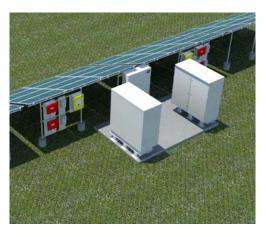


For continuous loads of 75 to 8,000 watts



SWPB 1920W Power Station



SWPB Power Station



SWPB PSG7680 Hybrid Power Station

SunWize® Power & Battery Power Stations are complete, integrated solar power systems designed for site loads requiring 12/24/48VDC or 110V-240V, 50Hz/60Hz AC voltage. Wired to NEC standards, each SWPB Power Station provides safe and reliable power without the expense of installing utility power. The solar array tilt is easily adjustable to maximize solar energy output. The systems are mounted on galvanized steel structures or trailers engineered to withstand harsh environments and high wind loads.

Proven solution: Solar has successfully powered thousands of critical applications worldwide for more than 30 years.

Reliability: SWPB systems allow your equipment to operate where power quality and reliability are a concern or where utility power does not exist in the most rugged environments.

Cost-effective: SWPB systems are cost-effective solutions providing continuous power to critical loads. Set up and installation time are minimized for rapid deployment.

Installation flexibility: SWPB Power Station ground mounts are designed according to site characteristics. Considerations can include surface uniformity, anchoring requirements, site area size, and wind loads to ensure longevity and durability.

Shipping and handling: SWPB systems are designed to withstand rugged transportation to remote sites. Each subsystem is fully assembled and factory tested before shipment.

KEY FEATURES AND BENEFITS:

- Meets your equipment electrical power requirements
- System load verified for voltage tolerances and duty cycle of operation
- System design verified for performance criteria, reliability and function
- Geographic location analysis provided
- · Standard product line flexibility allows customization
- Cost-effective design maximizes space efficiency
- Solid state electronics
- UL, FM and CSA listed components
- 20/25-year solar module warranty
- · Full system warranty for one year
- Pre-assembled for easy installation
- No environmental impact
- · Low operating and maintenance costs
- · Complete systems reduce specifying and buying time
- Data logging and remote control software
- Hybrid options and project services available



Technical Specifications

Environmental Specification		
Ambient Temperature	-30°C to 50°C	
Relative humidity	100% condensing	
Altitude	3000m max	
Wind Speed	110MPH sustained class C exposure	
Seismic	Zone 4	
Altitude Wind Speed	3000m max 110MPH sustained class C exposu	

Electrical Specification	
Battery operating voltage	From 12V up to 48VDC nominal
Load voltage	120 V – 277 VAC
Array load current	From 60A up to 320A
Temperature compensation	Standard on all models
Array wattage	1,800W – 4,500W per frame
Battery capacity	260 – 2,900Ah per enclosure

The System

- Provides uninterrupted power to the load with a power reliability of 99.5% worst case month based on weather and insolation data specific to the site.
- Battery designed for 5 days (120hrs) of autonomy based on average low temperature.
- Hybrid system: designed to work with engine genset, wind turbine, grid power, or fuel cell to offset PV contribution and provide uninterrupted power to the load with power reliability of 100% worst case; battery designed for 3 days (72hrs) of autonomy based on average low temperature.

The Modules

- Large Format Style 72-Cell Solar Modules with MC4 or H4 Connectors, 300-375W
- Comply with industry standard wind exposure of 110MPH sustained, 133MPH gust.
- Impact resistant for 1 inch (25mm) hail at terminal velocity.

The Batteries

- Designed for solar applications in deep-cycle operation.
- Battery life rated for greater than 500 cycles to 80% DOD (12V cells) and 1200 cycles to 80% DOD (2V cells). Total battery life varies with application temperature and load characteristics.
- Maintenance free and require no watering or equalizing charge.

The Controls

- Low voltage load disconnect, factory set for battery type and system voltage used.
 Set standard at 80% battery depth-of-discharge.
- Standard PV charge controls and advanced MPPT controls to optimize energy contribution are available.
- Standard AC controls: AC inverter with up-to 72kW of power output, 10kW of battery charging capability with integral genset controls.

Protection and Safety

- NEC compliant circuit protection.
- Finger safe terminal blocks and covers on all switches and breakers.
- All wiring is routed in liquid tight conduit for protection from damage and the elements.
- Surge protection options protect both solar and load equipment from transients.











Headquarters

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SunWize Age of Power Autonomy www.sunwizepower.com

SWPB Power Station Model Information



1. Structure

Industrial grade, heavy-gauge steel coated with a durable hot-dip galvanized finish. Available in standard platforms from 1.8-4.5 kWp (peak kilowatts) on a single structure.

2. Adjustable Solar Array

Solar array tilt is easily adjustable from 15-55 degrees.

3. Solar Modules

Solar array, consisting of high-efficiency, crystalline silicon modules, provides reliable charging in all climates.

4. DC Combiner Box

Provides solar array circuit disconnects and surge protection. Simplifies assembly and testing.

5. System Control Enclosure

The control enclosure is a NEMA 3R powder-coated steel box housing the power distribution components, charge control and inverter/charger electronics,

disconnects, system monitoring and control components. Enclosure features rainproof vents and key lockable doors.

6. AC and DC Distribution Panels

Customer AC and DC breaker panels conform to U.S. National Electric Code, providing overload and surge protection. Offers flexibility for multiple loads.

7. Inverter/Battery Charger

Microprocessor-controlled highefficiency, sine wave inverter with three stage temperature compensated battery charger. Peak conversion efficiency of 96%, protection circuitry, LCD display with user and setup menus. Configurable from 3-12kW.

8. DC Charge Controller

Solid state, low frequency, pulse-width modulated solar charge control with battery temperature compensation and automatic nighttime disconnect. Configurations available from 60A to 320A. Utilizes standard and maximum power point tracking (MPPT) technologies.

9. Battery Enclosure

Standard battery PSF-style enclosure features white powder-coated steel construction, lockable front-opening doors, NEMA 3R louvered vented design. T-Style chest enclosures for smaller battery configurations feature white powder-coated aluminum construction and a pad-lockable, NEMA 3R vented lid. Enclosure sizes vary to accommodate batteries sized from 210AH to 3000AH.

10. Battery Bank

Standard system includes maintenancefree, 12V sealed, lead-acid batteries. For larger capacities, 2V industrial cells are available.

SunWize® Power & Battery

Power Station Systems



STANDARD CONFIGURATIONS

PS-ARRAY SYSTEM BATTERY AH **ENCLOSURE** STRUCTURE ENCLOSURE STRUCTURE LOCAL **POWER** MOUNTING TYPE **FINISH FINISH** METERING **VOLTAGE** CAPACITY

STANDARD OPTIONS

REMOTE MONITORING OP-TION POWER PANEL OP-

GENSET OPTION FUEL CELL OPTION

Example: PS-7680-48-4320-F-L01-W-G-LM01-F01

Array Power (Watts)

System Voltage: 12 Volts / 24 Volts / 48 Volts

Battery Capacity in AmpHrs (based on 120hr discharge rate)

Enclosure Mounting Style

F - Front opening hinged door

T - Top opening hinged

Structure Type

M01 - 82" x 113" steel ground mount - 6 Modules

L01 - 82" x 131" steel ground mount - 8 Modules

LO2 - 82" x 131" steel ground mount - 10-12 Modules

T01 - HD on-road trailer w 82" x 113" steel mount

Enclosure Finish

W - Powder-coated white aluminum, Nema 3R

P - Powder-coated white steel, Nema 3R

S - SS-304 stainless steel, Nema 3R

Structure Finish

G - Hot dipped galvanized

P - Gray Powder coat over hot dipped galvanized

Local Metering

LM01 – LCD charge control display

LM02 – LCD charge control display w/external mounting

System Standard Options:

RM - Remote Monitoring Option

Power Panel Options

P3.0kW1P - 3.0kW max 120VAC 60Hz P4.5kW2P - 4.5kW max 120/240 60Hz P6.0kW2P - 6.0kW max 120/240 60Hz

Power Panel Options: (continued)

P12kW2P – 12kW max 120/240 60Hz **P9.0kW3P** – 9.0kW max 208 3-PHASE 60Hz

P3.0kW1PE - 3.0kW max 230VAC 50Hz Genset Options



SunWize 1800W Power Station

G01 - Light duty, 3600 RPM, air-cooled LP engine 8.5-12kW

G02 – Medium duty, 1800 RPM, liquid-cooled LP engine 10–20kW

G03 – Heavy duty, 1800 RPM, liquid-cooled LP engine 30–60kW

G04 – Medium duty, 1800 RPM, air-cooled diesel engine 6–15kW

G05 – Medium duty, 1800 RPM, liquid-cooled diesel engine 10–20kW

G06 – Heavy duty, 1800 RPM, liquid-cooled diesel engine 30–60kW

Fuel Cell Options

F01 – Fuel cell, DC, 250W, USSI p250i













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