



# LITHIUM

**CERTIFICATIONS**  
 UL1642 (Cell), CE (Pack), IEC62133 (Cell), UN38.3 (Cell / Pack), IEC62619 (Cell), ROHS (Cell)



## ATLS12-120-BT

### Specifications

Electrical Specifications	Nominal Voltage	12.8V	
	Nominal Capacity	120 Ah	
	Nominal Power	1536 Wh	
	Parallel Connection	max 6 units	
	Series Connection	max 4 units	
	Circuit Protection	Overcharge, Over Discharge, Short Circuit, High Temperature, Cell Imbalance	
	Cycle life	"3000 cycles @100% DOD, 6000 cycles @80%DOD"	
Charge Specifications	Charge Profile	CC @ 0.2C to 14.4V, then CV @ 14.4V until current $\leq 0.01C$ (CC/CV)	
	Max Charge Voltage	14.4 $\pm$ 0.2V	
	Charge Current	$\leq 60A$ (0.2C @ 24A)	
	Max Current	60A	
Discharge Specifications	Recommended Discharge Current	$\leq 60A$ (0.2C @ 24A)	
	Max Continuous Current	120A	
	Cut-off Voltage	10V	
Environmental Specifications	Charge Temperature	0°C to 55°C	60 $\pm$ 25% Relative Humidity
	Discharge Temperature	-20°C to 60°C	
	Storage Temperature	-5°C to 45°C	
Mechanical Specifications	Dimensions, mm	305x169x210 (Group 27)	
	Approx Weight, kg	13.5	
	Terminal type	M8	
	Case Material	Plastic ABS	
	IP Rating	IP65	
	Cell Type	Cylindrical LiFePO4	

Circuit Protection	Characteristic	Parameters
Over charge protection battery	High voltage protection	15V
	Recovery point	14.4V
	Reset trigger	auto release below recovery point
	Time delay	1s
	Max charge current protection	145A
	Charge current protection reset	140A
	Time delay	1s
Over discharge protection battery	Low voltage protection	10V
	Recovery point	10.4V
	Reset trigger	cut load, press reset button or charge/apply voltage >12V
	Time delay	1s
	Max discharge current protection	800A
	Reset trigger	cut load, auto release
	Time delay	1s

Circuit Protection	Characteristic	Parameters
Short circuit protection	Short circuit protection	850A
	Time delay	150 $\mu$ s
High temperature protection	Max charge temperature	65°C
	Recovery point	55°C
	Time delay	1s
	Max discharge temperature	65°C
	Recovery point	55°C
	Time delay	1s
	MOSFET over temperature protection	85°C
Cell imbalance protection	Vcell balancing condition	$\geq 3.3V$
	Vcell, open difference	$\leq 30mV$
	Vcell, closed difference	$\leq 20mV$
	Balancing current	30mA



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MSDS



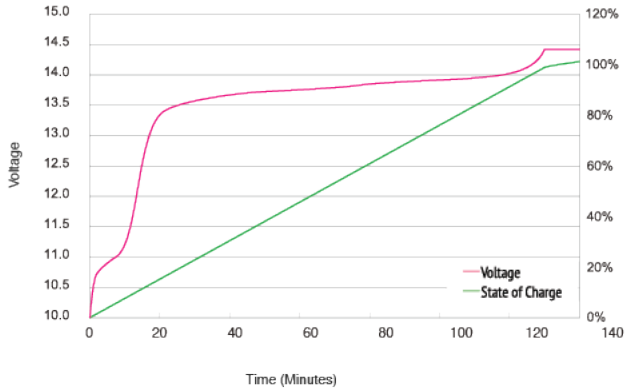
UN38.3



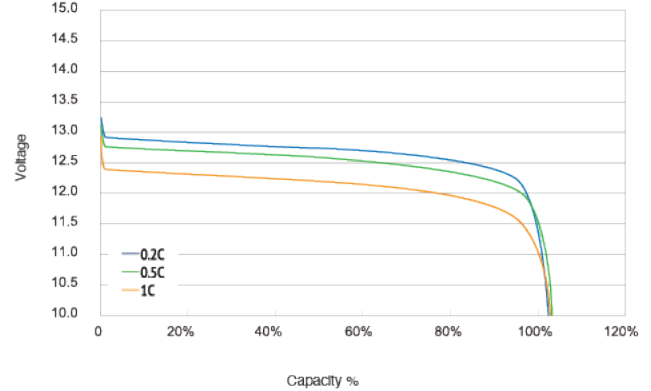
3 YEARS WARRANTY

### Characteristics Curve

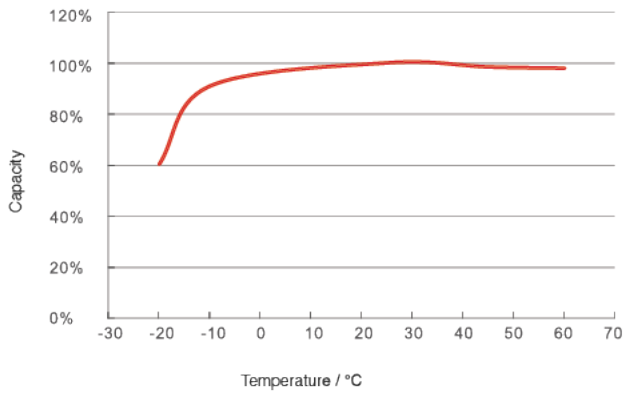
#### Charging Characteristics (0.5C @ 25°C)



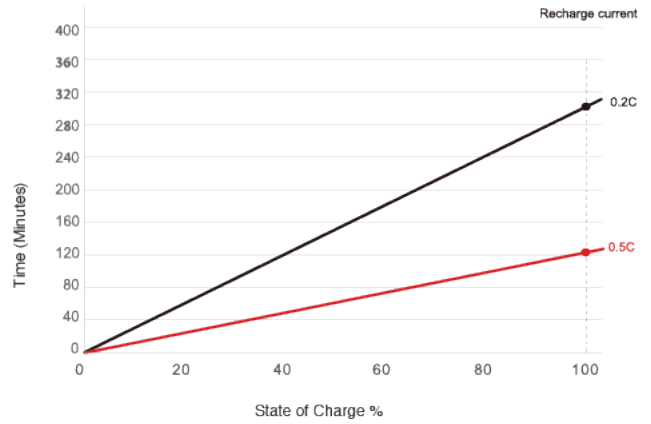
#### Discharging Characteristics (0.2C, 0.5C, 1C @ 25°C)



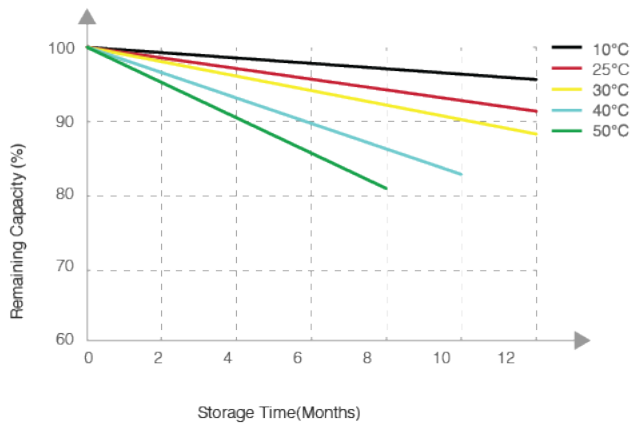
#### Different Temperature Capacity Curve



#### Typical Charge Time Curve



#### Different Temperature Self Discharge Curve



#### Different DOD Discharge Cycle Life Curve

