

ALCHEMY

INDUSTRIAL

BATTERY SPECIFICATIONS

VOLTAGE AND CAPACITY	24V Heated (Plastic)	24V Heated (Metal)	48V
Nominal voltage	25.6 V	25.6 V	51.2 V
Nominal capacity @ 25 °C	314 Ah	314 Ah	280 Ah
Nominal energy @ 25 °C	8.04 kWh	8.04 kWh	14.34 kWh
Cell configuration	8S (Series)	8S (Series)	16S (Series)
Cell type	LiFePO ₄ (LFP)	LiFePO ₄ (LFP)	LiFePO ₄ (LFP)
Cell model	EVE MB31 – Grade A	EVE MB31 – Grade A	EVE LF280K – Grade A
Energy per cell	1004.8 Wh	1004.8 Wh	896 Wh
DISCHARGE			
Max continuous discharge current	200 A	200 A	100 A
Recommended continuous discharge	≤160 A	≤160 A	≤80 A
Discharge cut off voltage	≈20.0 V	≈20.0 V	≈40.0 V
CHARGE			
Charge voltage	28.4 – 29.2 V	28.4 – 29.2 V	56.8 – 58.4 V
Max continuous charge current	100 A	100 A	100 A
Recommended charge current	≤60 A	≤60 A	≤60 A
Charge method	CC/CV	CC/CV	CC/CV
Low temp charge protection	Yes (BMS + Heater)	Yes (BMS + Heater)	Yes (BMS)
GENERAL			
BMS model	Daly Smart BMS	Daly Smart BMS	Daly Smart BMS – Home Energy
BMS configuration	8S / 24V	8S / 24V	16S / 48V
Continuous current rating	200 A	200 A	100 A
Active balancing	Yes (Daly Active Balancer)	Yes (Daly Active Balancer)	Yes (Integrated Daly)
Parallel support	Yes (Daly Parallel Module)	No	Yes (Daly Parallel)
Temperature monitoring	Yes (Cells + Heater)	Yes (Cells + Heater)	Yes (Cells via BMS)
Protections	OV, UV, OC, SC, OT, LT	OV, UV, OC, SC, OT, LT	OV, UV, OC, SC, OT, LT
Battery chemistry	Lithium Iron Phosphate (LiFePO ₄)	Lithium Iron Phosphate (LiFePO ₄)	Lithium Iron Phosphate (LiFePO ₄)
Manufactured in	USA	USA	USA
Serviceability	Yes (Bolted Enclosure)	Yes (Bolted Enclosure)	Yes (Bolted Enclosure)
Intended applications	Off-Grid, Cold-Weather, Lightweight	Off-Grid, Cold-Weather, Industrial	Home Energy Storage, Off-Grid, Backup, Small Commercial ESS
OTHER			
Power connection	M8 (threaded inserts and bolts)	M8 (threaded inserts and bolts)	Amphenol SurLok
Dimensions (L × W × H)	20.55 × 14.37 × 9.13 in	25.5 × 11.5 × 12.5 in	33.75 × 20.75 × 9.75 in
Weight	115 lbs	140 lbs	268 lbs
Enclosure type	Plastic	Metal	Metal (Rack Mountable)