

HV48100



Features



Safe

- LFP Chemistry
- Smart BMS



Efficiency

- High Voltage System
- Voltage Range 200V~870V

Compatible Cabinets



HV48100 8S

BMU Quantity: 5~8

Dimensions:

600×640×1555mm /

23.6×25.2×61.2inch

Weight: 89.6kg / 197.5lbs

Enclosure Rating: IP20



HV48100 12S

BMU Quantity: 9~12

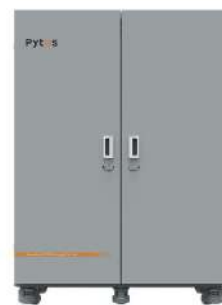
Dimensions:

595 x 680 x 2100mm /

23.4 x 26.8 x 82.7 inch

Weight: 138kg / 304.2lbs

Enclosure Rating: IP20



HV48100 15S

BMU Quantity: 13~15

Dimensions:

1054 x 626 x 1463mm /

41.50 x 24.7 x 57.6 inch

Weight: 126.5kg / 278.9lbs

Enclosure Rating: IP20

HV48100 Specs

HV48100 BCU

Controller Working Voltage	200V~870V
Self-consumption Power	7.56W
Dimensions (W x D x H)	484 x 510 x 140 mm / 19.1 x 20.1 x 5.5 inch
Weight	13.3 kg / 29.3 lbs
Communication	CAN, RS485, Dry Contact, WiFi
Internal Communication	RS232

HV48100 BMU

Cell Type	LFP
Nominal Energy	5.12kWh
Nominal Voltage	51.2V
Nominal Capacity	100Ah
Continuous Discharging/Charging Current	50Adc
Voltage Range	45.5~58V
Depth of Discharge	90%
Series Connection Qty	5~15pcs
Dimensions (W x D x H)	484 x 530 x 140 mm / 19.1 x 20.9 x 5.5 inch
Weight	43 kg / 94.8 lbs
Internal Communication	RS232
External Communication	CAN, RS485
Cycle Life	≥6000Cycles
Operation Temperature	Charge: 0°C~45°C(32°F~113°F), Discharge: -10°C~50°C(14°F~122°F)
Storage Temperature	Within 1month: -20°C~50°C(-4°F~122°F) 1-3months: -10°C~40°C(14°F~104°F) 3-12months: > 0°C~30°C(32°F~86°F)

Certifications

UL9540 Ed.2 (2020), UL9540A, UL1973, CE, IEC62619, UN38.3, CEC

HV48300 MAX SE

Adaptable C&I Solution



Features



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
- IP55 rating for indoor and outdoor installation



Scalable

- Scale seamlessly to MWh-level capacity with our modular battery system industrial-scale applications



Smart

- Remote monitoring with PYTES Battery Cloud



Flexible

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

HV48300 MAX SE Specs

Battery Module				
Battery Chemistry	Lithium Iron Phosphate (LFP)			
Battery Module Energy	16.076kWh			
Battery Module Nominal Voltage	51.2V			
Battery Module Operating Voltage	44.8 ~ 57.6V			
Battery Module Nominal Capacity	314Ah			
Weight (lb / kg)	262 ± 11 / 119 ± 5			
System				
Max. Battery Pack Internal Configuration ^[1]	1P5S	~	1P15S	(1P5S) × 2 ~ (1P7S) × 2
Rated Energy	80.380kWh		241.140kWh	160.760kWh 225.064kWh
Rated Power	40.192kW		120.576kW	80.384kW 112.537kW
Operating Voltage	224 ~ 288V		672 ~ 864V	224 ~ 288V 313.6 ~ 403.2V
Rated Charge/Discharge Current	157A		157A	157A x 2 157A x 2
Peak Charge/Discharge Current	205A		205A	205A x 2 205A x 2
General				
Dimensions (W x D x H)	68 x 57 x 92in (1750 x 1450 x 2350mm)			
Weight (lb / kg)	2929 / 1329		5553 / 2519	4296 / 1949 5346 / 2425
Ingress Protection Rating	IP55			
Cycle Life ^[2]	6000 cycles			
Warranty ^[3]	Battery system: basic warranty 3years/ advantage warrenty 5 years ^[4] Battery module: basic warranty 5years/ advantage warrenty 10 years			
Environmental				
Operating Temperature	Charging: 32°F ~ 131°F (0°C~55°C) Discharging: -4°F ~ 131°F (-20°C~55°C)			
Operating Altitude	≤ 6561.68 ft (2000m)			
Relative Humidity	5% ~ 95%, 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				
Rated Cooling Capacity	5000W (L35)			
Rated Heating Capacity	2500W			
Ingress Protection Rating	IP55			
Compliance				
Certifications	UL 9540A , UL 1973 , UN 38.3 , IEC62619 , CE EMC , IEC63056 , IEC62477 , IEC62040			

[1]: Flexible Configuration:

1P (1 x BCU): Number of connectable BMUs ranges from 1 to 15. Voltage Range: 44.8 V × (1 ~ 15) ~ 57.6 V × (1 ~ 15).

2P (2 x BCU in parallel): Number of connectable BMUs ranges from 1 to 7 for each BCU. Voltage Range: 44.8 V × (1 ~ 7)~57.6 V × (1 ~ 7).

[2]: Operating conditions: 77°F (25°C), 0.5 P @ 90% DoD, ret @70% (EOL).

[3]: Basic warranty 5 years/ advantage warrenty 10 years; or 6000 cycles (Condition: 0.5P/0.5P, 90% DOD[Recommended SOC Range=10-100%], 20~35°C, ret 70%.)

[4]: Optional 2 year warranty extension available for purchase.

Pi Station 230EX

Liquid Cooling Outdoor Rated ESS



Introduction

Pytes liquid cooling battery cabinet integrates battery modules with a full configuration capacity of 232.96kWh. And can be widely used in various application scenarios such as generation and transmission grid, distribution grid, new energy plants.

Features

Flexible

- All-in-one design and highly integrated
- Modular design with different optional parts.

Compatible

- Grid-tied
- 400Vac 3P4W
- Optional backup module

Easy-to-Install

- IP55 rated
- Parallel installation back-to-back

Compliance

- Global grid certified & listed
- Compliance with global safety standards.

Pi Station 230EX Specs

Mode	PI STATION 230EX
System Specificatoin	
Battery Chemistry	LFP (LiFePO4)
Nominal Output Power	105KW
Battery Capacity	232.96kWh
Battery Nominal Voltage	832V
Operating DC Voltage Range	650V-949V(3P4W)
Recommended. Charging/ Discharging Current	140 ^[1]
Fire Fighting System	1.Sensor Tube(Aerosol) 2.Water Fire Fighting System 3.Heat/Smoke/Gas sensor
Cell Cycle life	6000 ^[2]
DOD	90%
Warranty	3 Year Product Warranty, 10 Year Battery Warranty
Commmunication	
Communication port	CAN, RS485, Ethernet
Communication protocol	ModbusRTU/TCP
Mechanical	
Dimensions(W x D x H)	1000 x 1390 x 2430mm
Weight	2500kg
Cooling System	Liquid cooling
IP protection	IP55
Environmental	
Reactive Humidty	0-95% (no condensing)
Operating Temperature Range	-20~55°C
Recommended Cell Temperature Range	Charge:0~55°C; Discharge:-20~55°C
Altitude	2000m (>2000 derating)
Regulations	
Certification	<p>CELL IEC 62619:2022, IS 16046 (PART 2) : 2018 / IEC 62133-2 : 2017, UL1642, UL1973, UL9540A, GB/T36276-2023, GB 38031-2020, GB/T 31486-2015, GB/T 31484-2015, GB/T 30512-2014, UN38.3, REACH, RoHS</p> <p>PCS CE-EMC, CE-LVD, South Africa NRS097, 50549-1 European general, 50549-2 European general, 50549-1 Netherlands, 50549-1 C10/11 Belgium, 50549-1 Greece, 50549-1 Sweden, 50549-1 Poland, England-G99, VDE-AR-N 4105:2018, GB/T 34120-2017</p> <p>System UN38.3, IEC62619, IEC63056, IEC62477, CE-EMC</p>

[1] Charge and discharge current derating will occur outside 0°C and 45°C

[2] Under test conditions(20~35°C, 0.5P/0.5P, EOL70%)

Pi Station 261

Liquid Cooling Outdoor Rated ESS



Introduction

Pytes liquid cooling battery cabinet integrates battery modules with a full configuration capacity of 261.284kWh. And can be widely used in various application scenarios such as generation and transmission grid, distribution grid, new energy plants.

Features

Flexible

- All-in-one design and highly integrated
- Modular design with different optional parts.

Compatible

- Grid-tied
- 400Vac 3P4W
- Optional backup module

Easy-to-Install

- IP55 rated
- Parallel installation back-to-back

Compliance

- Global grid certified & listed
- Compliance with global safety standards.

Pi Station 261 Specs

Mode	PI STATION 261
System Specificatoin	
Battery Chemistry	LFP (LiFePO4)
Nominal Output Power	125KW
Battery Capacity	261.284kWh
Battery Nominal Voltage	832V
Operating DC Voltage Range	650V-949V
Recommended. Charging/ Discharging Current	157 ^[1]
Fire Fighting System	1.Sensor Tube(Aerosol) 2.Water Fire Fighting System 3.Heat/Smoke/Gas sensor
Cell Cycle life	6000 ^[2]
DOD	90%
Warranty	3 Year Product Warranty, 10 Year Battery Warranty
Commmunication	
Communication port	CAN, RS485, Ethernet
Communication protocol	ModbusRTU/TCP
Mechanical	
Dimensions(W x D x H)	1000 x 1390 x 2430mm
Weight	2500kg
Cooling System	Liquid cooling
IP protection	IP55
Environmental	
Reactive Humidty	0-95% (no condensing)
Operating Temperature Range	-20~55°C
Recommended Cell Temperature Range	Charge:0~55°C; Discharge:-20~55°C
Altitude	2000m (>2000 derating)
Regulations	
Certification	<p>CELL IEC 62619, UL1642, UL1973, UL9540A, UN38.3</p> <p>PCS CE-EMC, CE-LVD, South Africa NRS097, 50549-1 European general, 50549-2 European general, 50549-1 Netherlands, 50549-1 C10/11 Belgium, 50549-1 Greece, 50549-1 Sweden, 50549-1 Poland, England-G99, VDE-AR-N 4105:2018, GB/T 34120-2017</p> <p>System UN38.3, IEC62619, IEC63056, IEC62477, CE-EMC</p>
<p>[1] Charge and discharge current derating will occur outside 0°C and 45°C</p> <p>[2] Under test conditions(20~35°C, 0.5P/0.5P, EOL70%)</p>	

Compatibility List of PYTES ESS and Inverters

Low Voltage



High Voltage

