



OMNIPOWER

THE POWER OF CHOICE

24V LiFeYPO₄ Battery (Lithium Iron Yttrium Phosphate)

- Includes Battery Management system, cell monitoring and voltage control
- Built-in fuse and DC isolator
- Integrated with leading solar inverters to ensure optimal battery charging for prolonged battery life.

HIGH ENERGY, HIGH PERFORMANCE ENERGY STORAGE SOLUTIONS.



Shelf Price < Lead Acid shelf price

Daily cycle for more than 10 years

Weight < 25 % of Lead Acid

Volume < 33% of Lead Acid

100% Environmentally friendly

100% Safe

Lithium Iron Phosphate (LiFeYPO₄) batteries have transfer efficiencies of more than 96% at C/2 charge and discharge rates they deliver 10 times higher turn around efficiencies than leading lead acid batteries. This feature implies major savings in the necessary size of the solar system required to charge the batteries.

LiFeYPO₄ batteries are capable of delivering up to 80% of their charge for more than 5000 times and are perfectly suited for operation in warm African conditions.

LiFeYPO₄ batteries have more than 4 times the energy density compared to Lead Acid equivalents. This has great advantages for application where light weight energy storage is a requirement. Applications such as 4x4 vehicles, yachts and even apartment buildings benefit greatly from these light weight batteries. No gassing, no ventilation required.

Available from **12V, 24V, 36V, 48V** up to **800V** with storage capacities from 1.8 kWh for small residential applications to 1080kWh for industrial applications.



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LiFeYPO4 Lithium Iron Yttrium Phosphate Battery

MODEL	OPR24V-77-2k	OPR24V-154-4k	OPR24V-230-6k	OPR24-310-8k
GENERAL				
Battery Type	LiFeYPO4 (Lithium Iron Yttrium Phosphate)			
Useable Capacity	2 000 Wh	4 000 Wh	6 000 Wh	8 000 Wh
Nominal Voltage	24 VDC			
Operating Voltage	23.2 VDC - 28.1VDC			
Operating Temperatures	-20°C to 65°C			
Cycle Life > 3600 Cycles (100% DoD)	2 000 Wh	4 000 Wh	6 000 Wh	8 000 Wh
Cycle Life > 5000 Cycles (80% DoD)	1 600 Wh	3 200 Wh	4 800 Wh	6 400 Wh
Cycle Life > 7000 Cycles (70% DoD)	1 400 Wh	2 800 Wh	4 200 Wh	5 600 Wh
Dimensions L x W x H (mm)	470 x 290 x 310	710 x 230 x 265	660 x 360 x 280	2 x (710 x 230 x 265)
Net Weight (kg)	25 kg	47 kg	75 kg	2 x 47 kg
Warranty	10 Years			
CHARGE				
Bulk Voltage	28.1 VDC			
Discharge Voltage (min)	23.2 V			
Max. Charge Current (cont.)	100 A	300 A	400 A	400 A
Max. Discharge Current (cont.)	100 A	300 A	400 A	400 A
Max. Discharge Current (burst @ 1 min)	150 A	400 A	600 A	600 A
Max. Discharge Current (peak @ 10 sec)	300 A	1200 A	1200 A	1200 A
Self-discharge Rate	< 2% per month			
Charge / Discharge Efficiency	96% @ C2; 98% @C10			
PROTECTION				
Isolator	150 A	400 A	600 A	600 A
In-line Fuse	150 A	400 A	600 A	600 A
Over Current Protection	150 A	400 A	600 A	600 A
Over Voltage Cut-out	32.0 V (4.0 V on any cell)			
Under Voltage Cut-out	22.8 V (2.85 V on any cell)			

MODEL	OPR24V-460-12k	OPR24V-770-20k	OPR24V-1250-32k	OPR24-1540-40k
GENERAL				
Battery Type	LiFeYPO4 (Lithium Iron Yttrium Phosphate)			
Useable Capacity	12 000 Wh	20 000 Wh	32 000 Wh	40 000 Wh
Nominal Voltage	24 VDC			
Operating Voltage	23.2 VDC - 28.1VDC			
Operating Temperatures	-20°C to 65°C			
Cycle Life > 3600 Cycles (100% DoD)	12 000 Wh	20 000 Wh	32 000 Wh	40 000 Wh
Cycle Life > 5000 Cycles (80% DoD)	9 600 Wh	16 000 Wh	25 600 Wh	32 000 Wh
Cycle Life > 7000 Cycles (70% DoD)	8 400 Wh	14 000 Wh	22 400 Wh	28 000 Wh
Dimensions L x W x H (mm)	2 x (660 x 360 x 280)	600 x 600 x 1600	600 x 600 x 1800	735 x 785 x 1130
Net Weight (kg)	2 x 75 kg	265 kg	445 kg	450 kg
Warranty	10 Years			
CHARGE				
Bulk Voltage	28.1 VDC			
Discharge Voltage (min)	23.2 V			
Max. Charge Current (cont.)	400 A			
Max. Discharge Current (cont.)	400 A			
Max. Discharge Current (burst @ 1 min)	600 A			
Max. Discharge Current (peak @ 10 sec)	1200 A			
Self-discharge Rate	< 2% per month			
Charge / Discharge Efficiency	96% @ C2; 98% @C10			
PROTECTION				
Isolator	600 A			
In-line Fuse	600 A			
Over Current Protection	600 A			
Over Voltage Cut-out	32.0 V (4.0 V on any cell)			
Under Voltage Cut-out	22.8 V (2.85 V on any cell)			

