

C&I Energy Storage Solutions

OUTDOOR DC ENERGY STORAGE CABINET



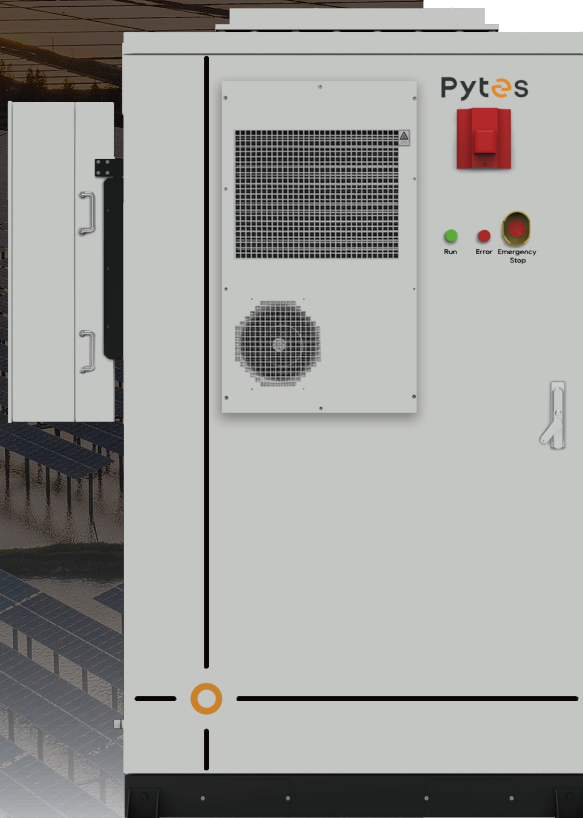
Flexible
Configuration



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 a forced-air cooling system(HVAC) ensure efficient thermal management in high-temperature environments
- Integrated heating system ensures reliable operation in low-temperature environments
- C4-M corrosion resistance
- IP55 rating for indoor and outdoor installation



Scalable

- Modular design enables seamless scaling to MWh-level capacity - 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 (BMU)

Chemistry	Lithium Iron Phosphate (LFP)						
Nominal Energy	5.12 kWh						
Nominal Voltage	51.2 V						
Operating Voltage	47.5 V ~ 57.6 V						
Nominal Capacity	100 Ah						
Weight	99 lb / 45 kg						

System

BMU Internal Configuration ¹	5S2P	6S2P	7S2P	12S1P	13S1P	14S1P	15S1P
Rated Energy	51.20 kWh	61.44 kWh	71.68 kWh	6144 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 x 47 x 79 inch / 1100 x 1193 x 2015 mm						
Approximate weight	2029 lb / 920 kg	2234 lb / 1013 kg	2439 lb / 1106 kg	2203 lb / 999 kg	2306 lb / 1046 kg	2408 lb / 1092 kg	2511 lb / 1139 kg
Ingress Protection Rating	IP55						
Anti-Corrosion Grade	C4-M						
Cycle Life ²	6000 cycles						
Warranty ³	System: 3 Years ⁴ Battery module: 10 Years						

Battery Module 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
Code Compliance	NFPA 68 / 69 / 855
Listings	CEC, SGIP, OGPe

1. Flexible Configuration: Number of connectable BMUs per Battery Control Unit (BCU) ranges from 3 to 15. Voltage Range: 47.5 V x (3 ~ 15) ~ 57.6 V x (3 ~ 15). The HV48100SE has 16 available positions for BMU and BCU. The 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 cabinet system (excludes the BMU and BCU), 10 years or 6000 cycles for the battery (whichever comes first).
4. Optional 2 year warranty extension available for purchase.

