



C&I Energy Storage Solutions

OUTDOOR HV BATTERY CABINET



Flexible
Configuration



Outdoor
Rating



Active & Passive Fire
Protection



HV48300 Max 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
- C4-H 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



Flexible

- 4 standard configurations available to match different inverter input voltage ranges
- Universal mounting structure accommodates various inverter models

Applications



Commercial
Buildings



Light Industrial



Agriculture



EV Charging



Off-Grid

Battery Module (BMU)	
Chemistry	Lithium Iron Phosphate (LFP)
Nominal Voltage	51.2 V
Operating Voltage Range	46.5 – 56.8 V
Nominal Capacity	314 Ah
Energy	16.076 kWh
Weight	262 ± 11 lb / 119 ± 5 kg

System				
BMU Internal Configuration ¹	7S2P	12S1P	14S1P	15S1P
Nominal Energy	225.07 kWh	192.92 kWh	225.07 kWh	241.15 kWh
Nominal Output Power	112.53 kW	96.46 kW	112.53 kW	120.57 kW
Operating Voltage Range	325.5 V – 397.6 V	558 V – 681.6 V	651 V – 795.2 V	697.5 V – 852 V
Recommended Charge / Discharge Current	157 A*2	157 A	157 A	157 A
Peak Charge / Discharge Current	205 A*2	205 A	205 A	205 A

General				
Dimensions (W x D x H)	69 x 57 x 93 inch / 1750 x 1450 x 2350 mm			
Weight	5388 lb / 2444 kg	4667 lb / 2117 kg	5291 lb / 2400 kg	5454 lb / 2474 kg
Communication	CAN / RS485/ RS232 / Dry Contact / WiFi			
Ingress Protection Rating	IP55			
Anti-Corrosion Grade	C4-H			
Cycle Life ²	6000 cycles			
Warranty ³	System: 5 years Battery: 10 years			

Environmental	
Operating Temperature Range	Charging: 32 °F – 131 °F / 0 °C – 55 °C Discharging: -4 °F – 131 °F / -20 °C – 55 °C
Operating Altitude	≤ 13123 ft / 4000 m Derating required above: 6562 ft / 2000 m
Relative Humidity	5 % ~ 95 %, non-condensing

Fire Suppression System	
Level 1: Gas Detection & Ventilation	Combustible gas detection automatically activates ventilation
Level 2: Aerosol Fire Suppression	Heat and smoke detection automatically activates the aerosol fire suppression system
Level 3: Pressure Relief	The explosion-relief panel opens automatically if internal pressure exceeds safe limits
Level 4: Fire Hose Connection	Dedicated fire hose connection for firefighter

HVAC	
Rated Cooling Capacity	5000 W (L35)
Rated Heating Capacity	2500 W
Ingress Protection Rating	IP55

Compliance	
Certifications	UN 38.3, UL 1973, UL 9540A (2026), UL 9540 Ed3 (2023) (Expected Q1 2027)
Code Compliance	NFPA 68, NFPA 69
Listings	CEC, SGIP, OGPe

1. Flexible Configuration: Each Battery Control Unit (BCU) supports 1 to 15 BMUs. The corresponding system voltage range is 46.5 V to 852 V, based on a BMU voltage range of 46.5 – 56.8 V. The HV48300 Max SE Cabinet has 16 installation positions in total for BMUs and the BCU. The maximum configuration per cabinet is 15S1P / 7S2P.

2. Standard Operating Conditions: 77°F / 25°C, 0.5C charge / 0.5C discharge, 90% DOD, 70% retained capacity at EOL.

3. Warranty: 5 years for the system, excluding the BMU; 10 years or 6,000 cycles for the battery, whichever comes first.

