

# SIMPLE FLEXIBLE ENERGY STORAGE LiFe SERIES

AUSTRALIAN MADE LITHIUM FERRO PHOSPHATE  
BATTERY MODULES

Scalable Energy Storage



Engineered and built with pride in Australia  
for the worlds most demanding customers

# PowerPlus Energy is an Australian manufacturer of Lithium Ferro Phosphate (LFP) batteries used in solar and industrial applications.

Currently offering 24v and 48v battery modules equipped with an internal Battery Management System (BMS) offering a level of operation and design flexibility not often found in alternative solutions. High voltage range planned for release in 2019.

## WHY LiFe SERIES LFP?

- AC/DC Couple On & Off Grid Compatible
- Australian Made - Quality engineered
- High Temp and Cycle LiFe
- 10 Year Warranty
- Light Weight and Compact
- High Efficiency - 30% more PV stored
- Lead Acid Replacement - or possible parallel connection
- Self Managed LFP Battery - suites most inverters and MPPT
- Parallel Connection to achieve kWh
- Long Service life
- Small Installation Foot Print
- Fully Recyclable No Heavy Metals
- Safe Lithium Chemistry
- Reduced generator runtime and increased fuel efficiency

## PV STORAGE OPTIONS COMPARISON 20 YEAR DESIGN LIFE

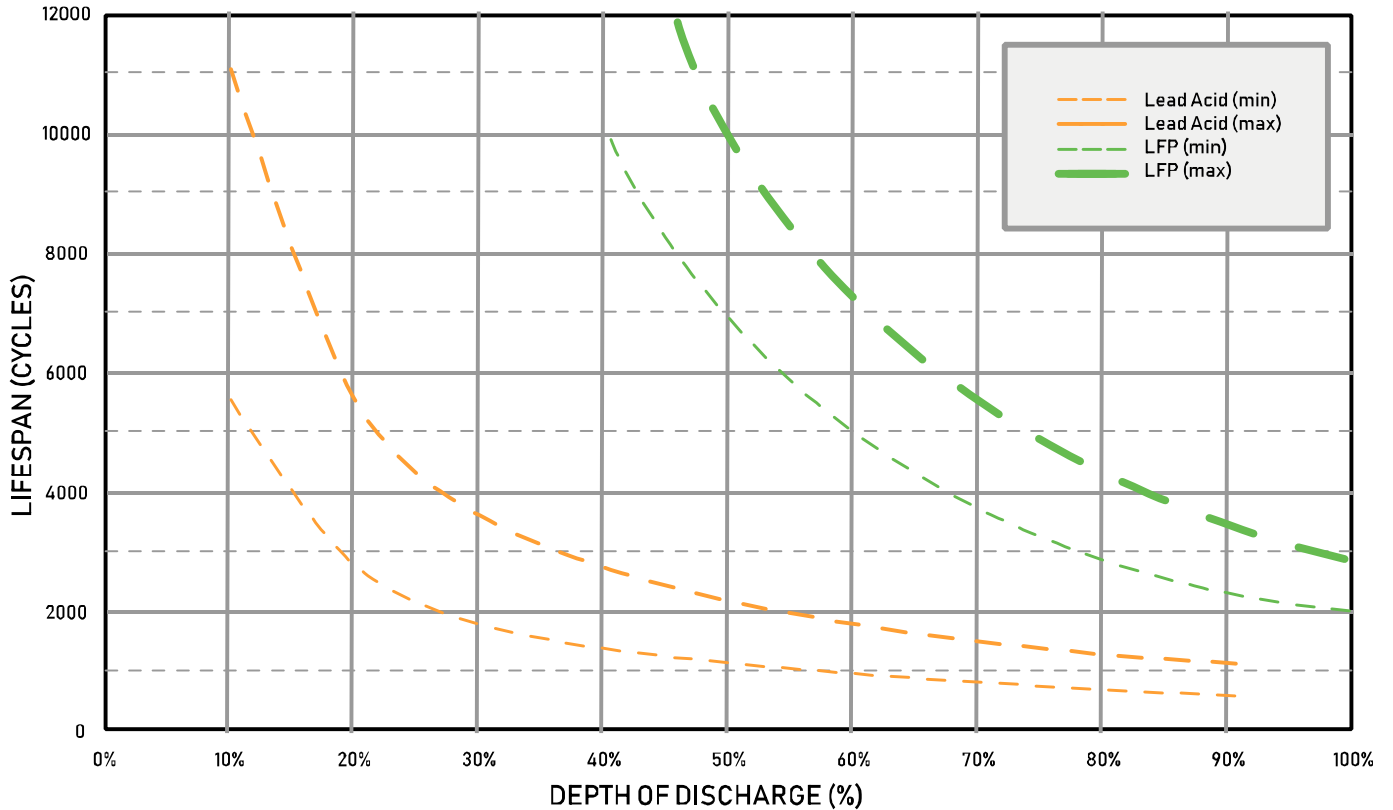
	Lead Acid 2V 1100ah Gel C120	Lithium Ferro Phosphate Cylindrical
kWh capacity	52.8	21.0
Daily kWh	10.5	10.5
Cycle Life	6,000	10,000+
System Weight	1584 kgs	245 kgs
Battery Weight	66kgs	35kgs
Volume	0.68m <sup>3</sup>	0.15m <sup>3</sup>
Service Life @ 35Deg	10 years	20+ years
Full capacity at C1	No	Yes
Efficiency	60 to 80%	96 to 98%
Cost	\$19,338	\$19,230
Warranty	3 Years	10 Years



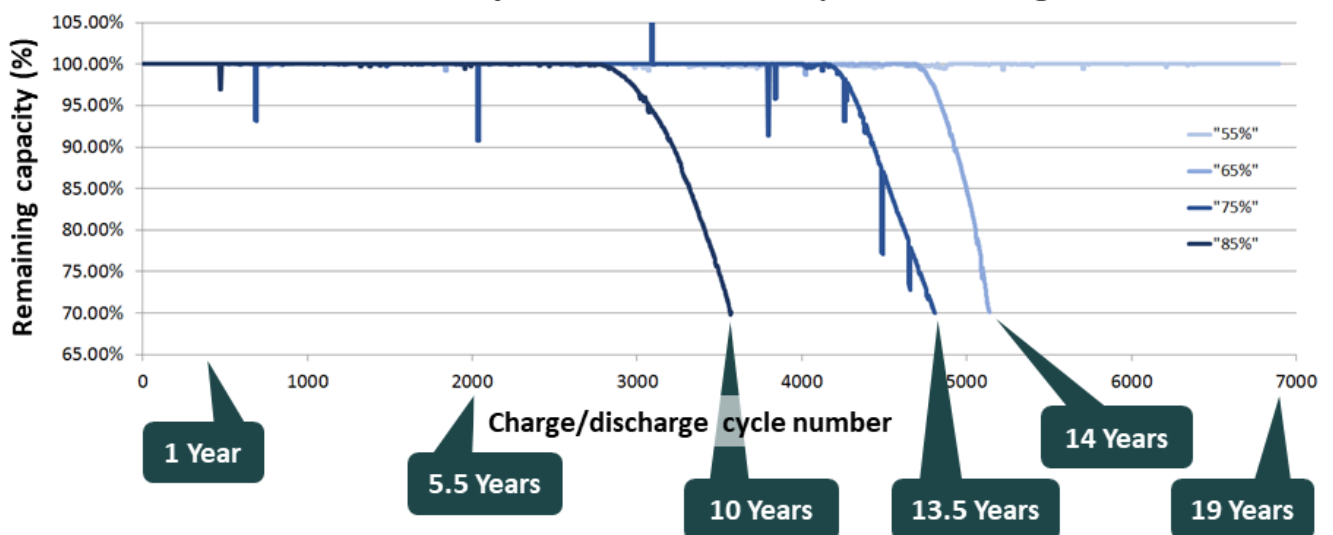
# LFP DISCHARGE CHARACTERISTICS

In solar applications with a discharge over one or two days the results are significantly improved compared to the laboratory tests when discharged over one hour.

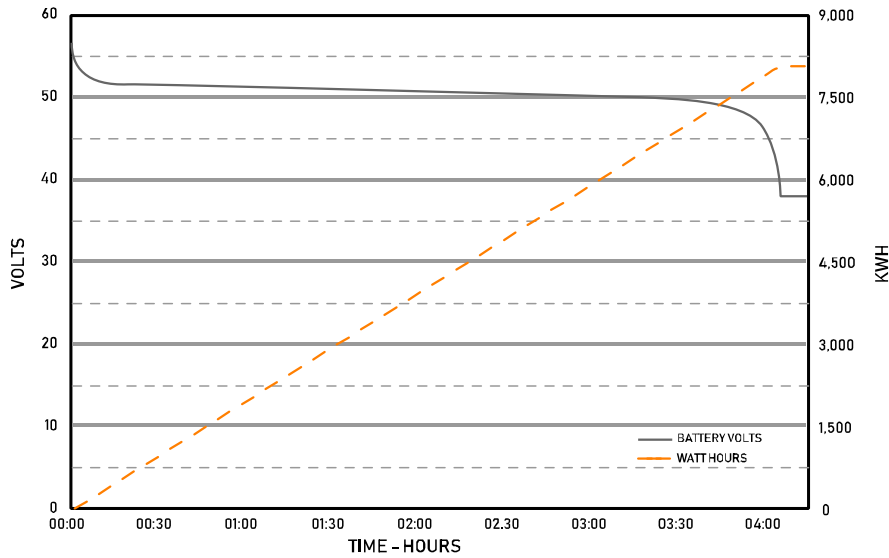
TYPICAL LEAD ACID & LFP BATTERY LIFESPAN vs DEPTH OF DISCHARGE



26650-3200-3.2V Cycle life at different depths of discharge at 1C rate



TYPICAL LFP DISCHARGE CURVE



# SPECIFICATIONS

Nominal Voltage DC	24V	48V	120V **
Nominal Capacity	3.3kWh/127ah	3.3kWh/63.5ah	3.3kWh/25.6ah
Continuous Discharge	C2	C1	C1
Continuous Charge	C2 (Recommended)		
Maximum Current	63A (Limited by circuit breaker)		32A
Charge/Discharge cycles	2700@100% DOD, 25°C / 5000 @ 75% DOD, 25°C / 10,000 @ 50% DOD 25°C		
Operating Temperature	Charge 0° to 55°C Discharge -20° to 60°C		
Operating Humidity (non condensing)	85%		
Battery Case Dimensions (mm)	620mm D x 430mm W x 88mm H		
Battery Mounting Options	Standard 19" Mounting /Horizontal or Vertical		
Terminal Connection	Amphenol Surlok 100Amp Non Keyed		
Weight Module	41kg		
BMS Over Volt cut off	29.2VDC	58.4VDC	146VDC
BMS Under Volt cut off	20V	40V	100V
BMS Over Temp cut off	65°C		
Circuit Breaker	2-pole 63Amp 500VDC		
Self Discharge	14% Per Annum		
Lithium Composition	Lithium Ferro Phosphate (LiFePO4 or LFP)		
IP Rating	IP40		

\*\* Available 2019