Ratings

Overhead Lighting

Overhead lighting systems are perfect for highways, freeways, neighborhood streets, parking lots, rural roads, parks, boat ramps, pathways, perimeters, jogging paths, security lights and many other applications.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com







Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com







Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com



Solar Power Assemblies

Small Solar Power System



Figure 1: SYSTEMS SEPA10, SEPA20, SEPA30, SEPA50

Our small solar power systems provide power for smaller applications or where dusk to dawn



lighting is not required. They are comprised of a single solar panel, solar battery assembly, control electronics, and system mounting bracket.

SEPA10 Solar Power System

System Features:

- The SEPA10 solar electric power assembly features a 10 Watt solar panel that is mechanically riveted to the battery box lid for mounting.
- The 36 Amp hours battery is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.
- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 10 Watt single array consists of one 10 Watt module which is integrally mounted upon and power riveted to a vented aluminum battery box cover and terminated in pre-wired 3 prong Molex type connector. Solar array produces .63 amps charge current and measures 17.4"L x 11.4"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.





Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Battery Assembly

A vented aluminum box containing a 36 amp hour sealed GEL battery which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.

Power Bracket

Aluminum power bracket consists of a substantial aluminum channel for mounting to any pole or wall and providing a low profile, only 20" on the pole, to provide maximum strength for wind loading in excess of 150 MPH. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.



SEPA20 Solar Power System





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

System Features:

- The SEPA20 solar electric power assembly features a 20 Watt solar panel that is mechanically riveted to the battery box lid for mounting.
- The 36 Amp hours battery is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.
- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 20 Watt single array consists of one 20 Watt module which is integrally mounted upon and power riveted to a vented aluminum battery box cover and terminated in pre-wired 3 prong Molex type connector. Solar array produces 1.2 amps charge current and measures 21.3"L x 17.7"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.

Battery Assembly

A vented aluminum box containing a 36 amp hour sealed GEL battery which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.



Power Bracket

Aluminum power bracket consists of a substantial aluminum channel for mounting to any pole or wall and providing a low profile, only 20" on the pole, to provide maximum strength for wind loading in excess of 150 MPH. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.



SEPA30 Solar Power System

System Features:

- The SEPA30 solar electric power assembly features a 30 Watt solar panel that is mechanically riveted to the battery box lid for mounting.
- The 36 Amp hours battery is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to • dawn dusk activated, motion detector, etc.
- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 30 Watt single array consists of one 30 Watt module which is integrally mounted upon and power riveted to a vented aluminum battery box cover and terminated in pre-wired 3 prong Molex type connector. Solar array produces 1.72 amps charge current and measures 21.45"L x 20.24"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.

Battery Assembly

A vented aluminum box containing a 36 amp hour sealed GEL battery which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.

Power Bracket

Aluminum power bracket consists of a substantial aluminum channel for mounting to any pole or wall and providing a low profile, only 20" on the pole, to provide maximum strength for wind loading in excess of 150 MPH. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

SEPA50 Solar Power System



System Features:

- The SEPA50 solar electric power assembly features a 50 Watt solar panel that is mechanically riveted to the battery box lid for mounting.
- The 82 Amp hours battery is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.
- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 50 Watt single array consists of one 50 Watt module which is integrally mounted upon and power riveted to a vented aluminum battery box cover and terminated in pre-wired 3 prong Molex type connector. Solar array produces 3.15 amps charge current and measures 33.8"L x 26"W x 1.4"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.





torporate relint. 1.0. box 450052, 500180, 11 55545

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Battery Assembly

A vented aluminum box containing an 82 amp hour sealed GEL battery which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.

Power Bracket

Aluminum power bracket consists of a substantial aluminum channel for mounting to any pole or wall and providing a low profile, only 20" on the pole, to provide maximum strength for wind loading in excess of 150 MPH. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Solar Power Assemblies

Medium Solar Power System



Figure 2 : SYSTEMS SEPA85, SEPA110, SEPA125

The medium solar power systems provide power for a wide range of applications. They are comprised of a single solar panel, solar battery assembly, control electronics, and single system mounting bracket.

SEPA85 Solar Power System



System Features:

• The SEPA85 solar electric power assembly features a 85 Watt solar panel, full protective panel pan, and single support power bracket.





Corporate Remit: P.O. Box 450852, Sunrise, FI 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

- The 82 Amp hours battery is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.
- The systems are built for easy installation with quick connects terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 85 Watt single array consists of one 85 Watt module which is integrally mounted upon and power riveted to a vented aluminum panel pan featuring full panel backside damage prevention, welded substantial aluminum mounting rails, power riveted aluminum end rails and terminated in pre-wired 3 prong Molex type connector. Solar array produces 5 amps charge current and measures 47.3"L x 20.8"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.

Battery Assembly

A vented aluminum box containing an 82 amp hour sealed GEL battery which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.

Power Bracket

A complete aluminum, unique single support 5/15/45 degree power bracket consists of a substantial aluminum channel affording mounting to any pole or wall. Welding of strong schedule 40-.25" aluminum pipe in a single support arrangement to provide maximum strength



for wind loading. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.

SEPA110 Solar Power System



System Features:

- The SEPA110 solar electric power assembly features a 110 Watt solar panel, full protective panel pan, and single support power bracket.
- The 112 Amp hours battery is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.
- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free and system warranty.



Panel Assembly

A 110 Watt single array consists of one 110 Watt module which is integrally mounted upon and power riveted to a vented aluminum panel pan featuring full panel backside damage prevention, welded substantial aluminum mounting rails, power riveted aluminum end rails and terminated in pre-wired 3 prong Molex type connector. Solar array produces 6.6 amps charge current and measures 58.1"L x 26"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.

Battery Assembly

A vented aluminum box containing a 112 amp hour sealed GEL battery which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.

Power Bracket

An all aluminum, unique single support 5/15/45 degree power bracket consists of a substantial aluminum channel affording mounting to any pole or wall. Circumference welding of strong schedule 40-.25" aluminum pipe in a single support arrangement that provide maximum strength for wind loading. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

SEPA125 Solar Power System



System Features:

- The SEPA125 solar electric power assembly features a 125 Watt solar panel, full protective panel pan, and single support power bracket.
- The 112 Amp hours battery is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.
- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 125 Watt single array consists of one 125 Watt module which is integrally mounted upon and power riveted to a vented aluminum panel pan featuring full panel backside damage prevention, welded substantial aluminum mounting rails, power riveted aluminum end rails and terminated in pre-wired 3 prong Molex type connector. Solar array produces 7.3 amps charge current and measures 59"L x 26"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Battery Assembly

A vented aluminum box containing a 112 amp hour sealed GEL battery which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.

Power Bracket

An all aluminum, unique single support 5/15/45 degree power bracket consists of a substantial aluminum channel affording mounting to any pole or wall. Circumference welding of strong schedule 40-.25" aluminum pipe in a single support arrangement to provide maximum strength for wind loading. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Large Solar Power System



Figure 3: SEPA170, SEPA225, SEPA300, SEPA340

The large solar power systems provide power for applications that require higher intensity or multiple solar lights. They are comprised of two or three solar panels, double solar battery assembly, control electronics, and double system mounting bracket.

SEPA170 Solar Power System



System Features:

- The SEPA170 solar electric power assembly features two 85 Watt solar panels integrated together, full protective panel pan, and single support power bracket.
- The 164 Amp hours battery assembly, consisting of two 82 amp hour batteries, is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 170 Watt single array consists of two 85 Watt modules which are integrally mounted upon and power riveted to a vented aluminum panel pan featuring full panel backside damage prevention, welded substantial aluminum mounting rails, power riveted aluminum end rails and terminated in pre-wired 3 prong Molex type connector. Solar array produces 9.8 amps charge current and measures 48"L x 42"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.

Battery Assembly

A vented aluminum box containing two 82 amp hour sealed GEL batteries, totaling 164 amp hours, which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.

Power Bracket

An all aluminum, unique double support 5/15/45 degree power bracket consists of a substantial aluminum channel affording mounting to any pole or wall. Circumference welding of strong schedule 40-.25" aluminum pipe in a double support arrangement to provide maximum strength for wind loading. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.



Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.

SEPA225 Solar Power System



System Features:

- The SEPA225 solar electric power assembly features three 75 Watt solar panels integrated together, full protective panel pan, and single support power bracket.
- The 224 Amp hours battery assembly, consisting of two 112 amp hour batteries, is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.
- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 225 Watt single array consists of three 75 Watt modules which are integrally mounted upon and power riveted to a vented aluminum panel pan featuring full panel backside damage prevention, welded substantial aluminum mounting rails, power riveted aluminum end rails and terminated in pre-wired 3 prong Molex type connector. Solar array produces 13.02 amps charge



current and measures 48"L x 62"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.

Battery Assembly

A vented aluminum box containing two 112 amp hour sealed GEL batteries, totaling 224 amp hours, which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.

Power Bracket

An all aluminum, unique double support 5/15/45 degree power bracket consists of a substantial aluminum channel affording mounting to any pole or wall. Circumference welding of strong schedule 40-.25" aluminum pipe in a double support arrangement to provide maximum strength for wind loading. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

SEPA255 Solar Power System



System Features:

- The SEPA255 solar electric power assembly features three 85 Watt solar panels integrated together, full protective panel pan, and single support power bracket.
- The 224 Amp hours battery assembly, consisting of two 112 amp hour batteries, is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.
- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 255 Watt single array consists of three 85 Watt modules which are integrally mounted upon and power riveted to a vented aluminum panel pan featuring full panel backside damage prevention, welded substantial aluminum mounting rails, power riveted aluminum end rails and terminated in pre-wired 3 prong Molex type connector. Solar array produces 15.0 amps charge current and measures 48"L x 62"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Battery Assembly

A vented aluminum box containing two 112 amp hour sealed GEL batteries, totaling 224 amp hours, which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.

Power Bracket

An all aluminum, unique double support 5/15/45 degree power bracket consists of a substantial aluminum channel affording mounting to any pole or wall. Circumference welding of strong schedule 40-.25" aluminum pipe in a double support arrangement to provide maximum strength for wind loading. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. The systems surpass all codes, compliances, and quality controls.



SEPA300 Solar Power System





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

System Features:

- The SEPA300 solar electric power assembly features four 75 Watt solar panels integrated together, full protective panel pan, and single support power bracket.
- The 224 Amp hours battery assembly, consisting of two 112 amp hour batteries, is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.
- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 300 Watt single array consists of four 75 Watt modules which are integrally mounted upon and power riveted to a vented aluminum panel pan featuring full panel backside damage prevention, welded substantial aluminum mounting rails, power riveted aluminum end rails and terminated in pre-wired 3 prong Molex type connector. Solar array produces 17.6 amps charge current and measures 48"L x 83.2"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.

Battery Assembly

A vented aluminum box containing two 112 amp hour sealed GEL batteries, totaling 224 amp hours, which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.



Power Bracket

An all aluminum, unique double support 5/15/45 degree power bracket consists of a substantial aluminum channel affording mounting to any pole or wall. Circumference welding of strong schedule 40-.25" aluminum pipe in a double support arrangement to provide maximum strength for wind loading. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.



SEPA340 Solar Power System

System Features:

- The SEPA340 solar electric power assembly features four 85 Watt solar panels integrated together, full protective panel pan, and single support power bracket.
- The 224 Amp hours battery assembly, consisting of two 112 amp hour batteries, is contained within a vented aluminum battery box and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.
- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 340 Watt single array consists of four 85 Watt modules which are integrally mounted upon and power riveted to a vented aluminum panel pan featuring full panel backside damage prevention, welded substantial aluminum mounting rails, power riveted aluminum end rails and terminated in pre-wired 3 prong Molex type connector. Solar array produces 19.4 amps charge current and measures 48"L x 83"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.

Battery Assembly

A vented aluminum box containing two 112 amp hour sealed GEL batteries, totaling 224 amp hours, which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.

Power Bracket

An all aluminum, unique double support 5/15/45 degree power bracket consists of a substantial aluminum channel affording mounting to any pole or wall. Circumference welding of strong schedule 40-.25" aluminum pipe in a double support arrangement to provide maximum strength for wind loading. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.





Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

Extra Large Solar Power System



Figure 4 :SEPA425

The extra large solar power systems provide power for applications that require higher intensity, multiple solar lights, or projects that allow for large power needs. They are comprised of three to four solar panels, a quad stack solar battery assembly, control electronics, and double system mounting bracket.

SEPA425 Solar Power System







Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266

Web: www.buildingtechsupply.com

System Features:

- The SEPA425 solar electric power assembly features five 85 Watt solar panels integrated together, full protective panel pan, and single support power bracket.
- The 448 Amp hours battery assembly, consisting of four 112 amp hour batteries, is contained within two vented aluminum battery boxes and includes a wiring harness and control electronics.
- There are 14 different controllers to choose for different types of applications such as dusk to dawn dusk activated, motion detector, etc.
- The systems are built for easy installations with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the device.
- Meets AASHTO 150 mph wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free and system warranty.

Panel Assembly

A 425 Watt single array consists of five 85 Watt modules which are integrally mounted upon and power riveted to a vented aluminum panel pan featuring full panel backside damage prevention, welded substantial aluminum mounting rails, power riveted aluminum end rails and terminated in pre-wired 3 prong Molex type connector. Solar array produces 24.25 amps charge current and measures 104"L x 48"W x 2.1"D. The array has a 10 year warranty for 10% power loss and 25 year warranty for 20% power loss. Solar array has a life cycle testing and actual field proven life of over 30 years.

Battery Assembly

A double vented aluminum box containing four 112 amp hour sealed GEL batteries, totaling 448 amp hours, which is integrally mounted and pre-wired to include a standard wire harness with simple plug in connections for the LCU1 Lighting Computer/Control Unit and the solar panel assembly. The low profile design contains a preformed and welded back mounting plate for easy slide on attachment to the power bracket. Battery assembly is unique "Through the Pole" rear wire routing output for no exposed wiring to provide a neat clean appearance for the finished installation. Battery assembly is complete with all stainless steel mounting hardware. All metal crafting has been performed by high speed robotic presses using computer programmed instructions.



Web: www.buildingtechsupply.com

Power Bracket

An all aluminum, unique double support 5/15/45 degree power bracket consists of a substantial aluminum channel affording mounting to any pole or wall. Circumference welding of strong schedule 40-.25" aluminum pipe in a double support arrangement to provide maximum strength for wind loading. The power bracket contains predrilled and tapped battery slide mount bolts of stainless steel and two 11/16" mounting holes for utility standard 5/8" mounting bolts. The bracket contains the unique "Through the Pole" battery wire hole for no exposed system wiring.

Our manufacturer of solar electric power assemblies have proven themselves as the most rugged and robust design in thousands of installations worldwide since their introduction in 1994. These systems surpass all codes, compliances, and quality controls.