

# RV BATTERIES

KEEPING YOU **IN CHARGE**  
WITH THE POWER TO EXPLORE



**POWERPSONIC**  
TRUSTED BATTERY SOLUTIONS

[power-sonic.com](http://power-sonic.com)

# RV BATTERIES

## ULTIMATE RELIABILITY AND MAXIMUM PERFORMANCE FROM POWER SONIC

Whether you're driving cross country, hauling your gear for a weekend camping trip or even if you're 'full-timing', you want reliable power both on-grid and off-grid. Power Sonic offers a wide range of LiFePO4 batteries designed to deliver ultimate reliability and maximum performance for your RV.

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As an OEM qualified supplier we offer a complete line of LiFePO4 RV batteries produced to the highest international standards in our cutting-edge facilities. Power Sonic battery products are subject to rigorous quality control throughout every step of the manufacturing process. This is key to ensuring high quality products that perform.

Power Sonic's deep cycle LiFePO4 batteries have been engineered to provide rugged durability, outstanding performance and a long life. Offered in standard BCI group sizes, these batteries are a true drop-in replacement when upgrading from sealed lead acid.

In today's world, the RV battery industry demands innovation, not only with power, performance and life but also with peace of mind and comfort. Power Sonic has been delivering innovative battery solutions for over 50 years and one of these innovations is the Lithium Bluetooth series which enables RV owners to check the status of their battery via their phone eliminating the need to access the power system directly to check the status of the battery.

Wherever the road may take you, you can rely on Power Sonic to be there for the ride.

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# WHY GO LITHIUM?

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## MORE USABLE POWER

Lithium batteries give you the ability to use 100% of their capacity, regardless of the discharge rate. With a very high discharge rate, for instance 0.8C, the capacity of a lead acid battery will only be 60% of the rated capacity. This means you can be confident when running all your electronics that, with a lithium battery there will be plenty of capacity in reserve.

## SUPER SAFE

Power Sonic lithium batteries utilize LiFePO4 chemistry, which is the safest lithium chemistry on the market today. For increased safety our lithium batteries are integrated with an advanced Protection Circuit Module (PCM) that protects against over-charge, over-discharge, over-temperature and short circuit situations.

## A LONGER LIFE

Power Sonic lithium batteries deliver up to 10 times longer cycle life than a lead acid battery. This brings down the cost per cycle of a lithium battery lower than lead acid, meaning you will replace a lithium battery less often than a lead acid battery in a recreational vehicle.





## KEEPING YOU **IN CHARGE** WITH INNOVATIVE LITHIUM BATTERIES FOR RVs



Power Sonic lithium iron phosphate (LiFePO<sub>4</sub>) batteries deliver everything needed to support life on the road. Travel further more efficiently without compromising on reliability and performance with a battery designed to perform in the most demanding conditions.

### **FASTER CHARGING**

With lithium batteries charging can be up to 4 times faster than with lead acid. Faster charging means there is more time the battery can be in use. Another benefit is the quick and efficient energy storage from solar panels.

### **WEIGHS LESS**

50~70% less weight than the equivalent capacity lead acid battery. For larger RV's this could result in a weight saving of 50~100kg

### **FLEXIBLE INSTALLATION**

Power Sonic lithium batteries can be installed upright or on their side allowing for flexible installation and easier configuration.

### **DROP-IN REPLACEMENT**

Power Sonic lithium batteries are available in a variety of BCI standard group sizes and can be used as a drop-in replacement or upgrade to lead acid.

### **LOW SELF-DISCHARGE**

A low self-discharge rate means worry free storage, so even with seasonal use you can be sure your battery won't let you down.

### **MAINTENANCE FREE**

Plug and play design. Simply connect your battery and you are ready to go! No topping up with water, completely maintenance free.

#### **FURTHER INFORMATION**

Please refer to our website [www.power-sonic.com](http://www.power-sonic.com) for product catalogs, safety data sheets (SDS), ISO certification, etc.



# KEEPING YOU IN CHARGE

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BATTERY SELECTION GUIDE



**ULTIMATE RELIABILITY AND MAXIMUM  
PERFORMANCE FROM POWER SONIC**



# KEEPING YOU IN CHARGE

## WITH THE RV BATTERY SELECTION GUIDE



Power Sonic lithium batteries gives RV owners everything they need to enjoy the freedom and comfort of life on the road. With so many different RVs available it can be challenging to find the right battery for your specific power needs. The battery selection guide below shows common batteries that are used in different classes of RV.

VEHICLE CLASS >	CLASS A	CLASS B	CLASS C	5TH WHEEL	TOY HAULER	TRAVEL TRAILER	POP-UP
<b>VEHICLE DESCRIPTION</b>	Large motor homes with all the comfort of home, may have two bedrooms or bathrooms, full kitchen & living area. House batteries combined with solar / generator could power all systems.	A van body with a customized interior for outdoor adventures and recreation. May have additional storage on top or even solar panels.	A van or small truck chassis with vinyl or aluminium exterior. Living areas built on top of the chassis frame.	5th Wheel or Kingpin types are non-motorized trailers that need to be towed. These are usually 30 foot or longer in length.	A tow hitch or 5th Wheel trailer with a drop down gate at the rear for ATVs or motorcycles. Furnishings are cleverly hidden in the walls and ceiling when ATVs etc.. are loaded inside. These trailers can be 30 foot or longer in length.	Travel trailers of various lengths. Small ones can be towed by cars, however, larger ones (up to 40 foot) need to be hitched to a larger vehicle.	Small trailers which have a tent top extend or pop up from the solid trailer base.
<b>TYPICAL POWER SYSTEM</b>	36~48 volt systems powered by banks of AGM batteries. Newer high spec models may come with lithium batteries as standard.	12~24 volt systems powered by banks of AGM batteries.	12~24 volt systems powered by banks of AGM batteries.	12~24 volt systems powered by banks of AGM batteries.	12~24 volt systems powered by banks of AGM batteries.	12~24 volt systems powered by banks of AGM batteries.	12 volt systems powered by U1 or Group 24 AGM batteries.
<b>MAXIMUM CURRENT</b>	50 Amp	30~50 Amp	30~50 Amp	30~50 Amp	30~50 Amp	15~30 Amp	15 Amp
<b>POWER SONIC REPLACEMENT BATTERY (Single or multiples in series or parallel to meet needs)</b>	For 36 and 48 volt systems: PSL-SC-122000-G8D PSL-SC-122600-G8D PSL-SC-123000-G8D	For 12 volt systems only: PSL-BTP-12750 For 12 or 24 volt systems: PSL-SC-12750-G24 PSL-SC-12800-G27 PSL-SC-121000-G27 PSL-SC-121000-G31	For 12 volt systems only: PSL-BTP-121000 PSL-BTP-121250 For 12 or 24 volt systems: PSL-SC-121000-G27 PSL-SC-121000-G31 PSL-SC-121250-G31	For 12 volt systems only: PSL-BTP-121000 PSL-BTP-121250 For 12 or 24 volt systems: PSL-SC-121000-G27 PSL-SC-121000-G31 PSL-SC-121250-G31	For 12 volt systems only: PSL-BTP-121000 PSL-BTP-121250 For 12 or 24 volt systems: PSL-SC-12800-G27 PSL-SC-121000-G27 PSL-SC-121000-G31 PSL-SC-121250-G31	For 12 volt systems only: PSL-BTP-12750 PSL-BTP-121000 For 12 or 24 volt systems: PSL-SC-12750-G27 PSL-SC-12800-G27 PSL-SC-121000-G27 PSL-SC-121000-G27 PSL-SC-121000-G31	For 12 volt systems PSL-BTP-12500 PSL-SC-12350-GU1 PSL-SC-12500 PSL-SC-12750-G24

12 volt systems only require 1 x battery  
 24 volt systems require 2 x batteries connected in series  
 36 volt systems require 3 x batteries connected in series  
 48 volt systems require 4 x batteries connected in series

# SERIES CAPABLE

**SERIES CAPABLE LIFEPO4** batteries are designed as a drop-in replacement and upgrade to lead acid. Combining proven lithium technology with an advanced Protection Circuit Module (PCM), the PSL-SC Series delivers a robust, safe and easy to install battery which lasts longer, weighs less and charges quicker than the lead acid equivalent. Up to 4 batteries can be connected in series or parallel giving you all the power you need for your RV, whether on or off the grid.

## FEATURES:

- Outstanding performance and reliability
- Super safe lithium iron phosphate technology
- Rugged impact resistant case and cover
- Up to 10 times longer cycle life than lead acid
- 50~70% lighter than lead acid
- Charges up to 4 times faster than lead acid
- 100% maintenance free

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## SPECIFICATIONS

Model	Protection Circuit Module	Series Connection*	Parallel Connection*	Nominal Voltage	Rated Capacity AH	Approx. Dimensions: inch (mm)						Approx. Weight	
						Length		Width		Height		lbs.	kgs.
						inch	mm	inch	mm	inch	mm		
PSL-SC-12350-GU1	✓	4	4	12.8V	35Ah	7.80	197	6.50	165	6.70	171	9.70	4.4
PSL-SC-12500	✓	4	4	12.8V	50Ah	7.72	196	6.50	165	6.85	174	14.33	6.5
PSL-SC-12750-G24	✓	4	4	12.8V	75Ah	10.24	260	6.62	168	8.39	213	21.60	9.8
PSL-SC-12800-G27	✓	4	4	12.8V	80Ah	12.10	307	6.60	168	8.70	221	22.30	10.1
PSL-SC-12000-G27	✓	4	4	12.8V	100Ah	12.08	307	6.61	168	8.70	221	28.00	12.7
PSL-SC-121000-G31	✓	4	4	12.8V	100Ah	12.52	318	6.50	165	8.47	215	28.20	12.8
PSL-SC-121250-G31	✓	4	4	12.8V	125Ah	12.51	318	6.49	165	8.46	215	32.80	14.9
PSL-SC-121500-G8D	✓	4	4	12.8V	150Ah	20.48	520	10.55	268	8.98	228	44.53	20.2
PSL-SC-122000-G8D	✓	4	4	12.8V	200Ah	20.48	520	10.55	268	8.98	228	53.35	24.2
PSL-SC-122600-G8D	✓	4	4	12.8V	260Ah	20.48	520	10.55	268	8.98	228	71.21	32.3
PSL-SC-123000-G8D	✓	4	4	12.8V	300Ah	20.48	520	10.55	268	8.98	228	83.11	37.7

\* Cannot be connected in series and parallel at the same time.



### FURTHER INFORMATION

Please refer to our website [www.power-sonic.com](http://www.power-sonic.com) for product catalogs, safety data sheets (SDS) and specifications.

# LITHIUM BLUETOOTH

**LITHIUM BLUETOOTH** batteries utilize an intelligent battery management system (BMS) and Bluetooth communication, giving you the ability to monitor your battery status from a smart phone or tablet. The PSL-BT Series gives you all the features of a Power Sonic LiFePO4 battery including longer life, lighter weight, faster charging and intelligent protection, as well as complete peace of mind knowing you can check your battery status at any time via the free app.

## FEATURES:

- Bluetooth communication
- Outstanding performance and reliability
- Super safe lithium iron phosphate technology
- Rugged impact resistant case and cover
- Up to 10 times longer cycle life than lead acid
- 50~70% lighter than lead acid
- Charges up to 4 times faster than lead acid
- 100% maintenance free





Power Sonic's free Lithium Bluetooth app allows you to get instant access to the battery state of charge (SOC), voltage, cycles and active events.



## SPECIFICATIONS

Model	Battery Management System	Bluetooth® Communication	Parallel Connection	Nominal Voltage	Rated Capacity AH	Approx. Dimensions: inch (mm)						Approx. Weight	
						Length		Width		Height		lbs.	kgs.
						inch	mm	inch	mm	inch	mm		
PSL-BTP-12500	✓	✓	4	12.8V	50Ah	7.72	196	6.50	165	6.85	174	14.33	6.5
PSL-BTP-12750	✓	✓	4	12.8V	75Ah	10.24	260	6.62	168	8.39	213	21.60	9.8
PSL-BTP-121000	✓	✓	4	12.8V	100Ah	12.52	318	6.50	165	8.47	215	28.20	12.8
PSL-BTP-121250	✓	✓	4	12.8V	125Ah	12.51	318	6.49	165	8.46	215	32.80	14.9
PSL-BTP-121500	✓	✓	4	12.8V	150Ah	19.09	485	6.70	170	9.45	240	44.53	20.2
PSL-BTP-122000	✓	✓	4	12.8V	200Ah	19.03	483.5	6.70	170	9.50	241	53.35	24.2
PSL-BTP-123000	✓	✓	4	12.8V	300Ah	20.48	520	10.55	268	8.72	221.6	83.11	37.7
PSL-BTP-24500	✓	✓	4	25.6V	50Ah	12.52	318	6.50	165	8.47	215	27.11	12.3
PSL-BTP-241000	✓	✓	4	25.6V	100Ah	19.03	483.5	6.69	170	9.49	241	54.60	24.8



Power Sonic's PSL-BT Series can not be connected in series.

### FURTHER INFORMATION

Please refer to our website [www.power-sonic.com](http://www.power-sonic.com) for product catalogs, safety data sheets (SDS), ISO certification, etc.

# KEEPING YOU IN CHARGE

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SERIES VS PARALLEL GUIDE



**ULTIMATE RELIABILITY AND MAXIMUM  
PERFORMANCE FROM POWER SONIC**

# KEEPING YOU IN CHARGE WITH THE SERIES VS PARALLEL GUIDE



Batteries can be arranged differently to achieve increased capacity or increased voltage to match your specific power requirements. It is essential that you do not mix battery types (lead acid, lithium) when connecting in series or parallel.

## PARALLEL INSTALLATION

Two or more batteries with terminals connected + to + and - to - in a parallel system that increases capacity and maintains a specific voltage. If configuring two batteries in parallel this will double the power of the battery while maintaining the voltage.

For example two 12.8 volt, 100 ah batteries in parallel will give you a 12.8 volt, 200 ah system.

PSL-SC Series can connect up to 4 batteries in parallel and PSL-BT Series up to 4.

2 batteries connected in parallel = Ah x 2, battery voltage stays the same



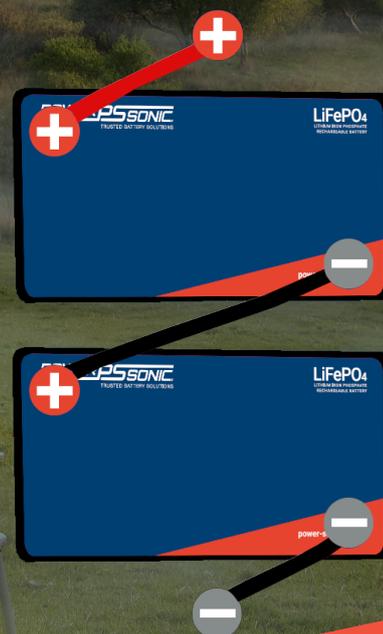
## SERIES INSTALLATION

With terminals connected + to - and - to +, a series configured system increases the voltage and keeps the battery capacity the same.

The same two batteries (12.8V, 100 ah) in a series configuration will increase the voltage to 51.6 volts and maintain the battery capacity of 100 ah

PSL-SC Series can connect up to 4 batteries in series, however the PSL-BT Series can not be connected in series.

2 batteries connected in series = voltage x 2, battery ah stays the same



### FURTHER INFORMATION

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# KEEPING YOU IN CHARGE

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**ULTIMATE RELIABILITY AND MAXIMUM  
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## KEEPING YOU IN CHARGE

Power Sonic is dedicated to continual product development enabling us to offer solutions for all industry specifications globally. We pride ourselves on product quality, performance and reliability, meeting the industry standards and approvals.

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website.

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