

BATTERY STORAGE SOLUTIONS



SPB
SEALED PERFORMANCE BATTERIES

PROVIDING QUALITY SOLUTIONS FOR ALL YOUR CUSTOMERS

POWER PS SONIC
RECHARGEABLE BATTERIES

 **Leclanché**

Sealed Performance Batteries' new range of PowerSonic and Leclanche energy storage batteries gives your customers greater choice when looking to maximise their solar investment. The batteries are all easy to install, require low maintenance, and are suitable for both commercial and residential applications.

LOWER UPFRONT COST



Power-Sonic AGM PSS Range

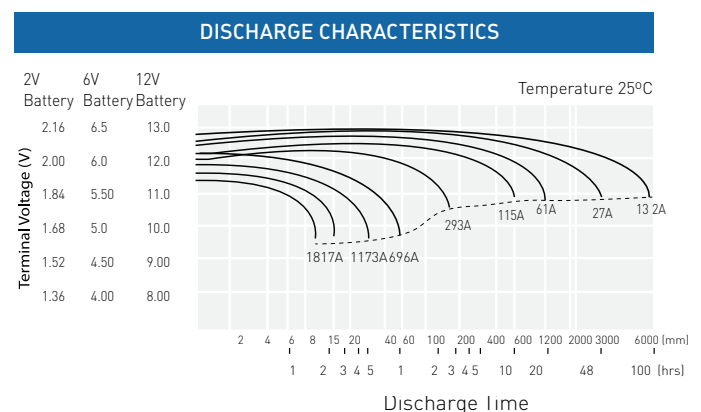
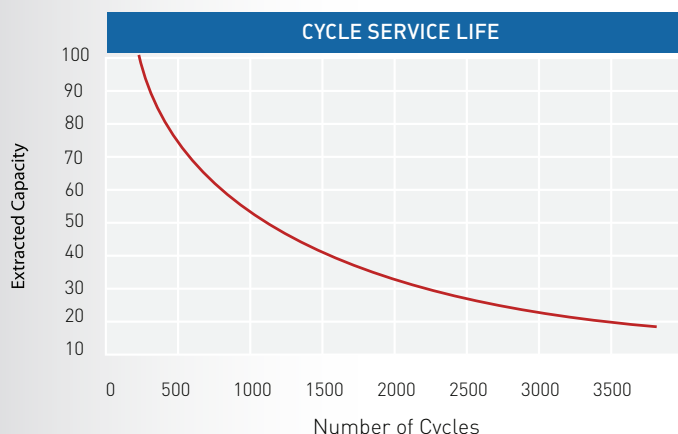
Ideal for the cost-conscious customers who are looking for the lowest initial investment but do not want to compromise on performance. Manufactured with Absorbent Glass Mat (AGM) technology with a lower acid density and increased electrolyte volume, giving greater cyclic performance and a longer life span.

Features and Benefits:

- Good cycle life making it perfect for off grid and critical load back-up applications
- Lowest upfront investment - giving you the fastest ROI
- Wide capacity range (170Ah - 3500Ah) perfect for large capacity off-grid systems



Part Number	Description	Voltage	Rated Capacity (AH) - 10-Hr 1.8V/cell	Rated Capacity (AH) - 20-Hr 1.8V/cell	Rated Capacity (AH) - 100-Hr 1.8V/cell	Weight (Kg)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	Terminal Type
AGM	PSS Range										
PSS-2V350	Power-Sonic Solar C100 345Ah	2	300	325	345	18.3	170	150	328	350	T11
PSS-2V450	Power-Sonic Solar C100 460Ah	2	400	430	460	24.9	210	175	330	350	T11
PSS-2V550	Power-Sonic Solar C100 575Ah	2	500	535	575	30	240	175	327.5	347.5	T11
PSS-2V700	Power-Sonic Solar C100 690Ah	2	600	645	690	36.3	300	175	330	350	T11
PSS-2V900	Power-Sonic Solar C100 920Ah	2	800	855	920	50.4	410	175	330	350	T11
PSS-2V1100	Power-Sonic Solar C100 1150Ah	2	1000	1070	1150	59	475	175	328	350	T11
PSS-2V1350	Power-Sonic Solar C100 1380Ah	2	1200	1285	1380	66.4	475	175	328	350	T11
PSS-2V1700	Power-Sonic Solar C100 1730Ah	2	1500	1605	1730	96	403	354	339	349	T11
PSS-2V2300	Power-Sonic Solar C100 2300Ah	2	2000	2100	2300	120.5	490	350	339	349	T11



LOWER TOTAL LIFETIME COST



Power-Sonic Tubular Gel – PSOPzV Range

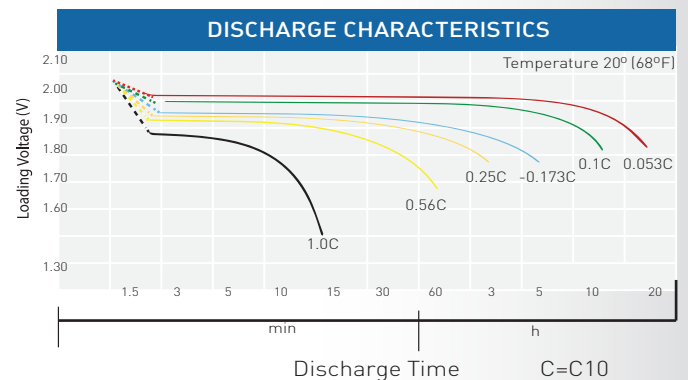
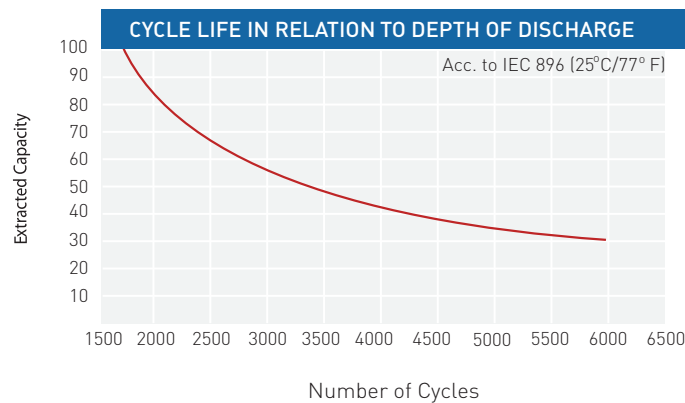
Ideal for customers looking for the lowest total cost of ownership over the life of the system. The specially designed tubular plate structure along with the unique gel electrolyte ensures a greater cycle life and longer life span than the AGM option.

Features and Benefits vs. AGM technology:

- Longer cycle life - ideal for both off grid and hybrid applications.
- Lower total cost of ownership - up to 3 times the cycle life of AGM
- Wider temperature resistance
- Wide capacity range (200Ah - 3000Ah)- perfect for large capacity off-grid systems



Part Number	Description	Voltage	Rated Capacity (AH) – 10-Hr 1.8V/cell	Rated Capacity (AH) – 20-Hr 1.8V/cell	Rated Capacity (AH) – 100-Hr 1.8V/cell	Weight (Kg)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	Terminal Type
Tubular Gel	PSOPzV Range										
PSOPzV300	Power-Sonic Tubular Gel C100 380Ah	2	300	320	380	26	145	206	355	390	T11
PSOPzV350	Power-Sonic Tubular Gel C100 440Ah	2	350	375	440	29	124	206	471	506	T11
PSOPzV490	Power-Sonic Tubular Gel C100 620Ah	2	490	525	620	39	166	206	471	506	T11
PSOPzV600	Power-Sonic Tubular Gel C100 760Ah	2	600	640	760	46	145	206	646	681	T11
PSOPzV800	Power-Sonic Tubular Gel C100 1010Ah	2	800	855	1010	64.5	191	210	646	681	T11
PSOPzV1000	Power-Sonic Tubular Gel C100 1265Ah	2	1000	1070	1265	78.5	233	210	646	681	T11
PSOPzV1200	Power-Sonic Tubular Gel C100 1520Ah	2	1200	1285	1520	93	275	210	646	681	T11
PSOPzV1500	Power-Sonic Tubular Gel C100 1900Ah	2	1500	1605	1900	115	275	210	796	831	T11
PSOPzV2000	Power-Sonic Tubular Gel C100 2530Ah	2	2000	2140	2530	155	399	214	772	807	T11



Sealed Performance Batteries (SPB) is an Australian, family-owned company based in Queensland but with the capability to deliver Australia-wide. Batteries are the core of our business and that's why we've been chosen by leading US and European brands to distribute their products throughout Australia, NZ and the Pacific Islands. When you buy a battery from us, you don't just get the battery. You get over 40 years of battery industry experience and the convenience and comfort of local technical support.

For the ultimate in battery energy storage we recommend the Swiss designed, German manufactured Lithium Ion range from the world leading Lithium cell manufacturer, Leclanche. For maximum flexibility, the range includes two types of Lithium Ion technologies: Lithium Nickel Manganese Cobalt (NMC) and Lithium Titanate (NCO Titanate). Both feature an integrated BMS to ensure maximum safety and have been designed for easy integration with SMA inverters with other inverter options also available.

Apollion Cube (NMC technology)

NMC technology from Leclanche delivers a superb Lithium ion solution balancing cycle life, safety and cost, making it ideal for hybrid applications.

Features and Benefits vs. AGM/Tubular technology:

- Greater utilisation of the 6.7kWh capacity through a deeper depth of discharge (80%)
- Up to 5 times the cycle life of AGM technology - perfect for peak load shifting/shaving in hybrid applications
- Faster recharge ensures maximum utilisation of solar energy
- Scalable up to 12 systems for greater flexibility in system sizing
- Small, compact and stylish (675mm W x 475mm D x 537mm H)



Ti-Box (NCO Titanate technology)

The Titanate technology from Leclanche is the ultimate solution for those wanting extreme cycle life, safety and performance.

Features and Benefits vs. Apollion Cube:

- Greater energy utilisation - 95% depth of discharge
- Extremely large cycle life - 3+ times that of the Apollion Cube
- Ultra-fast re-charge - ensures maximum utilisation of your generated solar energy
- The safest of all Lithium Ion technologies along with integrated BMS for ultimate peace of mind
- 3.2kWh capacity - scalable up to 3 systems making it ideal for hybrid systems
- Small, compact and stylish (731mm W x 515mm D x 312mm H)



COMMERCIAL & INDUSTRIAL APPLICATIONS

For industrial and commercial applications, we offer larger versions of our Leclanche energy storage range. Using the same Lithium Ion technology options, we can develop a scalable design ranging up to 1MWH capacity. This makes Leclanche batteries an ideal solution for both medium and large scale off-grid storage.

Key features and benefits:

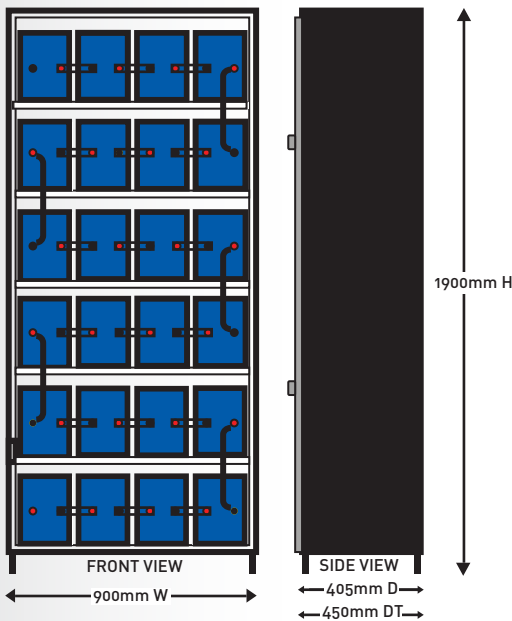
- Swiss designed and German manufactured for quality
- Fast recharge to ensure maximum utilisation of your generated solar energy
- Scalable up to 1MWH to suit a wide range of applications including energy storage for large off grid communities and diesel power replacement.



Specification	Apollion Cube	TI-Box
Cell technology	Li-Ion (NMC)	Li-Ion (NCO Titanate)
Nominal energy	6.7kWh	[C/10] 3.2kWh*
Nominal voltage	54.7 V	50.6 V
Charge end voltage	61.5 V	59.4 V
Discharge end voltage	41.0 V	42.9 V
Maximum continuous output		3,200 W
Max. discharge current	80 A	
Max. discharge power	300 A (3 sec.)	
Permanent Current		60A (1C)
Self Consumption (in operation)		20-25 W
Max. discharge performance	6,500 W	
Efficiency	97%	>90% [C/10]
Depth of discharge	80%	100%
Expected cycles	>5,000	<15,000 (100% DoD, 20°C)
Width	675mm	731mm
Depth	475mm	515mm
Height	537mm	312mm
Weight	95Kg	120Kg
Charge temperature (max.)	+0°C- +45°C	+0°C- +40°C
Discharge temperature (max.)	+0°C- +45°C	+0°C- +40°C
Optimal storage temperature	+10°C- +25°C	+0°C- +40°C
Scalability Max	12 Systems parallel (with optional master unit)	3 parallel
Communication	CAN/SMA ready	CAN/SMA ready
Protection class	IP21	IP21
Warranty	7 years fair value warranty	Warranty up to 10 years
Standards	Standards UN 38.3, IEC 60950-1	Standards UN 38.3, IEC 60950-1

As well as supplying a full range of AGM, Gel and Lithium Ion options for your energy storage requirements, SPB has made it simple by also designing a range of cabinets to match your kWh needs. Just select the required kWh from one of the tables below (AGM or Tubular Gel) and this will give you the correct battery and cabinet to suit.

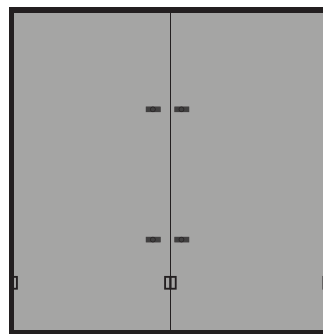
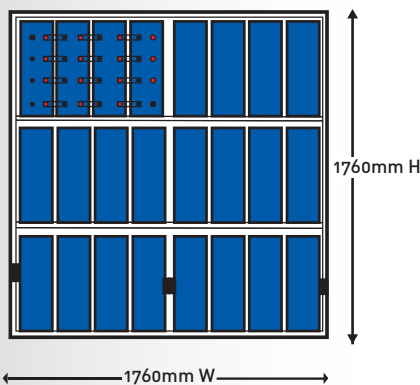
BCA 48V 450-550 BATTERY CABINET- POWER-SONIC 24 X PSS 2V 450AH POWER-SONIC 24 X PSS 2V 550AH



FEATURES

- 6 X SHELF - 1 DEEP X 4 WIDE
- 1 X DOOR 860 WIDE X 1790 High
- 2 X HANDLES WITH KEY LOCKS
- CABINET POWDER COATED
- IP43 RATING

BCA 48V 700-1350 BATTERY CABINET - POWER-SONIC 24 X PSS 2V 900AH POWER-SONIC 24 X PSS 2V 1100AH POWER-SONIC 24 X PSS 2V 1350AH



FEATURES

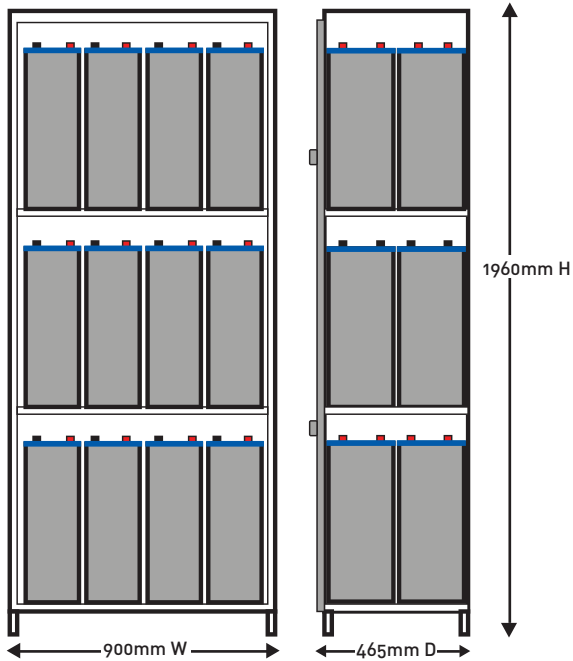
- BATTERIES ON SIDE - EASY FRONT TERMINATORS
- 2 X DOORS 840 X 1660 H
- 2 HANDLES WITH KEY LOCKS
- IP43 RATING
- CABINET POWDER COATED

Cabinet & Battery

Part Number	Description	Voltage	Rated Capacity [AH] - 10-Hr	kWh* Battery Bank Size @ C10		Rated Capacity [AH] - 100-Hr	kWh* Battery Bank Size @ C100		Battery Cabinet to suit
				24	48		24	48	
	System Voltage (V)								
AGM	PSS Range								
PSS-2V350	Power-Sonic Solar C100 345Ah	2	300	7.2	14.4	345	8.3	16.6	On Request
PSS-2V450	Power-Sonic Solar C100 460Ah	2	400	9.6	19.2	460	11.0	22.1	BCA48V450-550
PSS-2V550	Power-Sonic Solar C100 575Ah	2	500	12.0	24.0	575	13.8	27.6	BCA48V450-550
PSS-2V700	Power-Sonic Solar C100 690Ah	2	600	14.4	28.8	690	16.6	33.1	BCA48V700-1350
PSS-2V900	Power-Sonic Solar C100 920Ah	2	800	19.2	38.4	920	22.1	44.2	BCA48V700-1350
PSS-2V1100	Power-Sonic Solar C100 1150Ah	2	1000	24.0	48.0	1150	27.6	55.2	BCA48V700-1350
PSS-2V1350	Power-Sonic Solar C100 1380Ah	2	1200	28.8	57.6	1380	33.1	66.2	BCA48V700-1350
PSS-2V1700	Power-Sonic Solar C100 1730Ah	2	1500	36.0	72.0	1730	41.5	83.0	On Request
PSS-2V2300	Power-Sonic Solar C100 2300Ah	2	2000	48.0	96.0	2300	55.2	110.4	On Request

Total kWh

BCG 48V 350-490 BATTERY CABINET - POWER-SONIC 24 X PSOPzV350 POWER-SONIC 24 X PSOPzV490

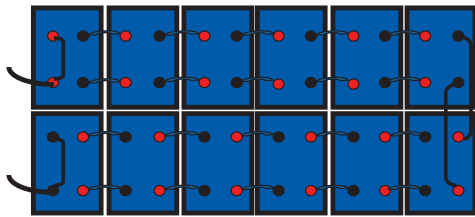


FEATURES

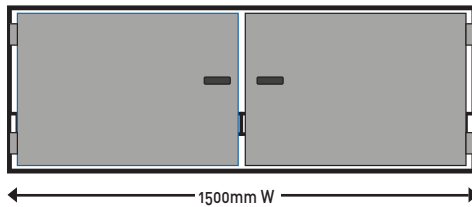
- 3 X SHELF - 2 DEEP X 4 WIDE
- 1 X DOOR 860 WIDE X 1850 High
- HANDLES WITH KEY LOCKS
- CABINET POWDER COATED
- IP43 RATING

BCG 24V 800-1200 BATTERY CABINET - POWER-SONIC 12 X PSOPzV800 POWER-SONIC 12 X PSOPzV1000 POWER-SONIC 12 X PSOPzV1200

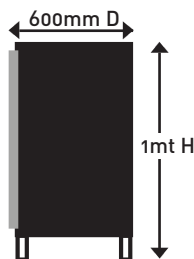
Top View



Front View



Side View



FEATURES

- 1 X SHELF - 2 DEEP X 6 WIDE
- 2 X DOORS 720 WIDE X 920 High
- HANDLES WITH KEY LOCKS
- CABINET POWDER COATED
- IP43 RATING

Cabinet & Battery

Part Number	Description	Voltage	Rated Capacity (AH) - 10-Hr	kWh* Battery Bank Size @ C10		Rated Capacity (AH) - 100-Hr	kWh* Battery Bank Size @ C100		Battery Cabinet to suit
				24	48		24	48	
	System Voltage (V)								
	Tubular Gel PSOPzV Range								
PSOPzV300	Power-Sonic Tubular Gel C100 380Ah	2	300	7.2	14.4	380	9.1	18.2	On Request
PSOPzV350	Power-Sonic Tubular Gel C100 440Ah	2	350	8.4	16.8	440	10.6	21.1	BCG48V350-490
PSOPzV490	Power-Sonic Tubular Gel C100 620Ah	2	490	11.8	23.5	320	7.7	15.4	BCG48V350-490
PSOPzV600	Power-Sonic Tubular Gel C100 760Ah	2	600	14.4	28.8	760	18.2	36.5	On Request
PSOPzV800	Power-Sonic Tubular Gel C100 1010Ah	2	800	19.2	38.4	1010	24.2	48.5	BCG24V800-1200
PSOPzV1000	Power-Sonic Tubular Gel C100 1265Ah	2	1000	24.0	48.0	1265	30.4	60.7	BCG24V800-1200
PSOPzV1200	Power-Sonic Tubular Gel C100 1520Ah	2	1200	28.8	57.6	1520	36.5	73.0	BCG24V800-1200
PSOPzV1500	Power-Sonic Tubular Gel C100 1900Ah	2	1500	36.0	72.0	1900	45.6	91.2	On Request
PSOPzV2000	Power-Sonic Tubular Gel C100 2530Ah	2	2000	48.0	96.0	2530	60.7	121.4	On Request

Total kWh



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