

# LITHIUM IRON PHOSPHATE BATTERY



## Technical Data Sheet for Lifos 12

### ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8V
Nominal Capacity	12Ah
Energy	153Wh
Resistance	$\leq 80\text{m}\Omega$
Efficiency	$\geq 90\%$
Self Discharge	$\leq 3\%$ per month
Maximum Batteries in Series	2
Maximum Batteries in Parallel	4

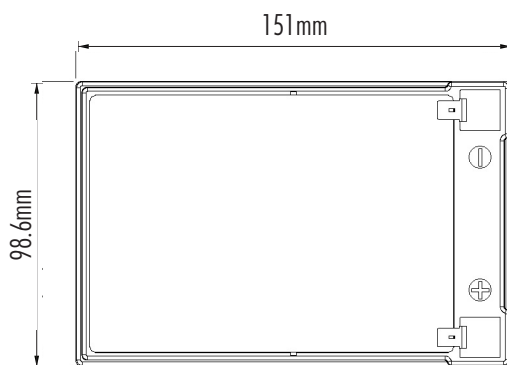
### COMPOSITION INFORMATION

Max Continuous Discharge Current	$\leq 6\text{A}$
Peak Discharge Current	12A (under 10 seconds)
PCM Discharge Current Cut Off	$30\text{A} \pm 5\text{A}$
PCM High Temperature Cut Off	75°C
Recommended Low Voltage Disconnect	$\geq 11.6\text{V}$
Reconnect Voltage	$\geq 12.8\text{V}$

### TEMPERATURE SPECIFICATIONS

Discharge Temperature	-20 ~ 60°C
Charge Temperature	0 ~ 50°C
Storage Temperature	-20 ~ 40°C
PCM High Temperature Cut-Off	$75^\circ\text{C} \pm 5^\circ\text{C}$

### DIMENSIONAL SPECIFICATIONS



### MECHANICAL SPECIFICATIONS

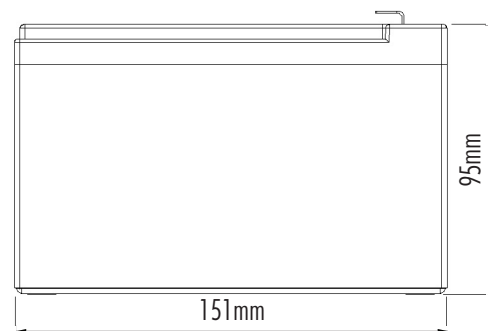
Dimensions inc terminals (LxWxH)	151 x 98.6 x 95mm
Weight	1.5kg
Terminal Type	F2
Case Material	ABS + PC
Enclosure Protection (IP rating)	IP54
Cell type - chemistry	LiFePO4

### CHARGE SPECIFICATIONS

Recommended Charge Current	3-6A
Maximum Charge Current	$< 6\text{A}$
Recommended Charge Voltage	14.4V
PCM Charge Voltage Cut Off	$3.9\text{V} \pm 0.025\text{V}/\text{cell}$

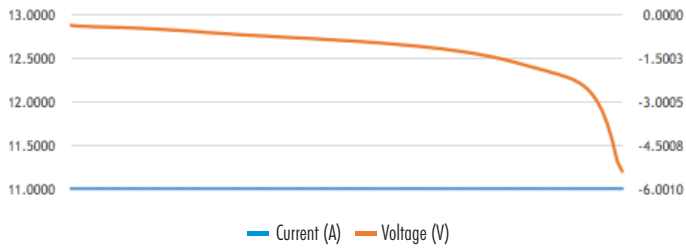
### COMPLIANCE SPECIFICATIONS - CERTIFICATION

Certifications	CE	TUV
	Rohs	TUV
Shipping Classification	MSDS	

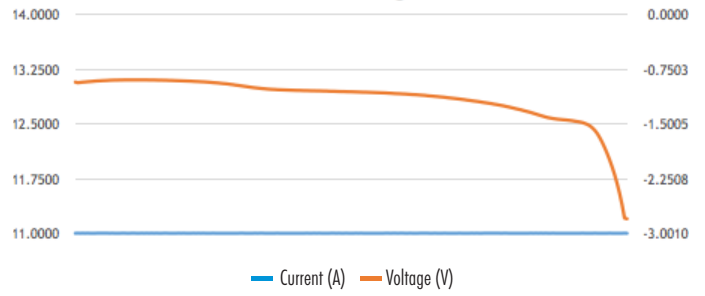


# PERFORMANCE CHARACTERISTICS

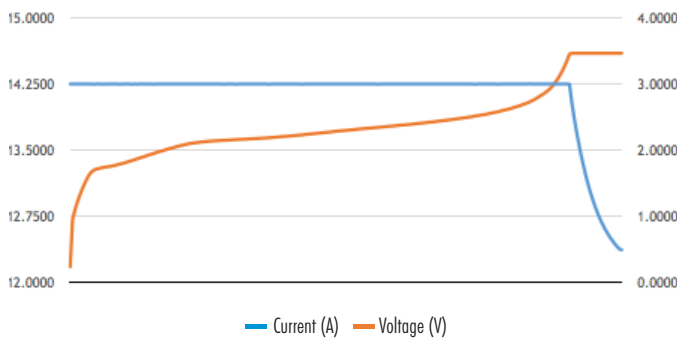
### 6A @ 25°C Discharging Curve



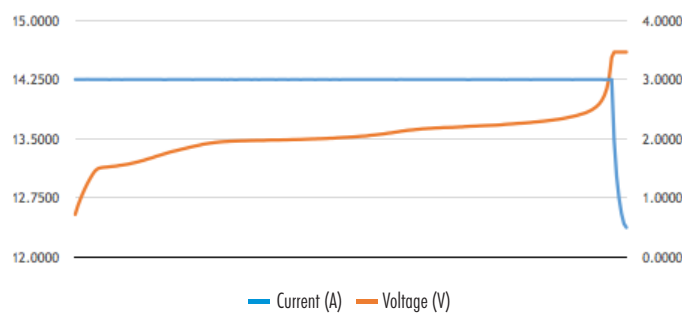
### 3A @ 35°C Discharging Curve



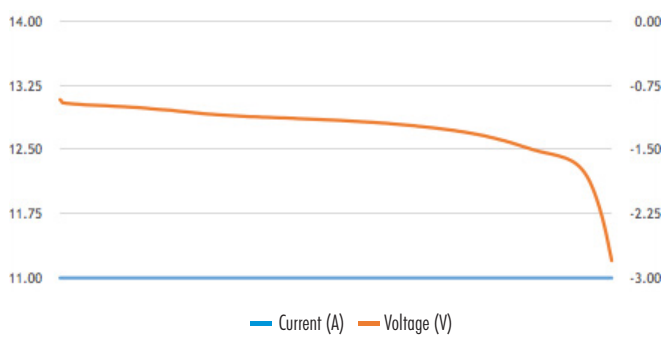
### 3A @ 10°C Charging Curve



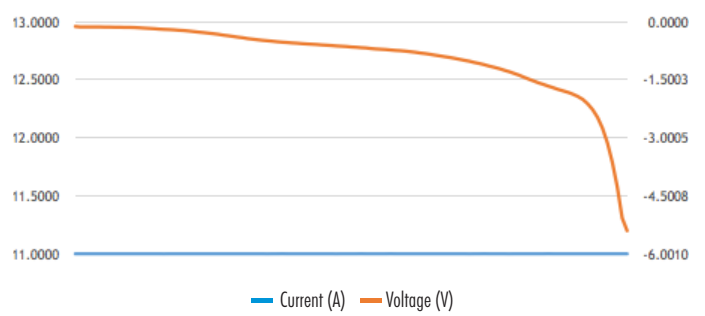
### 3A @ 25°C Charging Curve

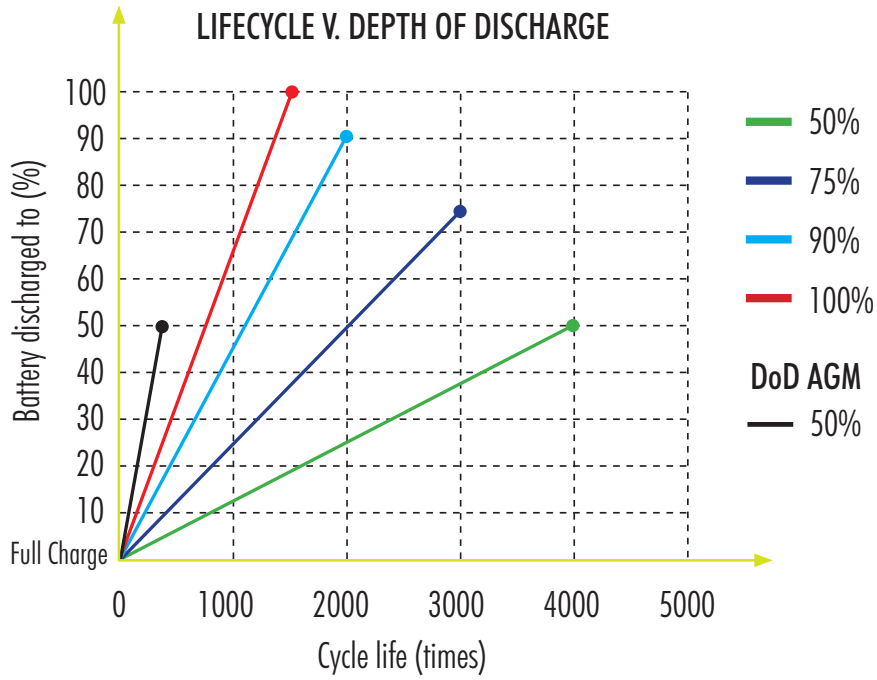


### 3A @ 25°C Discharging Curve

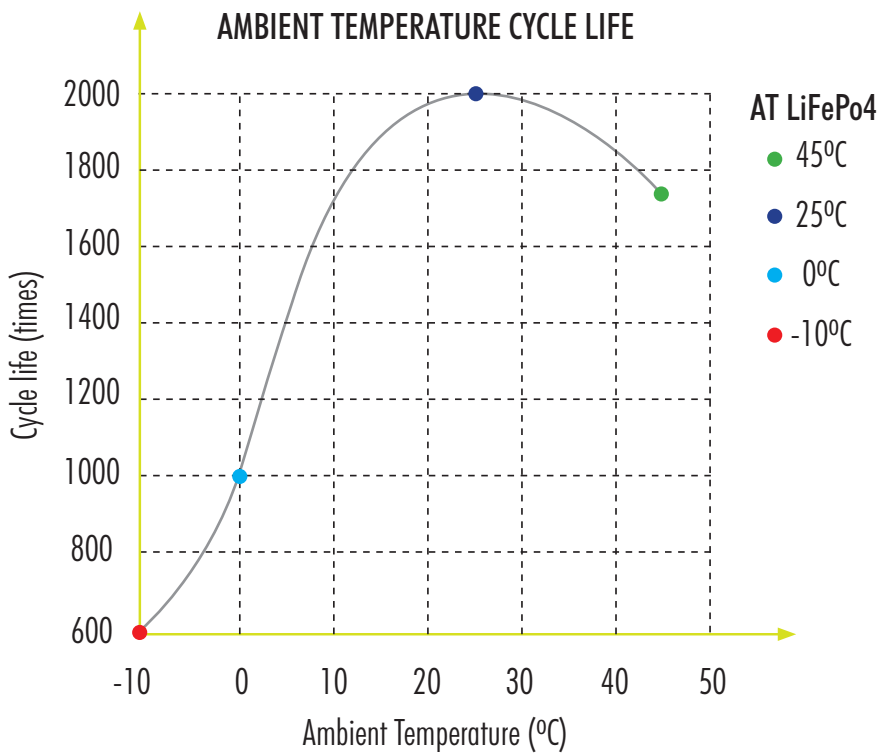


### 3A @ 35°C Discharging Curve





Depth of Discharge	100% DOD	90% DOD	75% DOD	50% DOD
Cycle life (times)	1500	2000	3000	4000



Ambient Temperature	-10°C	0°C	25°C	45°C
Cycle life (times)	600	1000	2000	1750