PROCUREMENT SPECIALISTS DIRECT FROM THE FACTORY

+ LITHIUM, CARBON GEL AND LEAD ACID BATTERIES

Today's latest specification batteries for today's modern requirements





PREDATOR
BATTERIES LTD



Predator + AES

A joint venture between Predator Batteries and Advanced Energy Storage, combines over 40 years of experience in the Battery Business.

Markets have changed and so has the demands on Batteries.
Supplying the correct battery for each application is vital.
Understanding these options and offering the ultimate
Battery Products is the key speciality of Predator AES.

By simply scheduling a requirement, which is locked into our system, Predator AES are able to plan ahead with the manufacturer, to ensure that the supply is virtually seemless and, 'just in time'. Brand new stock, and because of the low cost operation, large savings for our customers.



+Contents

- 4 / About Us
- **6** / Predator Lithium Iron Batteries
- **8** / Predator Lead Acid Batteries
- 10 / Predator Advanced Energy Storage48V Lithium for Marine Propulsion,Domestic & Commercial

About Us

Stuart James (SJ)

Since 1979, SJ has been a significant figure in the UK Battery Market. Grew the family business to the largest Independent Distributor in the UK (MBD), with over 10% market share of the Automotive Battery Market, with over 200 employees in 12 distribution sites. MBD were the first importer of Batteries from South Africa and South Korea.

Initiated the first Marine Leisure batteries from these 3 sources - the originator of the '110Leisure'.

The business was aquired by Exide (CMP) in 1998. Since then SJ has distributed exclusively, Trojan, Leoch and Relion (the first drop fit Lithium battery).

Apart from Batteries, SJ is a seasoned boating servicing experience for customers. enthusiast, and for a period of 10 years headed up the Dealership for Fairline in South in companies ranging from Start-Ups, SMEs West Mallorca. SJ is now the Chairman of the Electric Boat Association and is keen to recommend the Predator range for this market.

Mark Baker

Mark is a seasoned professional in the battery industry with a career spanning over 26 years.

Mark's journey from ground level to the position of Sales Director reflect his ability to adapt, learn and grow within the everchanging battery market.

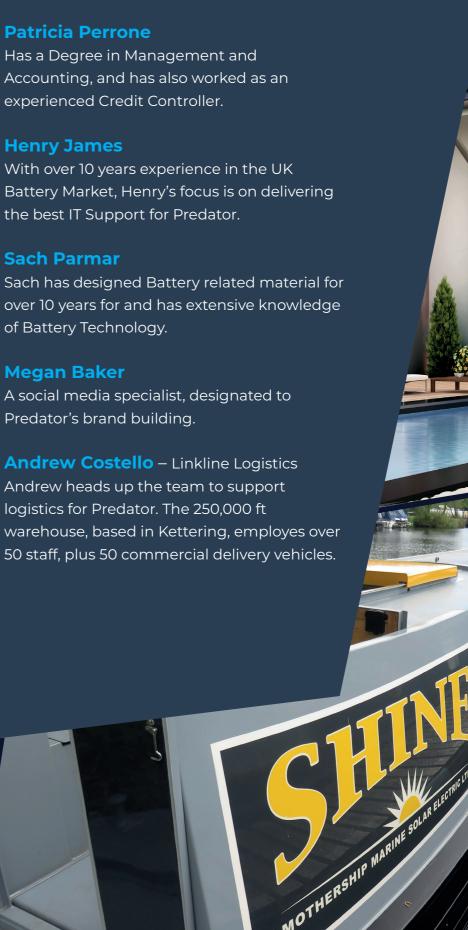
Mark's knowledge of batteries and related technologies has also played a significant role in the growth and advancement of the companies he has worked with.

Nick Southan

As a successful businessman, Nick has established a successful track record in sales and distribution. A previous mentor with the Princes Trust he has lead businesses through innovation enabling a fresh buying and He has founded and operated at board level to PLCs. He is passionate about delivering customer engagement that stands out from the crowd.

From a Captain in the Merchant Navy Nick has since owned many sailing and motor yachts and is a Yacht Master (Ocean).

Has a Degree in Management and experienced Credit Controller.



Predator Batteries New Brand to the UK, but with Years of Experience



PREDATOR - Lithium Iron Phosphate Batteries

Predator Lithium Batteries offer either the very latest technologolies, or the very best value for money with proven technology. Predator Batteries have years of experience in the sourcing and distributing Lithium Batteries.

Please read the questions and answers at the bottom of the page.

	PREDATOR LIFE POWER - First and Second Generation															
Part Number	Volts	Ah	Total Energy (Wh)	Dimensions	Weight (KG)	Cell Type	Max. Charge Rate	Max. Continuous Discharge Rate	Max. PULSE Discharge Rate	Charge Level Indicator	Bluetooth	Self Heating	Canbus / RS485	Series Support	Parallel Support	Series + Parallel Support
PR12-80-LIFe-4S	12.8	80	1,024	260*172*224	9	Pouche	80A	80A	160A	х	х	Х	Х	4	4	Х
PR12-100S-LIFe-4S	12.8	100	1,280	306*175*220	12	Prismatic	100A	100A	200A	х	х	Х	х	4	4	x
PR12-100-LIFe-2S	12.8	100	1,280	332*176*220	11	Pouche	100A	100A	200A	х	х	Х	х	2	4	х
PR12-100D-LIFe-4S	12.8	100	1,280	353*174*190	11	Prismatic	100A	100A	200A	х	х	Х	х	4	4	х
PR12-150D-LIFe-4S	12.8	150	1,920	353*174*190	18	Prismatic	150A	150A	300A	х	х	Х	х	4	4	х
PR12-150L-LIFe-4S	12.8	150	1,920	490*170*240	20	Pouche	150A	150A	300A	х	х	Х	х	4	4	x
PR12-200-LIFe-4S	12.8	200	2,560	525*238*220	26	Pouche	200A	200A	400A	х	х	Х	х	4	4	X
PR12-300-LIFe-4S	12.8	300	3,840	525*207*220	33	Pouche	200A	200A	400A	х	х	Х	х	4	4	X
PR24-50-LIFe-2S	25.6	50	1,280	332*176*220	11	Pouche	50A	50A	100A	х	х	Х	х	2	4	х
PR24-100-LIFe-2S	25.6	100	2,560	525*238*220	26	Pouche	100A	100A	200A	х	х	Х	х	2	4	х
PR24-150-LIFe-2S	25.6	150	3,840	525*238*220	33	Pouche	150A	150A	300A	х	Х	Х	х	2	4	х
PR12-100S-BH	12.8	100	1,280	306*175*220	12	Prismatic	100A	100A	200A	х	Y	Υ	х	4	4	х
PR12-100D-BH	12.8	100	1,280	353*174*190	11	Prismatic	100A	100A	200A	х	Υ	Υ	Х	4	4	Х
PR12-135-BH	12.8	135	1,728	330*172*214	16	Prismatic	100A	100A	200A	х	Υ	Υ	Х	4	4	Х
PR12-150D-BH	12.8	150	1,920	353*174*190	20	Prismatic	100A	150A	300A	х	Υ	Υ	Х	4	4	Х
	1				DD		V CENEDATION	2 VDII Camus Blustant		1	1		1		1	

	PREDATOR ENERGY GENERATION 3 - XBH - Canus, Bluetooth and Heating															
Part Number	Volts	Ah	Total Energy (Wh)	Dimensions	Weight (KG)	Cell Type	Max Charge Rate	Max Continuous Discharge Rate	Max PULSE Discharge Rate	Charge Level Indicator	Bluetooth	Self Heating	Canbus / RS485	Series Support	Parallel Support	Series + Parallel Support
PR12-100-XBH	12.8	100	1,280	330*172*214	11	Prismatic	100A	100A	200A	Y	Υ	Υ	Y	4	4	4+4
PR12-200-XBH	12.8	200	2,560	522*240*219	21	Prismatic	100A	200A	300A	Y	Y	Y	Y	4	4	4+4
PR12-300-XBH	12.8	300	3,840	522*240*219	31	Prismatic	100A	100A	200A	Y	Y	Y	Y	4	4	4+4
PR24-50-XBH	25.6	50	1,280	330*172*214	11	Prismatic	50A	50A	100A	Y	Y	Υ	Υ	4	4	2+4
PR24-100-XBH	25.6	100	2,560	522*240*219	21	Prismatic	50A	100A	200A	Y	Υ	Y	Y	4	4	2+4
PR24-200-XBH	25.6	200	5,120	522*240*219	39	Prismatic	150A	150A	300A	Υ	Y	Y	Y	4	4	2+4

						PREDATOR Xt	reme - Marine a	nd Engine Starting Lithium	Batteries							
Part Number	Volts	Ah	Starting Current (5Secs)	Dimensions	Total Energy (Wh)	Cell Type	Max Charge Rate	Max Continuous Discharge Rate	Polarity Layout	Weight (KG)	Bluetooth	Self Heating	Canbus / RS485	Series Support	Parallel Support	Series + Parallel Support
PR12-520-19BL	12.8	7	520	182*79*171*171	90	Cylindrical	7	7	0	1.4	Х	Х	х	х	х	Х
PR12-680-LB1	12.8	20	680	205*175*175	256	Cylindrical	20	20	0	3.4	Х	Х	х	Х	х	х
PR12-1100-D23R*	12.8	40	1,100	238*172*200*221	512	Cylindrical	40	40	1*	5.4	х	Х	х	х	х	x
PR12-1100-L2	12.8	40	1,100	240*174*190	512	Cylindrical	40	40	0	5.4	х	Х	х	х	х	x
PR12-1300-D26R*	12.8	56	1,300	260*174*203*224	717	Cylindrical	60	60	1*	5.9	х	Х	х	х	х	х
PR12-1300-L3	12.8	56	1,300	278*175*190	717	Cylindrical	60	60	0	6.1	х	Х	х	х	х	х
PR12-1600-D31R*	12.8	56	1,600	305*173*203*224	717	Cylindrical	60	60	1*	7.5	х	Х	х	х	х	x
PR12-1600-L4	12.8	56	1,600	305*173*190*190	717	Cylindrical	60	60	0	7.6	х	Х	х	х	х	х
PR12-1900-L5	12.8	60	1,900	352*174*190*190	768	Cylindrical	60	60	0	7.8	х	Х	х	х	х	x
PR12-2300-L6	12.8	68	2,300	393*174*190*190	870	Cylindrical	80	80	1	9.1	х	Х	х	х	х	х

^{*} opposite layout options available on request



Why buy Lithium, and what's the difference in the ranges? Why are the 'Life' Lithium Batteries so competitively priced?

- Because they are the first generation Lithium batteries with the first generation BMS. The Lithium cells are also Pouche type - so very cost effective. There are no frills and extras, but the performance of the battery is still significantly better than a Lead Acid Battery. Greater cycle Life, does not sulphate if left discharged, recharges in under an hour, half the weight. A tried and tested battery.

Why are the XBH batteries more costly?

- These are the latest technology Lithium batteries. Firstly the Lithium Cells are Prismatic. These are manufactured separately in a controlled environment, before fitting inside the battery. Secondly, the BMS is the latest advancement - allowing a charge level indicator, a Bluetooth system that connects to an App, plus the ability to withstand a high 'pulse'. Then, thirdly, the self-heating function. Lithium batteries will 'destroy' themselves if charged below 0°C (a phenomenon called 'Plating'). The heating function switches the charge current into the heating blanket. This heats the battery to 5°C. Finally Canbus connects the batteries together to give the optimum cell balancing.

7

6 optimum cell balancing.

PREDATOR LEAD ACID BATTERIES

12v Lead Carbon Gel, AES Series:- 2,000 CYCLES (60% DOD) PSOC

AES series lead-carbon battery combining 5th Generation Pure Gel tech, uses graphene as a key ingredient, added to the negative plate of the battery to make these batteries have the advantages of both lead-acid batteries and super capacitors. This not only improves the ability of rapid charge and discharge, but also significantly prolongs the battery life by pure Gel non-stratification protection. This product is specially designed for daily cycle charging and discharging, designed for PSOC conditions of ESS applications. 24/7, 365 use.

Part Number	Voltage	Ah (C100)	Ah (C20)	Total Energy (Wh) (C100)	Dimensions	Weight (KG)	Terminal	Layout
PR12-105S-AES	12.6	105	90	1,323	306*169*216	28	M8	1
PR12-110DT-AES	12.6	110	95	1,386	328*172*220	30	Twin Terminal	1
PR12-150-AES	12.6	150	140	1,890	340*173*287	41	M8	1
PR12-200-AES	12.6	200	175	2,520	532*207*219	50	M8	4
PR12-240-AES	12.6	240	225	3,024	522*240*224	63	M8	4
PR12-280-AES	12.6	280	260	3,528	521*268*225	72	M8	4

12v Lead, Dual Purpose, Deep Cycle and Starting AGM:- 1,000 cycles (60% DOD)

DPX AGM Dual Purpose AGM, combines Carbon and Tin alloys to give a true Deep Cycle battery, plus high cranking power for engine starting (MCA).

How? Extra Thick Plates, Deep Cycle Paste mix, with Tin Alloy, Carbon reduces the effects of PSOC, Plate design for Max current flow, DP AGM Separator.

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Part Number	Voltage	Ah C100/C20	MCA	PCHA	Dimensions	Weight (KG)	Terminal	Layout
PR12-1500DT-DPX	12.6	90/85	750 MCA	1,500 Amps	260*169*210	25	Twin Terminal	1
PR12-1750DT-DPX	12.6	115/105	875 MCA	1750 Amps	306*169*216	29	Twin Terminal	1
PR12-2000DT-DPX	12.6	130/120	1,000 MCA	2,000 Amps	328*172*220	31	Twin Terminal	1
PR12-2500-DPX	12.6	160/145	1,250 MCA	2,500 Amps	328*172*221	41	M8 with Post	1
PR12-3000-DPX	12.6	200/180	1,500 MCA	3,000 Amps	532*207*219	53	M8 with Post	4
PR12-4000-DPX	12.6	260/240	2,000 MCA	4,000 Amps	522*240*224	65	M8 with Post	4
PR12-5000-DPX	12.6	330/300	2,500 MCA	5,000 Amps	521*268*225	78	M8 with Post	4

12v Lead, Deep Cycle AGM:- 600 cycles (60% DOD)

AGM series (Absorbed Glass Mat), Deep Cycle batteries, are also known as VRLA (Valve Regulated Lead Acid). Rather than a flooded battery, the Electrolyte is absorbed in the Glass Fibre separation (approx 75% absorbed). The result allows for much thicker deep cycle plates, which can cycle up to 5 times more than a conventional flooded battery.

Part Number	Voltage	Ah (C100)	Ah (C20)	Total Energy (Wh) (C100)	Dimensions	Weight (KG)	Terminal	Layout
PR12-85-AGM	12.6	90	85	1,134	260*169*216	22	M8	1
PR12-110L-AGM	12.6	110	92	1,386	353*175*190	27.5	POST	0
PR12-115-AGM	12.6	115	105	1,449	306*169*216	28	M8	1
PR12-130-AGM	12.6	130	114	1,638	328*172*220	30	M8	1
PR12-160-AGM	12.6	160	145	2,016	340*173*287	41	M8	1
PR12-200-AGM	12.6	200	180	2,520	532*207*219	50	M8	4
PR12-240-AGM	12.6	240	225	3,024	522*240*224	63	M8	4
PR12-280-AGM	12.6	280	260	3,528	521*268*225	72	M8	4

Terminal Adaptor	M8 to SAE	Automotive Post			
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			12v Lead, Dual Pu	rpose, Deep Cycle and Starting SMF:- 2	200 Cycles (50% DOD)			
Part Number	Voltage	Ah (C100)	Ah (C20)	Total Energy (Wh) (C100)	Dimensions	Weight (KG)	Terminal	Layout
PR12-85-SMF	12.6	85	80	650	260*173*222*239	16.7	Twin Terminal	1
PR12-110L-SMF	12.6	110	100	860	353*175*190	20.9	Post	0
PR12-110-SMF	12.6	110	100	750	317*173*223*240	20.7	Twin Terminal	1
PR12-120-SMF	12.6	120	110	850	330*173*222*239	23.6	Twin Terminal	1
PR12-130-SMF	12.6	130	120	1000	330*173*222*239	26.1	Twin Terminal	1

f 8

PREDATOR ADVANCED ENERGY STORAGE - Lithium & Lead Acid Batteries for Renewable Energy Storage, Marine Propulsion, & Electric Vehicles

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Please read the questions and answers at the bottom of pages 6 & 7.

	Lithium Rack Storage Batteries												
Part Number	Volts	Ah	Total Energy (Wh)	Dimensions	Weight (KG)	Max. charging	Max. Discharging	Pulse A	Max Parallel				
PR24-200-XBH	25.6	200	5120	442*400*130	40.5	100	100		4				
PR48-50-XBH	48	50	2400	442*400*130	30	50	50	70 @ 1S	14				
PR48-100 -XBH	48	100	4800	442*396*130.5	40	100	100	150 @ 2S	15				
PR48-200 -XBH	48	200	9600	442*550*250	78	100	100	151 @ 2S	15				
PR51.2-100-RESS	51.2	100	5,120	520*165*566	50	100	100	120 @ 5s	6				
PR51.2-200-RESS	51.2	200	10,240	520*150*850	100	100	200	220 @ 5s	6				

Features

- Victron Compatible
- Blue tooth
- Heating



Safety

- Prismatic LiFePO4 3.2v 205ah cells
- Low Voltage System
- UN38.3 certification



Design

- Standard 19" rack
- Easy Insatallation
- -10-> 55C temp



Battery Management System

- Independent Protection
- SEC,SOH, display 7 PC software
- RC485, CAN, RS232 Comms Port











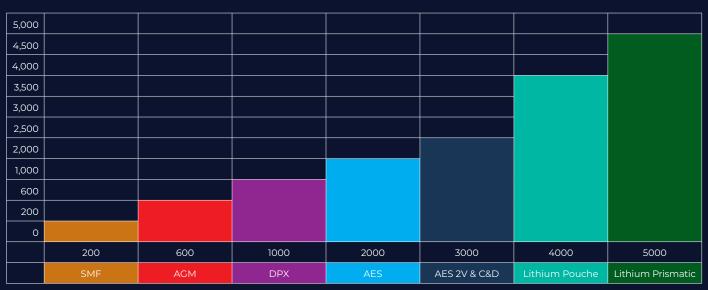
				Predator Lithium Marine by Tr	ojan				
Part Number	Volts	Ah	Total Energy (Wh)	Dimensions	Weight (KG)	Max. charging	Max. discharging	Pulse A	Max Parallel
PR12-120-GC2	12	120	1,440	260*180*272	15	40	150	tba	tba
PR24-60-GC2	24	60	1,440	260*180*272	15	30	60	tba	tba
PR36-45-GC2	36	45	1,620	260*180*272	15	20	50	tba	tba
PR48-30-GC2	48	30	1,440	260*180*272	15	10	60	tba	tba
PR48-100	48	100	4,800	440*470*330	44	100	100	250	х
PR48-800WCH	48	X	X	328*112*178	4	12-18 amps	X	Х	Х

	Predator Lead Acid Batteries											
				Flooded Tubular Batteries								
Part Number	Voltage	Ah (C100)	Ah (C20)	Total Energy (Wh)	Dimensions	Weight (KG)	Terminal	Layout				
PR6-225-FTP	6.3	245	225	1,544	259*182*248(283)	29.0	Twin	Diagonal				
PR6-240-FTP	6.3	260	240	1,638	260*182*270(303)	32.5	Twin	Diagonal				
PR6-265-FTP	6.3	285	265	1,796	260*182*270(303)	34.0	Twin	Diagonal				
PR8-190-FTP	8.4	190	170	1,596	259*182*248(283)	30.0	Twin	Diagonal				
PR12-150-FTP	12.6	165	150	2,079	327*182*277	38.5	post	1				

			Predator Lead Carbon Gel Batteries													
Part Number	Voltage	Ah (C100)	Ah (C20)	Total Energy (Wh)	Dimensions	Weight (KG)	Terminal	Layout								
PR6-220-AES	6.3	240	220	1,512	260*180*245(264)	30.0	DT	Diagonal								
PR6-240-AES	6.3	265	240	1,670	260*180*245(264)	32.0	DT	Diagonal								
PR6-440-AES	6.3	485	440	3,056	295*178*404(404)	41.0	DT	Diagonal								
PR8-190-AES	8.4	210	190	1,764	260*182*267(272)	32.0	DT	Diagonal								
PR12-165G-AES	12.6	165	165	2,079	327*180*271(276)	43.0	M8	1								
AES12-2170	12.6	209	192	2,633	559*126*322	61.0	M8	FT								
AES12-2870	12.6	242	242	3,049	559*154*322	73.0	M8	FT								

10 11

Keys factors when considering 'what battery should we use?'



Number of Cycles

Why the correct battery pays in the long run and is more Environmentally Friendly

Battery Series	SMF	AGM	DPX	AES	LITHIUM
NO Cycles @ 60% DOD	200	600	1000	2000	5000
Cost ratio - approx cost/100ah	£100	£160	£200	£240	£340
Cost per cycle	£0.50	£0.27	£0.20	£0.12	£0.07
Energy stored in Lifetime/ 100ah Kw	150	450	750	1500	3750
Cost ratio - approx cost/100ah	£100	£160	£200	£240	£340
Cost/Kw	£0.67	£0.36	£0.27	£0.16	£0.09
Greenometer Reading	13%	39%	55%	79%	91%

OTHER THINGS TO CONSIDER

With added financial implications

Cost of premature failure - engineer call outs

Cost of repeat batetry replacement

Cost of breakdown / Holiday ruined

Cost of Periodic Maintenance testing

Fitting Lithium = Less Weight, cost saving in vehicle's fuel*

Environmental impact of constantly replacing battery and Recycling

FITTING LITHIUM = LESS WEIGHT

COST SAVING IN 100,000 MILES

= £174

*Fitting 100ah Lithium vs 100 Lead saves 20Kg

*If a vehicle weighs 1500kg and has a payload of 1500kg then the decrease in payload is 1.35%. Vehicle does 100,000, 200 mile/day = 500 journeys * 20kg = 10 tones, which is 6 additional days for free OR Total weight reduction = 0.66% - 100,000 mile @25mpg = 4,000 gallons at £6.50/gallon = £26,000 - 0.0066% saving = £174

PREDATOR BATTERIES LTD

MIDLANDS WAREHOUSE

Linkline Transport, Appleby Lodge Way Sywell Road, Wellingborough NN8 6BT

SOUTHERN WAREHOUSE

Mr Batteries, Unit 2 Camelot Ct, Bancombe Rd, Somerton TA11 6SB

REGISTERED OFFICE

3 Weekley Wood Close, Kettering NN14 1UQ

COMPANY DETAILS

Company Reg. number: 14028522 Company Vat Number: 435 6032 13

Bank Sort code: 20-49-17

Bank Account number: 30235253





