

Adaptable C&I Solution

OUTDOOR DC ENERGY STORAGE CABINET



Flexible
Configuration



Outdoor
Rating



Active Fire
Protection



HV48100 SE



Safe

- Tier 1 automotive-grade LFP cells
- BMS multi-level monitoring and protection
- Multi-layer active fire suppression system



All-Weather

- Built-in module-level fans and forced-air cooling system (HVAC) ensure efficient thermal management and reliable operation in high-temperature environments
- Integrated heating system ensures low-temperature operation
- IP55 rating for indoor and outdoor installation



Scalable

- Scale seamlessly to MWh-level capacity with our modular battery system — ideal for commercial and industrial-scale applications



Smart

- Remote monitoring with PYTES Battery Cloud



Flexible

- Multiple battery string configurations support a wide range of operating voltages
- Universal mounting structure accommodates various inverter models

Applications



Hotel



Data
Center



Agriculture



Utilities



C & I Facilities



VPP

Battery Module							
Battery Chemistry	Lithium Iron Phosphate (LFP)						
Battery Module Energy	5.12 kWh						
Battery Module Nominal Voltage	51.2 V						
Battery Module Operating Voltage	47.5 V ~ 57.6 V						
Battery Module Nominal Capacity	5.12 kWh						
Weight (lb / kg)	99 / 45						
System							
Battery Module Internal Configuration ¹	5S2P	6S2P	7S2P	12S1P	13S1P	14S1P	15S1P
Rated Energy	51.20 kWh	61.44 kWh	71.68 kWh	61.44 kWh	66.56 kWh	71.68 kWh	76.80 kWh
Rated Power	25.60 kW	30.72 kW	35.84 kW	30.72 kW	33.28 kW	35.84 kW	38.40 kW
Operating Voltage	237.5 V ~ 288 V	285 V ~ 345.6 V	332.5 V ~ 403.2 V	570 V ~ 691.2 V	617.5 V ~ 748.8 V	665 V ~ 806.4 V	712.5 V ~ 864 V
Charge/Discharge Current	50 A*2			50 A			
General							
Dimensions (W x D x H)	43 × 47 × 79 inch (1100 × 1193 × 2015 mm)						
Approximate weight (lb / kg)	2029 / 920	2234 / 1013	2439 / 1106	2203 / 999	2306 / 1046	2408 / 1092	2511 / 1139
Ingress Protection Rating	IP 55						
Cycle Life ²	6000 cycles						
Warranty ³	Battery system: 3 Years ⁴ Battery module: 10 Years						
Internal Heating Film							
Rated Input Voltage	110Vac @ 60 Hz						
Rated Power	176 W						
Control Temperature	On: ≤50 °F (10 °C) Off: ≥59 °F (15 °C)						
Environmental							
Operating Temperature	-4 °F ~ 131°F (-20 °C ~ 55 °C)						
Operating Altitude	≤ 9843 ft (3000 m)						
Relative Humidity	5% ~ 80 % non-condensing						
Fire Suppression System							
Level 1: Detection & Ventilation	Hazardous gas detection activates ventilation system						
Level 2: Aerosol Suppression	Heat and smoke detection activates aerosol fire suppression system						
Level 3: Pressure Relief	The explosion relief valve opens automatically if internal pressure exceeds safe limits						
Level 4: Fire Hose Connection Port	Equipped with a fire hose connection port for firefighter hose attachment						
HVAC							
Max. Cooling Capacity	2300 W (L35)						
Max. Heating Capacity	1050 W						
Ingress Protection Rating	IP55						
Compliance							
Certifications	UL 9540 Ed.3 (2023), UL 9540A, UL 1973, UN 38.3						
Listings	CEC, SGIP, OGPe						

1. Flexible Configuration: Number of connectable BMUs per BCU ranges from 5 to 15. Voltage Range: 47.5 V x (1 ~ 15) ~ 57.6 V x (1 ~ 15). The HV48100 SE cabinet has 16 layers. The recommended maximum configuration per HV48100 SE cabinet is 15S1P / 7S2P.
2. Operating conditions: 77°F (25°C), 0.5C @ 90% DOD, ret @70% (EOL).
3. Warranty: 3 years for the whole battery system, 10 years or 6000 cycles for the battery (whichever comes first).
4. Optional 2 year warranty extension available for purchase.

