

POWervamp™

Specialist Battery Product Range

Cyclon Genesis SBS Odyssey Powervamp Racing



POWervamp™

THE POWER BEHIND YOUR PERFORMANCE

Powervamp Ltd* was formed by managing director Richard Roller in 1993. Initially building a range of portable battery packs for starting cars, buses and trucks, it pioneered the first stainless steel portable battery pack for starting helicopter turbines, and went on to develop a range of stainless steel packs for aircraft and vehicle starting.

Key to its product success was the extensive “hands-on” trials, field testing and development. Continual operational use of the products by the company founder and by Powervamp engineers resulted in a wealth of technical knowledge unique to the company. Such in-depth knowledge continues to give Powervamp a huge technological edge over claimed competitors.

The specialist knowledge and skills gained by Powervamp staff since the company started can now be drawn upon by customers who wish to use battery products in all types of specialist applications. Our staff can work with you to ensure you incorporate the correct battery to achieve maximum performance and a commercially competitive product.

Powervamp has chosen one of the most robust and high performance technologies on which to base its range of specialist batteries: Thin Plate Pure Lead (TPPL). TPPL batteries have been used in the most extreme applications and have significant benefits over traditional batteries, such as very high starting current, wide temperature range and fast recharging, to name just a few.

Powervamp has through many years' experience been heavily involved with various battery related projects and applications, including:

- Specialist automotive applications
- Marine applications
- Aviation applications
- Vehicle tracking/GPS systems
- Portable CCTV systems
- Remote power installations
- Emergency vehicle systems
- Solar and renewable energy systems
- Portable instrumentation
- Medical battery systems
- Standby power systems
- Specialist lighting



* The name is derived from power = volts x amps



Cyclon Cell

The Cyclon product utilises pure lead tin spirally wound technology, originally designed for the specialist military and aviation sectors.

Cyclon batteries have proven to be very reliable with far superior performance when used in extreme applications when compared with standard sealed lead acid batteries. The Cyclon product has many key performance features such as very high output currents, wide operational temperature range and the ability to be recharged within one hour. This, combined with the fact that the battery is a dry cell and requires no maintenance, makes using Cyclon cells ideal in many types of application.

Cyclon battery cells can be used in custom-built battery packs to obtain any voltages in multiples of 2V. They can be formed into many shapes using these compact cylindrical cells; alternatively the monobloc prismatic battery is available in 4V and 6V blocks.



Cyclon Cell Performance Characteristics

- Charging: To 95% capacity within 1 hour
- No requirement to limit charge current
- Storage life: 2 years from fully charged
- Cycle life: Up to 2500 cycles @ 30% depth of discharge
- Float life: 15 years @ 20 degrees C
- High current performance: Up to 26C discharge rate
- Strength: Very high resistance to shock and vibration
- Installation: Can be used in any orientation
- Safety: No loose electrolyte – will not leak acid
- Transportation: Non-hazardous, non-spillable cargo classification by land, air or sea
- Operating temperature: -65 to +80 degrees C

Contact Powervamp for Cyclon monobloc performance data

Cyclon Batteries Specifications

Battery part	Model	Voltage	Capacity (Ah)	Peak discharge (Amps)	Continuous discharge (Amps)	Dimensions (mm)	Height over terminals (mm)	Weight (kg)	Terminal design	Terminal size (mm)
0810-0004	D Cell	2	2.5	200	65	34.3 Dia	68.1	0.18	Tabs	4.75 x 0.64
0860-0004	DT Cell	2	4.5	200	65	34.3 Dia	102.9	0.28	Tabs	4.75 x 0.64
0800-0004	X Cell	2	5.0	285	65	44.5 Dia	81.5	0.36	Tabs	6.35 x 0.64
0850-0004	E Cell	2	8.0	330	65	44.5 Dia	108.7	0.49	Tabs	6.35 x 0.64
0840-0004	J Cell	2	12	400	100	51.8 Dia	135.6	0.84	Tabs	7.92 x 0.81
0820-0004	BC Cell	2	25	665	250	65.3 Dia	173.2	1.67	Threaded Post	M6 Neg M8 Pos
0819-0010	D M/bloc	4	2.5	200	50	80L x 46W	69.9	0.36	Tabs	4.75 x 0.64
0809-0010	X M/bloc	4	5.0	285	50	98L x 54W	76.7	0.74	Tabs	6.35 x 0.64
0859-0010	E M/bloc	4	8.0	330	50	97L x 54W	101.6	0.96	Tabs	6.35 x 0.64
0819-0012	D M/bloc	6	2.5	200	50	114L x 46W	69.9	0.52	Tabs	4.75 x 0.64
0809-0012	X M/bloc	6	5.0	285	50	140L x 54W	76.7	0.98	Tabs	6.35 x 0.64
0859-0012	E M/bloc	6	8.0	330	50	140L x 54W	101.6	1.43	Tabs	6.35 x 0.64

Genesis

Since its introduction in the early 1990s, the Genesis thin plate pure lead-tin (TPPL) battery has established itself as a premium high performance battery suitable for a wide range of demanding applications.

The Genesis range using TPPL technology can be found in applications as diverse as emergency power, avionics, medical, military and consumer equipment.



Genesis Performance Characteristics

- Charging: To 95% capacity within 1 hour
- No requirement to limit charge current
- Storage life: 2 years from fully charged
- Cycle life: Up to 400 cycles @ 80% depth of discharge
- Float/Standby design life: 10 years @ 20 degrees C
- High current output and stable voltage profile
- Dimensions: All industry standard standby footprints
- Installation: Can be used in any orientation (except inverted)
- Safety: No loose electrolyte - will not leak acid
- Transportation: Non-hazardous, non-spillable cargo classification by land, air or sea
- Operating temperature: -40 to +45 degrees C



Genesis Specifications

Battery model	Voltage	Capacity (Ah) at 10 Hour Rate	Short Circuit Current (Amps)	Internal Resistance (Milliohms)	Dimensions L x W x H (mm)	Weight (kg)	Terminal design	Terminal Size (mm)
G13EP	12	13	1400	8.5	176 x 84 x 130	4.9	Threaded Socket and Bolt	M6
G16EP	12	16	1600	7.5	182 x 77 x 168	6.1	Threaded Socket and Bolt	M6
G26EP	12	26	2400	5.0	167 x 166 x 171	10.1	Threaded Socket and Bolt	M6
G42EP	12	42	2600	4.5	198 x 166 x 171	14.9	Threaded Socket and Bolt	M6
G70EP	12	71	3500	3.5	331 x 169 x 176	24.3	Threaded Socket and Bolt	M6

SBS

The SBS battery range utilises unique and proven technology to provide a superior range of valve regulated batteries with an extended service life in compact and energy dense configurations.

SBS batteries are manufactured to the highest international standards and are ideal for reliable use in all wireless and fixed-line communication applications.

SBS batteries are also widely used in cable TV, emergency lighting, power generation and offshore applications. SBS batteries are designed to cope with elevated temperatures and harsh environments.

The advanced thin plate, pure-lead technology and unique manufacturing methods used make SBS batteries the choice for long and trouble-free service.



SBS Performance Characteristics

- Charging: To 95% capacity within 1 hour
- No requirement to limit charge current
- Storage life: 2 years from fully charged
- Float/Standby design life: 15 years @ 20 degrees C
- High wattage output and stable voltage profile
- Dimensions: All standard telecoms and standby footprints
- Installation: Can be used in any orientation (except inverted)
- Safety: No loose electrolyte – will not leak acid
- Transportation: Non-hazardous, non-spillable cargo classification by land, air or sea
- Operating temperature: 40 to +50 degrees C



SBS Specifications

Battery model	Voltage	Capacity (Ah) at 10 Hour Rate	Short Circuit Current (Amps)	Internal Resistance (Milliohms)	Dimensions L x W x H (mm)	Weight (kg)	Terminal design	Terminal Size (mm)
SBS 8	12	7	455	27.1	138 x 86 x 101	2.7	Threaded socket and bolt	M4
SBS 15	12	14	891	13.5	200 x 77 x 140	5.7	Threaded Post and Nut	M6
SBS 30	12	26	1556	7.9	250 x 97 x 156	9.5	Threaded Post and Nut	M6
SBS 40	12	38	2184	5.6	250 x 97 x 206	12.7	Threaded Post and Nut	M6
SBS 60	12	51	2618	4.4	220 x 121 x 261	18.5	Threaded Post and Nut	M6
SBS 110	6	115	3804	1.7	200 x 208 x 239	21.2	Threaded Post and Nut	M8
SBS 130	6	132	4111	1.4	200 x 208 x 239	22.7	Threaded Post and Nut	M8
SBS 300	2	310	8700	0.23	200 x 208 x 239	21.7	Threaded Post and Nut	M8
SBS 390	2	360	11101	0.18	200 x 208 x 239	23.2	Threaded Post and Nut	M8
SBS B8	12	31	1584	7.7	280 x 97 x 159	10.3	Threaded socket and bolt	M8
SBS B10	12	38	1968	6.2	280 x 97 x 184	12.8	Threaded socket and bolt	M8
SBS B14	12	62	3210	3.8	280 x 97 x 264	19.1	Threaded socket and bolt	M8
SBS C11	12	92	3696	3.3	395 x 105 x 264	28	Threaded socket and bolt	M8



Odyssey

Odyssey batteries provide the user with many key performance features and benefits, such as very high cranking currents, wide operational temperature range and a very high resistance to shock and vibration. This combined with the fact that the battery is a dry cell and requires no maintenance, makes using Odyssey the ultimate battery for the harshest of environments.

As well as offering customers many more benefits compared with other battery types, Odyssey batteries can also be used in a whole host of different applications. Using pure lead tin technology originally designed for the aviation industry, these batteries have proven to be far superior when used in extreme applications in comparison with standard sealed lead acid or conventional wet lead acid batteries.

Odyssey Battery Characteristics

- Very high starting/output current
- High resistance to shock and vibration
- Dry cell (no loose electrolyte)
- Two year storage life
- Can be installed in any orientation (except inverted)
- Can be fast charged to 95% within one hour
- High Cycle life up to 400 at 80% depth of discharge
- Wide temperature range -40 to +80 degrees C (with metal jacket)
- Two year warranty
- Excellent recovery from deep discharge
- Can replace much larger conventional starter batteries
- Classified as non-spillable cargo for shipment (land, sea or air)



Odyssey Specifications

Battery Model	Voltage	Capacity (Ah) at 20 Hour Rate	Peak Cranking Amps (5 secs)	Cold Cranking Amps (SAE rating)	Dimensions L x W x H (mm)	Weight (kg)	Terminal Design
PC310	12	8	310	100	138 x 86 x 101	2.7	Threaded M4 Socket and Bolt
PC535	12	14	535	200	170 x 99 x 157	5.4	Threaded M6 Post and Nut
PC545	12	13	545	185	178 x 86 x 131	5.7	Threaded M6 Socket and Bolt
PC625	12	18	625	265	170 x 99 x 175	6.0	Threaded M6 Post and Nut
PC680	12	16	680	220	181 x 76 x 168	7.0	Threaded M6 Socket and Bolt. (Automotive Posts optional)
PC925	12	28	925	380	167 x 179 x 128	11.8	Threaded M6 Socket and Bolt. (Automotive Posts optional)
PC1200	12	42	1200	550	200 x 169 x 173	17.4	Threaded M6 Socket and Bolt. (Automotive Posts optional)
PC1230	12	55	1230	730	240 x 178 x 201	20.6	Automotive posts (top) with 3/8 socket (side)
PC1400	12	65	1400	810	240 x 174 x 221	22.7	Automotive Posts
PC1500	12	68	1500	880	276 x 172 x 199	22.4	Automotive Posts
PC1700	12	68	1700	875	331 x 168 x 176	27.6	Threaded M6 Socket and Bolt. (Automotive Posts optional)
PC2150	12	92	2150	1150	331 x 173 x 241	35.3	Threaded 3/8 post and Nut. (Automotive Posts optional)
PC2250	12	126	2250	1225	286 x 269 x 233	39.0	Dual Automotive Posts and 3/8 Threaded Post

Powervamp Racing

The Powervamp range of high discharge fully plated sealed Racing Batteries uses state-of-the-art, pure lead technology having been designed and engineered to the highest specification.

Sometimes supplied under different branded "Trade" names, these famous Hawker (EnerSys) 12 Volt batteries offer the best performance to weight ratio of any battery and are recognised worldwide as the leading race/rally dry cell battery.

Originally used to withstand the shock and vibration experienced in combat aircraft, the qualities of the Powervamp Racing Batteries have proved to be exceptional for race and rally applications.



Powervamp Racing Battery Characteristics

- Very high starting/output current
- High resistance to shock and vibration
- Dry cell (no loose electrolyte)
- Two year storage life
- Can be installed in any orientation (except inverted)
- Can be fast charged to 95% within one hour
- Wide temperature range -40 to +50 degrees C (with metal jacket)
- One year warranty
- Excellent recovery from deep discharge
- Can replace much larger conventional starter batteries
- Classified as non-spillable cargo for shipment (land, sea or air)



Powervamp Racing Batteries Specifications

Battery Model	Voltage	Capacity (Ah) at 10 Hour Rate	Starting Current (Amps)	Dimensions L x W x H (mm)	Weight (kg)	Terminal Design	Terminal Size (mm)
PVR8	12	7	310	138 x 86 x 101	2.7	Threaded socket and bolt	M4
PVR15	12	14	540	200 x 77 x 140	5.7	Threaded post and nut	M6
PVR18	12	14	535	170 x 99 x 155	5.4	Threaded post and nut	M6
PVR20	12	14	545	178 x 86 x 132	5.7	Threaded socket and bolt	M6
PVR22	12	18	625	170 x 99 x 155	6.0	Threaded post and nut	M6
PVR25	12	18	680	185 x 79 x 170	7.0	Threaded socket and bolt	M6
PVR30	12	26	840	250 x 97 x 156	9.0	Threaded post and nut	M6
PVR35	12	29	925	169 x 179 x 128	11.8	Threaded socket and bolt	M6
PVR40	12	37	1140	250 x 97 x 206	12.5	Threaded post and nut	M6
PVR60	12	51	1390	220 x 121 x 260	18.5	Threaded post and nut	M6

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