

## Smart Lithium Battery Pack - 38.4V

ITEMS	38.4V 105Ah	38.4V 125Ah	38.4V 150Ah
<b>General</b>			
Nominal Voltage	38.4V	38.4V	38.4V
Working Voltage	32.4V - 43.8V	32.4V - 43.8V	32.4V - 43.8V
Recommended Voltage	36.0V - 42.0V	36.0V - 42.0V	36.0V - 42.0V
Cells	12	12	12
Nominal Capacity	105Ah	125Ah	150Ah
Energy	4,032Wh	4,800Wh	5,760Wh
Self Discharge	3% Per Month	3% Per Month	3% Per Month
IP Rating	IP67	IP67	IP67
<b>Physical</b>			
Cell Chemistry	Lithium Iron Phosphate	Lithium Iron Phosphate	Lithium Iron Phosphate
Cell Type	Prismatic	Prismatic	Prismatic
Cell Configuration	1P12S	1P12S	1P12S
Weight	40kg(88.18 lbs)	46Kg(101.41 lbs)	51kg(112.43lbs)
Dimension LxWxH	369x300x240mm (14.53" x 11.81" x 9.45")	463x273x258mm (18.23" x 10.75" x 10.16")	450x339x245 mm (17.72" x 13.35" x 9.65")
Terminal Type	M8 Female	M8 Female	M8 Female
Shell Type	Powder Coated Steel	Powder Coated Steel	Powder Coated Steel
UN Shipping Class	UN 3480, Class 9	UN 3480, Class 9	UN 3480, Class 9
<b>Safety</b>			
Charging Freeze Protection	Yes, Under 32°F	Yes, Under 32°F	Yes, Under 32°F
Pack Over-Voltage	Yes	Yes	Yes
Cell Over-Voltage	Yes	Yes	Yes
Pack Under-Voltage	Yes	Yes	Yes
Cell Under-Voltage	Yes	Yes	Yes
Cell Over-Temp	Yes	Yes	Yes
BMS Over-Temp	Yes	Yes	Yes
Short Circuit/Over Current	Yes	Yes	Yes
Certifications	UN38.3, UL1642 Cell	UN38.3, UL1642 Cell	UN38.3, UL1642 Cell
<b>Charge</b>			
Recom. Charging Current	30A	30A	30A
Max Charging Current	40A	40A	40A
BMS High Voltage Cutoff	58.4V	58.4V	58.4V
Charging Temp. Range	32°F to 131°F	32°F to 131°F	32°F to 131°F
<b>DisCharge</b>			
Max Continuous Discharge	150A	250A	250A
Max Discharge 3 Sec	480A	480A	480A
Max Discharge 30 Sec	315A	400A	400A
BMS Voltage Cutoff	43.2V	43.2V	43.2V
BMS Voltage Recovery	48V	48V	48V
Discharge Temp Range	-22°F to 140°F	-22°F to 140°F	-22°F to 140°F
<b>Communication</b>			
Bluetooth	Yes	Yes	Yes
CAN	Yes	Yes	Yes

## Smart Lithium Battery Pack - 51.2V

ITEMS	51.2V 105Ah	51.2V 125Ah	51.2V 150Ah	51.2V 210Ah
<b>General</b>				
Nominal Voltage	51.2V	51.2V	51.2V	51.2V
Working Voltage	43.2V - 58.4V	43.2V - 58.4V	43.2V - 58.4V	43.2V - 58.4V
Recommended Voltage	48.0V - 57.0V	48.0V - 57.0V	48.0V - 57.0V	48.0V - 57.0V
Cells	16	16	16	32
Nominal Capacity	105Ah	125Ah	150Ah	210Ah
Energy	5,376Wh	6,400Wh	7,680Wh	10,752Wh
Self Discharge	3% Per Month	3% Per Month	3% Per Month	3% Per Month
IP Rating	IP67	IP67	IP67	IP67
<b>Physical</b>				
Cell Chemistry	Lithium Iron Phosphate	Lithium Iron Phosphate	Lithium Iron Phosphate	Lithium Iron Phosphate
Cell Type	Prismatic	Prismatic	Prismatic	Prismatic
Cell Configuration	1P16S	1P16S	1P16S	2P16S
Weight	50kg(110.23 lbs)	57Kg(125.66 lbs)	63kg(138.9lbs)	90kg(198.4 lbs)
Dimension LxWxH	445x300x240mm (17.52"x11.81"x9.45")	463x323x258mm (18.2" x 12.7"x10.2")	510x375x240 mm (20.1" x 14.8" x 9.5")	539x454x250mm (21.2" x 17.9" x 9.8")
Terminal Type	M8 Female	M8 Female	M8 Female	M8 Female
Shell Type	Powder Coated Steel	Powder Coated Steel	Powder Coated Steel	Powder Coated Steel
UN Shipping Class	UN 3480, Class 9	UN 3480, Class 9	UN 3480, Class 9	UN 3480, Class 9
<b>Safety</b>				
Charging Freeze Protection	Yes, Under 32°F	Yes, Under 32°F	Yes, Under 32°F	Yes, Under 32°F
Pack Over-Voltage	Yes	Yes	Yes	Yes
Cell Over-Voltage	Yes	Yes	Yes	Yes
Pack Under-Voltage	Yes	Yes	Yes	Yes
Cell Under-Voltage	Yes	Yes	Yes	Yes
Cell Over-Temp	Yes	Yes	Yes	Yes
BMS Over-Temp	Yes	Yes	Yes	Yes
Short Circuit/Over Current	Yes	Yes	Yes	Yes
Certifications	UN38.3, UL1642 Cell	UN38.3, UL1642 Cell	UN38.3, UL1642 Cell	UN38.3, UL1642 Cell
<b>Charge</b>				
Recom. Charging Current	30A	30A	30A	30A
Max Charging Current	40A	40A	40A	40A
BMS High Voltage Cutoff	58.4V	58.4V	58.4V	58.4V
Charging Temp. Range	32°F to 131°F	32°F to 131°F	32°F to 131°F	32°F to 131°F
<b>DisCharge</b>				
Max Continuous Discharge	150A	250A	250A	250A
Max Discharge 3 Sec	480A	480A	480A	480A
Max Discharge 30 Sec	315A	400A	400A	400A
BMS Voltage Cutoff	43.2V	43.2V	43.2V	43.2V
BMS Voltage Recovery	48V	48V	48V	48V
Discharge Temp Range	-22°F to 140°F	-22°F to 140°F	-22°F to 140°F	-22°F to 140°F
<b>Communication</b>				
Bluetooth	Yes	Yes	Yes	Yes
CAN	Yes	Yes	Yes	Yes

## Smart Lithium Battery Pack - 76.8V

ITEMS	76.8V 105Ah	76.8V 150Ah	76.8V 210Ah
<b>General</b>			
Nominal Voltage	76.8V	76.8V	76.8V
Working Voltage	64.8V – 87.6V	64.8V – 87.6V	64.8V – 87.6V
Recommended Voltage	72.0V – 86.4V	72.0V – 86.4V	72.0V – 86.4V
Cells	24	24	48
Nominal Capacity	105Ah	150Ah	210Ah
Energy	8,064Wh	11,520Wh	16,128Wh
Self Discharge	3% Per Month	3% Per Month	3% Per Month
IP Rating	IP67	IP67	IP67
<b>Physical</b>			
Cell Chemistry	Lithium Iron Phosphate	Lithium Iron Phosphate	Lithium Iron Phosphate
Cell Type	Prismatic	Prismatic	Prismatic
Cell Configuration	1P24S	1P24S	2P24S
Weight	72kg(158.7 lbs)	98kg(216.1 lbs)	135kg(297.6 lbs)
Dimension LxWxH	520*355*262mm (20.47"x13.98"x10.31")	731*327*273mm (28.78" x 12.87" x 10.75")	923*335*317mm (36.34" x 13.19" x 12.48")
Terminal Type	M8 Female	M8 Female	M8 Female
Shell Type	Powder Coated Steel	Powder Coated Steel	Powder Coated Steel
UN Shipping Class	UN 3480, Class 9	UN 3480, Class 9	UN 3480, Class 9
<b>Safety</b>			
Charging Freeze Protection	Yes, Under 32°F	Yes, Under 32°F	Yes, Under 32°F
Pack Over-Voltage	Yes	Yes	Yes
Cell Over-Voltage	Yes	Yes	Yes
Pack Under-Voltage	Yes	Yes	Yes
Cell Under-Voltage	Yes	Yes	Yes
Cell Over-Temp	Yes	Yes	Yes
BMS Over-Temp	Yes	Yes	Yes
Short Circuit/Over Current	Yes	Yes	Yes
Certifications	UN38.3, UL1642 Cell	UN38.3, UL1642 Cell	UN38.3, UL1642 Cell
<b>Charge</b>			
Recom. Charging Current	30A	30A	30A
Max Charging Current	40A	40A	40A
BMS High Voltage Cutoff	87.6V	87.6V	87.6V
Charging Temp. Range	32°F to 131°F	32°F to 131°F	32°F to 131°F
<b>DisCharge</b>			
Max Continuous Discharge	150A	250A	250A
Max Discharge 3 Sec	480A	480A	480A
Max Discharge 30 Sec	315A	400A	400A
BMS Voltage Cutoff	64.8V	64.8V	64.8V
BMS Voltage Recovery	72V	72V	72V
Discharge Temp Range	-22°F to 140°F	-22°F to 140°F	-22°F to 140°F
<b>Communication</b>			
Bluetooth	Yes	Yes	Yes
CAN	Yes	Yes	Yes