

LS Series Portable Lithium Batteries

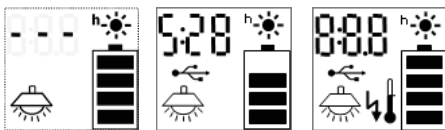
Portable Energy Kits



Plug and Play Lighting and Energy Station

- Long-lasting Lithium battery pack (LiFePO4)
- Intuitive user interface with back-lit LCD
- Onboard USB charging port for mobile device
- Built-in solar charger with MPPT

LCD shows state of charge and operation time



Built to Last

- LiFePO4 battery rated to 1500-2000 full cycles before replacement (5-8 years)
- LED lamps rated for 50,000+ hours and infinite switching cycles

High-Efficiency

- Built-in MPPT charging electronics
- LED lamps supply greater than 100 lm/watt

Modular Scalability

- Internal current limiting allows multiple units to be connected to any 12V panel/array (max 25 Voc)
- Wide range of plug and play accessories for expanding functionality over time

Phocos' LS Series portable energy kits were designed to supply long-lasting home lighting and mobile device charging in a compact and portable package.

Built around a high-quality, long lasting Lithium Ion Phosphate (LiFePO4) battery pack with MPPT charging, the LS series supports up to 6 A of continuous current at 12 VDC and is available in standard 4 Ah and 7 Ah versions.

The plug and play design allows for simple integration and customization based on a wide range of standard and optional accessories.

Application Examples

- Solar Home Systems
- Camping
- Remote Cabins/Buildings
- RVs/Boats
- Hiking/Backpacking



Technical Data

Battery Pack

Type	LS4000-Kit1	LS7000-Kit2
Nominal System Voltage	12.8V	
Battery Type	LiFePO4	
Battery Capacity	4000mAh/51Wh	7000mAh/89Wh
Charging Current	1.5A (max. 20W)	
Load Current	5A	6A
Working Temperature	-4 to 122 °F (-20 to +50 °C)	
USB Outlet	5V/1.5A	
Size	6.2 x 3.3 x 2.6 in (158 x 85 x 65 mm)	8.8 x 3.3 x 2.6 in (224 x 85 x 65 mm)
Display	LCD + LED	
Connectors	Panel: 1 Barrel (5.5/2.5mm) - Load: 3 Barrel (4.75/1.7mm) - USB: USB-A	
Certifications	Lighting Global Certified	

Accessories Included

Type	LS4000-Kit1	LS7000-Kit2
2W, 200 lm SFL LED bulb	2	2
3W, 300 lm SFL LED Bulb	1	2
0.25W Mini SFL LED Bulb	----	1
3W TL LED Tube Lamp	----	1
10W Poly Solar Panel	1	2
2 Panel Mounting Hardware	----	1
3-1 Panel Combiner/Distributor	----	1
5m Tube Lamp Extension Wire	----	1
Cigarette Lighter Socket	----	1
1-2 USB Splitter	----	1
Phone Charging Set	1	1
iPhone 3-4 Adapter	1	1
iPhone 5+ Adapter	1	1

LEDs

Type	SFLw-12/02CW	SFLw-12/03CW	SFLw-5/0.25CW	TL-12/03CW
Light Color/Temperature	6000K (+/-10%)			
Power (+/-0.5W)	2W	3W	0.25W	3W
Voltage	12V		5V	12V
Current	0.17A	0.25A	0.05A	0.25A
Nominal Lumen Output	200lm	300lm	17 lm	270 lm
Lumen Efficiency	>100 lm/W		>68 lm/W	>90 lm/W
CRI	>80%		>70%	>80%
Working Temperature	-20C to +50C			
LED Lifespan	>50,000 hrs			
IP Rating	IP50		IP40	IP30
Humidity	<95% (non-condensing)			
Diameter/Height	4.8/2.4 in (122/60 mm)		2.4 x 1 in (60/26 mm)	----
Diameter/Length	----			11.8/1 in (300/25mm)
Switching Cycles	Infinite			