Series: LPSS-E12



# Low Cost Solar Power Kit

for Low Power Wireless Sensors & Transmitters



# FEATURES & BENEFITS

Provides Regulated 12 Vdc Output Weather Resistant Enclosure Preassembled, Prewired, Ready-To-Install Deep-cycle Maintenance Free Battery

# **APPLACATIONS**

Wireless Sensors & Transmitters Base Stations & Receivers Low Power Sensors Data Logging & Monitoring Systems

## DESCRIPTION

Models come pre-wired and include a plastic, weather resistant enclosure with a hinged lid. 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, connect your equipment and your 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.

## Solar Charge Controller

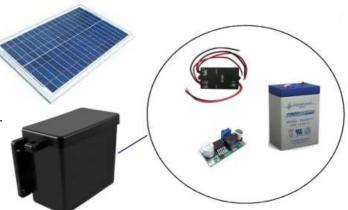
Specifically designed for efficient charging, the controller in this system features precise voltage and current regulation.

#### Deep-cycle SLA Battery

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

## **Battery Enclosure**

Made from Polyethylene plastic and features an economical, rugged, weather resistant design with a hinged lockable cover and external mounting ears.



Housing protects battery, charge controller and regulator

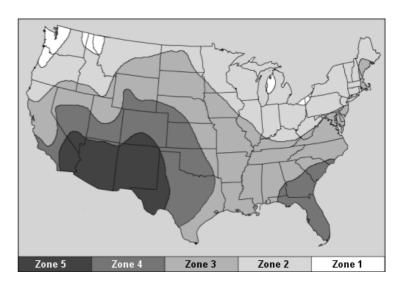
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# **GENERAL SPECIFICATIONS**

Operating Temperature: -40 to 140 °F (-40 to 60 °C) Enclosure: Plastic (Polyethylene) Min Battery Reserve Time: 5 days (120hrs) Regulated Output: 12 Vdc Estimated Battery Life: 4+ Years\*

# 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.
- Use the formula below to determine the amp hours per day your equipment requires. This is done by multiplying the total 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:

(Total Load Current +10%) X (Equipment Run Time in Hours = Load-amp Hrs/day 0.012 + 0.0012= 0.0132 (Amps) X 24 (Hrs) = 0.317 Load-amp Hrs/day

Based on this example for a 12 Vdc output system you would pick: Letter "D12" for Zone 5 and 4, "E12" for Zones 2 or 3, and "F12" for Zone 1.

Load-amp Hrs/day	0.250	0.375	0.500
Zone 1	C12	F12	112
Zone 2	B12	E12	H12
Zone 3	B12	E12	H12
Zone 4	A12	D12	G12
Zone 5	A12	D12	G12

Model Number	LPSS-E12-2W-5	LPSS-E12-3W-5	LPSS-E12-5W-5
Output Capacity (Letter Code)	A12	B12	C12
Solar Panel Capacity	2 Watt, 12V	3 Watt, 12V	5 Watt, 12V
Charge Controller	3 A	3 A	3 A
Battery Capacity	12V, 1.4 Ah	12V, 1.4 Ah	12V, 1.4 Ah
Regulated Output	12 Vdc	12 Vdc	12 Vdc
Enclosure Size	4"W x 6"L x 5.5"H (102 x 152 x 140mm)	4"W x 6"L x 5.5"H (102 x 152 x 140mm)	4"W x 6"L x 5.5"H (102 x 152 x 140mm)

Model Number	LPSS-E12-2W-5	LPSS-E12-3W-5	LPSS-E12-5W-5
Output Capacity (Letter Code)	D12	E12	F12
Solar Panel Capacity	2 Watt, 12V	3 Watt, 12V	5 Watt, 12V
Charge Controller	3 A	3 A	3 A
Battery Capacity	12V, 2.8 Ah	12V, 2.8 Ah	12V, 2.8 Ah
Regulated Output	12 Vdc	12 Vdc	12 Vdc
Enclosure Size	4"W x 6"L x 5.5"H (102 x 152 x 140mm)	4"W x 6"L x 5.5"H (102 x 152 x 140mm)	4"W x 6"L x 5.5"H (102 x 152 x 140mm)

Model Number	LPSS-E12-2W-5	LPSS-E12-3W-5	LPSS-E12-5W-5
Output Capacity (Letter Code)	G12	H12	112
Solar Panel Capacity	2 Watt, 12V	3 Watt, 12V	5 Watt, 12V
Charge Controller	3 A	3 A	3 A
Battery Capacity	12V, 5 Ah	12V, 5 Ah	12V, 5 Ah
Regulated Output	12 Vdc	12 Vdc	12 Vdc
Enclosure Size	4"W x 6"L x 5.5"H (102 x 152 x 140mm)	4"W x 6"L x 5.5"H (102 x 152 x 140mm)	4"W x 6"L x 5.5"H (102 x 152 x 140mm)

\*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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