



Series: SPS5-12VDC

Off-grid Solar Power System with 5-day Reserve Power



FEATURES & BENEFITS

- 5-day Minimum System Reserve Power
- Provides Regulated 12 Vdc Output
- Rainproof Aluminum Enclosure
- Preassembled, Prewired, Ready-To-Install
- Deep-cycle Maintenance Free Battery

APPLACATIONS

- Wireless Sensors, Transmitters, Base Stations
- 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.

Solar Panel

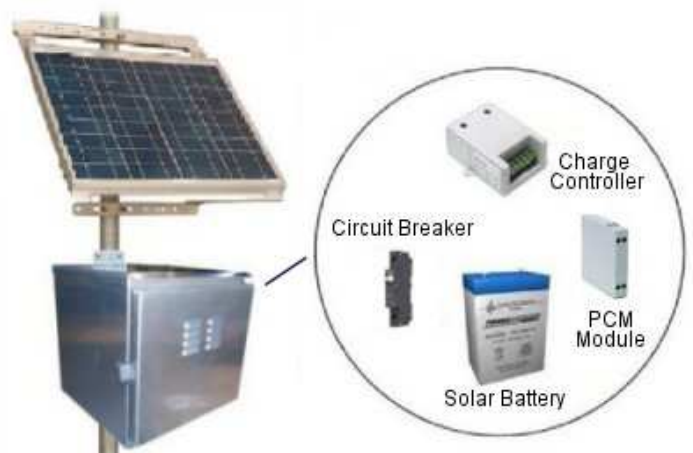
High performance design that provide excellent low light performance. Panels feature a heavy duty extruded aluminum frame with high transparency, low-iron tempered glass.

Charge Controller

Specifically designed for 12 Volt System charging, the controller in this system features precise voltage and current regulation and over voltage cut off protection.

Deep-cycle SLA Battery

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



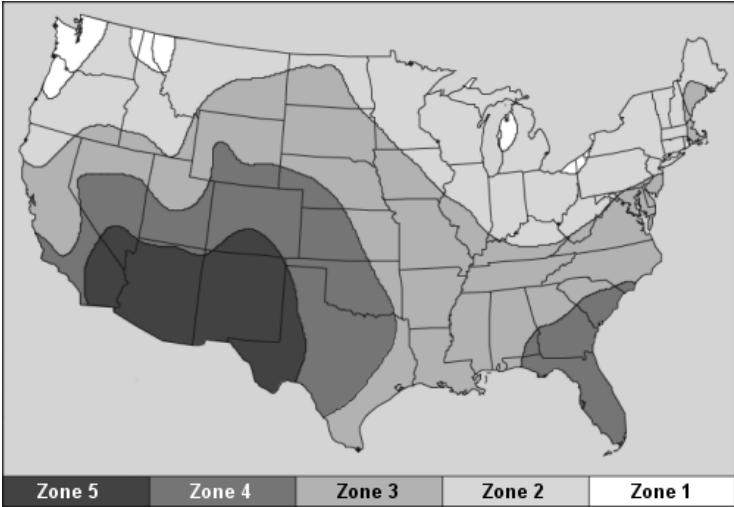
GENERAL SPECIFICATIONS

- Operating Temperature:** -40 to 140 °F (-40 to 60 °C)
- System Enclosure:** Aluminum, Rainproof
- Minimum Battery Reserve Time:** 5 days (120 hrs)
- Regulated Output:** 12 Vdc
- Estimated Battery Life:** 4+ Years*

Complete System Includes Solar Panel, Charge Controller, Deep-cycle Battery, Rainproof Metal Enclosure, 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 amp hours per day your equipment requires. This is done by multiplying the operating current by 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 amp 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:

(Equipment Current Draw +10%) X (Equipment Run Time in Hours = Load-amp Hrs/day
 $0.14 + 0.014 = 0.154 \text{ (Amps)} \times 24 \text{ (Hrs)} = 3.7 \text{ Load-amp Hrs/day}$

Based on this example you would pick:
 Letter "B4" for Zone 5, "C4" for Zones 3 or 4, "D4" for Zone 2, and "F4" for Zone 1.

Load-amp Hrs/day	2	3	4	5	7	10	12	15	17	20	25	30	35
Zone 1	C2	E3	F4	G5	H7	I10	J12	K15	L17	-	-	-	-
Zone 2	B2	C3	D4	E5	F7	G10	H12	I15	J20	K25	L30	-	-
Zone 3	B2	B3	C4	D5	E7	F10	G12	H15	H17	I20	J25	K30	L35
Zone 4	A2	B3	C4	C5	D7	F10	F12	G15	H17	H20	I25	J30	K35
Zone 5	A2	B3	B4	C5	D7	D10	F12	F15	G17	G20	H25	I30	J35

Model Number	SPS5-12VDC-10W-35	SPS5-12VDC-20W-55	SPS5-12VDC-30W-75
Output Capacity (Letter Code)	A2	B2, B3, B4	C2, C3, C4, C5
Solar Panel Capacity	10 Watt, 18V	20 Watt, 18V	30 Watt, 18V
Charge Controller	6 A	6 A	6 A
Battery Capacity	12V, 35 Ah	12V, 55 Ah	12V, 75 Ah
Enclosure Size	16 x 16 x 10" (406 x 406 x 254 mm)	16 x 16 x 10" (406 x 406 x 254 mm)	16 x 16 x 10" (406 x 406 x 254 mm)

Model Number	SPS5-12VDC-40W-100	SPS5-12VDC-50W-110	SPS5-12VDC-60W-110
Output Capacity (Letter Code)	D4, D5, D7, D10	E5, E7	F7, F10, F12, F15
Solar Panel Capacity	40 Watt, 18V	50 Watt, 18V	60 Watt, 18V
Charge Controller	6 A	6 A	6 A
Battery Capacity	12V, 100 Ah	12V, 55 Ah(x2)	12V, 55 Ah(x2)
Enclosure Size	16 x 16 x 10" (406 x 406 x 254 mm)	18 x 18 x 18" (457 x 457 x 457 mm)	18 x 18 x 18" (457 x 457 x 457 mm)

Model Number	SPS5-12VDC-80W-110	SPS5-12VDC-120W-200	SPS5-12VDC-140W-200
Output Capacity (Letter Code)	G10, G12, G15, G17, G20	H12, H15, H17, H20, H25	I10, I12, I15, I20, I25, I30
Solar Panel Capacity	80 Watt, 18V	120 Watt, 18V	140 Watt, 18V
Charge Controller	10 A	10 A	10 A
Battery Capacity	12V, 55 Ah(x2)	12V, 100 Ah(x2)	12V, 100 Ah(x2)
Enclosure Size	18 x 18 x 18" (457 x 457 x 457 mm)	18 x 18 x 18" (457 x 457 x 457 mm)	18 x 18 x 18" (457 x 457 x 457 mm)

Model Number	SPS5-12VDC-180W-200	SPS5-12VDC-240W-400	SPS5-12VDC-280W-400
Output Capacity (Letter Code)	J17, J25, J30, J35	K20, K30, K35	L17, L25, L35
Solar Panel Capacity	180 Watt, 18V	240 Watt, 18V	280 Watt, 18V
Charge Controller	20 A	20 A	20 A
Battery Capacity	12V, 100 Ah(x2)	12V, 100 Ah(x4)	12V, 100 Ah(x4)
Enclosure Size	18 x 18 x 18" (457 x 457 x 457 mm)	27 x 27 x 17" (686 x 686 x 432 mm)	27 x 27 x 17" (686 x 686 x 432 mm)

*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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