Pytes

V5° Gen 2 Rack Battery

Enhanced Performance & Safety

BMS — Optimized Passive Balancing

PACK — Multi-Layer Protection

Fire Suppression

V5°α Plus

Leading Pack Integration Capabilities

- Powered by Tier 1 automotive-grade battery cells
- Over 20 years of expertise in BMS design

High-Efficiency Passive Balancing Technology

- Cell-level passive balancing
- Built-in current limiters to prevent over current and improve module balancing performance

Enhanced Safety Features

- Equipped with a circuit breaker, ensuring controlled disconnection of the DC system (Emergency Shutdown Function)
- Built-in pre-charge circuit to limit inrush current and safeguard critical components
- Integrated aerosol fire suppression system

V5°α Plus Enclosures

V5° Bracket

- Indoor rated
- Floor-mounted installation
- Stack up to 6*V5°α Plus, expandable on demand

V-BOX-OC PLUS

- IP55 / NEMA 3 rated, suitable for both indoor and outdoor
- Ground / Floor -mounted installation
- Busbar & Breaker integrated
- Can hold 4*V5°α Plus, expandable on demand

Electrical	
Battery Chemistry	Lithium Iron Phosphate (LFP)
Rated Voltage	51.2 V
Rated Capacity	100 Ah
Rated Energy	5.12 kWh
Recommended Charge / Discharge Current	75 A (3.84 kW)
Maximum Short Circuit Fault Current	1910 A @ 77 ms
Integrated Breaker	Dual 125 Vdc / 125 Adc
Scalability	16 pcs (82 kWh) in a group 6 groups (492 kWh) in a system with a Pytes hub
General	
Dimensions (W x D x H)	19.05 x 22.76 x 5.51 inch (484 x 578.2 x 140 mm)
Weight (lb / kg)	100 / 45.34
Ingress Rating	IP 20
Power Terminal	Amphenol Surlok Plus 8.0 mm
Communication Ports	CAN / RS485 / RS232 / Dry Contact / WiFi
Round-Trip Efficiency	⩾ 95%
Cycle Life [1]	⩾ 6000 cycles
Warranty [2]	10 years
Internal Heating Film	
Rated Input Voltage	51.2 Vdc
Rated Power	250 W
Control Temperature	On: ⩽ 41 °F (5 °C) Off: ⩾ 59 °F (15 °C)
Environmental	
Charging Temperature [3]	14 °F~122 °F (-10 °C ~ 50 °C)
Discharging Temperature	-4 °F~131 °F (-20 °C ~ 55 °C)
Recommended Operating Altitude	⩽ 9843 ft (3000 m)
Relative Humidity	0~95%, non-condensing
Compliance	
Certifications	UL 9540 Ed.3, UL 9540A, UL 1973, UN 38.3

1. Operating conditions: 77 °F ± 7 °F (25 °C ± 4 °C), 0.5 C/0.5 C @ 90% DOD, ret @70% (EOL). Total throughput energy: (51.2 V×100 Ah / 1000 × 80% × 6000 / 1000) × 90%= 22 MWh.

2. 10 years or 6000 cycles (whichever comes first).

3. When the ambient temperature is between -0.4 °F (-18 °C) and 32 °F (0 °C), the heating film will activate to warm the battery until the temperature reaches the battery charging temperature range. External charging source (PV, grid, generator) is required for heating film operation.

Pytes
Power a Better Life

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