



Series: **SPS3-120VAC**

Off-grid Solar Power System

with 120VAC Output and 3-day Reserve Power

FEATURES & BENEFITS

- 3-day Minimum System Reserve Power
- Provides 120VAC 50/60 Hz Output
- Rainproof Aluminum Enclosure
- Preassembled, Prewired, Ready-To-Install
- Deep-cycle Maintenance Free Batteries

APPLACATIONS

- Campsite Power, Lighting, Security System
- Process Controls, Instrumentation
- Oil & Gas Instrumentation
- Irrigation Drip System, Water Pumping, Valves
- Pond Aeration Systems

DESCRIPTION

Models come pre-wired and include a rainproof, vented aluminum enclosure with a gasketed hinged door and closure buckles. Each model includes all the required system components to get you up and running right out of the box. Just mount and connect the included solar panel, Install and connect your equipment, flip the internal circuit breaker and you done. These systems are designed primarily for low wattage 120VAC equipment like controllers, valves and meters.

Solar Panels

High performance design that provide excellent low light performance. Panels feature a heavy duty extruded aluminum frame with high transparency, low-iron tempered glass.

Charge Controller/Power Inverter

Specifically designed for DC/AC System charging, the controller in this system features precise voltage and current regulation and over voltage cut off protection.

Deep-cycle SLA Batteries

Maintenance free, long life, high-energy sealed Lead Acid design provides years of reliable service under the most extreme conditions.



GENERAL SPECIFICATIONS

Operating Temperature: -40 to 140 °F (-40 to 60 °C)

System Enclosure: Aluminum, 3R, Vented

Minimum Battery Reserve Time: 3 days (72hrs)

Output: 120 VAC, 50/60 Hz

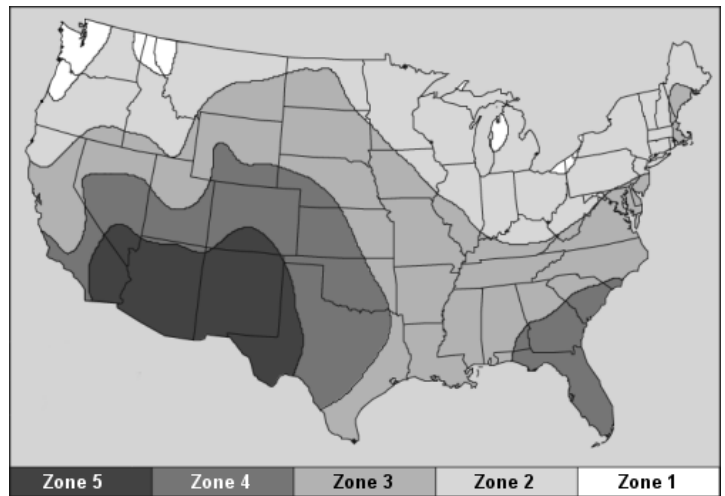
Estimated Battery Life: 4+ Years*

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Complete System Includes Solar Panel, Charge Controller, Deep-cycle Batteries, Rainproof Metal Enclosure, Inverter, Earth Grounding Kit, Solar Power Cables, Panel and Enclosure Mounting Kit.

How to Select the Correct Solar Power System for Your Application

1. Identify the zone your system will be installed from the map on the right.
2. Use the formula below to determine the watt hours per day your equipment requires. This is done by multiplying 120 times the operating current, then times the number of hours per day your equipment will be required to operate.
3. Based on the zone the solar power system will be installed and the watt hour per day requirement, use the chart below to identify a corresponding "Output Capacity" letter.
4. Use the model number charts below to locate the correct "Output capacity" letter and select your model number.



Example:

$120 \text{ (Volts)} \times \text{Equipment Current Draw (Amps)} = \text{Watts/hour} \times \text{Run Time per Day in Hours (Hours)} = \text{Watts/day}$
 $120 \text{ (Volts)} \times 0.12 \text{ (Amps)} = 14.4 \text{ (Watts)} \times 24 \text{ (Hrs)} = 345.6 \text{ Watts/day required.}$

Based on this example you would pick:

Letter "D1" for Zone 4 or 5, "D2" for Zones 2 or 3, "D3" for Zone 1

Watts/day Output	100	200	300	400	500
Zone 1	A3	B3	C3	D3	E3
Zone 2	A2	B2	C2	D2	E2
Zone 3	A2	B2	C2	D2	E2
Zone 4	A1	B1	C1	D1	E1
Zone 5	A1	B1	C1	D1	E1

Model Number	SPS3-120VAC-60W-55	SPS3-120VAC-70W-55	SPS3-120VAC-80W-55
Output Capacity (Letter Code)	A1	A2	A3
Solar Panel Capacity	60 Watt, 18V	70 Watt, 18V	80 Watt, 18V
Charge Controller	10 A	10 A	10 A
Battery Capacity	12V, 55 Ah	12V, 55 Ah	12V, 55 Ah
Enclosure Size	18.25 X 16.25 x 12" (464 x 413 x 305mm)	18.25 X 16.25 x 12" (464 x 413 x 305mm)	18.25 X 16.25 x 12" (464 x 413 x 305mm)

Model Number	SPS3-120VAC-120W-100	SPS3-120VAC-140W-100	SPS3-120VAC-160W-100
Output Capacity (Letter Code)	B1	B2	B3
Solar Panel Capacity	120 Watt, 18V	140 Watt, 18V	160 Watt, 18V
Charge Controller	10 A	10 A	10 A
Battery Capacity	12V, 100 Ah	12V, 100 Ah	12V, 100 Ah
Enclosure Size	18.25 X 16.25 x 12" (464 x 413 x 305mm)	18.25 X 16.25 x 12" (464 x 413 x 305mm)	18.25 X 16.25 x 12" (464 x 413 x 305mm)

Model Number	SPS3-120VAC-180W-150	SPS3-120VAC-200W-150	SPS3-120VAC-240W-150
Output Capacity (Letter Code)	C1	C2	C3
Solar Panel Capacity	180 Watt, 18V	100 Watt, 18V (x2)	80 Watt, 18V (x3)
Charge Controller	20 A	20 A	20 A
Battery Capacity	12V, 75 Ah(x2)	12V, 75 Ah(x2)	12V, 75 Ah(x2)
Enclosure Size	18.25 x 17.75 x 18" (464 x 451 x 457mm)	18.25 x 17.75 x 18" (464 x 451 x 457mm)	18.25 x 17.75 x 18" (464 x 451 x 457mm)

Model Number	SPS3-120VAC-240W-200	SPS3-120VAC-280W-200	SPS3-120VAC-300W-200
Output Capacity (Letter Code)	D1	D2	D3
Solar Panel Capacity	120 Watt, 18V (x2)	140 Watt, 18V (x2)	150 Watt, 18V (x2)
Charge Controller	20 A	20 A	20 A
Battery Capacity	12V, 100 Ah(x2)	12V, 100 Ah(x2)	12V, 100 Ah(x2)
Enclosure Size	18.25 x 17.75 x 18" (464 x 451 x 457mm)	18.25 x 17.75 x 18" (464 x 451 x 457mm)	18.25 x 17.75 x 18" (464 x 451 x 457mm)

Model Number	SPS3-120VAC-300W-300	SPS3-120VAC-330W-300	SPS3-120VAC-360W-300
Output Capacity (Letter Code)	E1	E2	E3
Solar Panel Capacity	100 Watt, 18V (x3)	110 Watt, 18V (x3)	130 Watt, 18V (x3)
Charge Controller	30 A	30 A	30 A
Battery Capacity	12V, 100 Ah(x3)	12V, 100 Ah(x3)	12V, 100 Ah(x3)
Enclosure Size	25.25 X 18.25 x 15.25" (641 x 464 x 387mm)	25.25 X 18.25 x 15.25" (641 x 464 x 387mm)	25.25 X 18.25 x 15.25" (641 x 464 x 387mm)

*Battery life is dependent on total system load, depth of charge cycles and ambient temperature conditions.

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Note: Continued product improvements make specifications subject to change without notice.
Check www.imagineinstruments.com for the latest product information and updates

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