

HV SERIES

CUSTOMIZABLE C&I ESS BUNDLES SELECTION GUIDE

- **Backup Power:**
Never Run Out of Energy
- **Peak Shaving:**
Significantly Lower Electric Bills
- **Cut Demand Charges:**
Eliminate Peak Usage Fees
- **Self-Consumption:**
Achieve Grid Independence



PYTES (USA) Energy Inc.
BATTERY EXPERT - GREEN ENERGY PROVIDER

**LI-ION BATTERY FOR
ENERGY STORAGE**

HV48100 8S- UL 9540 Ed.3 Certified Indoor ESS Solution

Recommended Inverter Models



Sol-Ark
30K-3P-208V



solis
S6-EH3P30/40K-H-US
S6-EH3P30K-H-LV-US

Part Number	Item	Quantity
1	162002100029	30K-3P-208V
	N/A	S6-EH3P30K-H-US / S6-EH3P30K-H-LV-US
2	150215100160	HV48100 8S Cabinet
3	151201100050	HV48100 BCU
4	151201100052	HV48100 BMU

Part Number	Item	Quantity
1	N/A	S6-EH3P40K-H-US
2	150215100160	HV48100 8S Cabinet
3	151201100050	HV48100 BCU
4	151201100052	HV48100 BMU

Part Number	Item	Quantity
1	162002100029	30K-3P-208V
	N/A	S6-EH3P30K-H-US / S6-EH3P30K-H-LV-US
2	150215100160	HV48100 8S Cabinet
3	151201100050	HV48100 BCU
4	151201100052	HV48100 BMU
5	110403100136 ¹	HV C01 Combiner Box
6	161412101415 ¹ 161412101416	HV C01 to Inverter Power cable Set
7	110409100233 ¹	HUB BOX
8	161412101352 ¹	HV48100 BCU Dry Contact Connectors

30 kW / 80 kWh		
	or	
x 1		x 1
		
		x 2

40kW / 80kWh		
		
x 1		x 2

30 kW / 120 kWh		
	or	
x 1		x 1
		
		x 3

Inverter	Battery ²	Rated Grid Voltage	Rated AC Output	Storage Capacity	Estimate Backup Time	Max. Inverter Parallel
1 × 30K-3P-208V	2 × HV48100 8S	120/208V	30 kW	80 kWh	2.7 H	10
1 × S6-EH3P30K-H-LV-US	2 × HV48100 8S	208V/240V	26.5 kW / 30 kW	80 kWh	3 H / 2.7H	6
1 × S6-EH3P30K-H-US	2 × HV48100 8S	480V	30 kW	80 kWh	2.7 H	6
1 × S6-EH3P40K-H-LV-US	2 × HV48100 8S	480V	40 kW	80 kWh	2 H	6
1 × 30K-3P-208V	3 × HV48100 8S	120/208V	30 kW	120 kWh	4 H	10
1 × S6-EH3P30K-H-LV-US	3 × HV48100 8S	208V/240V	26.5 kW / 30 kW	120 kWh	4.5 H / 4 H	6
1 × S6-EH3P30K-H-US	3 × HV48100 8S	480V	30 kW	120 kWh	4 H	6

1. Only needed if each inverter has more than 2 battery cabinets.

2. Up to 6 Battery cabinets (240 kWh) per Inverter. Each inverter must have same quantity of battery cabinets.

HV48100 12S- UL 9540 Ed.3 Certified Indoor ESS Solution

Recommended Inverter Models



Sol-Ark

60K-3P-480V



solis

S6-EH3P50/60K-H-US

Part Number	Item	Quantity
1	162002100119 60K-3P-480V	1 pc
	N/A S6-EH3P60K-H-US	
2	110403100125 HV48100 12S Cabinet	2 pcs
3	151201100050 HV48100 BCU	2 pcs
4	151201100052 HV48100 BMU	24 pcs

Part Number	Item	Quantity
1	N/A S6-EH3P50K-H-US	1 pc
2	110403100125 HV48100 12s Cabinet	2 pcs
3	151201100050 HV48100 BCU	2 pcs
4	151201100052 HV48100 BMU	24 pcs

Part Number	Item	Quantity
1	162002100119 60K-3P-480V	1 pc
	N/A S6-EH3P60K-H-US	
2	110403100125 HV48100 12S Cabinet	3 pcs
3	151201100050 HV48100 BCU	3 pcs
4	151201100052 HV48100 BMU	36 pcs
5	110403100136 ¹ HV C01 Combiner Box	1 pc
6	161412101415 ¹ HV C01 to Inverter Power cable Set	2 pcs
7	110409100233 ¹ HUB BOX	1 pc
8	161412101352 ¹ HV48100 BCU Dry Contact Connectors	3 pcs

60 kW / 120 kWh		
	or	
x 1		x 1
		
		x 2

50kW / 120kWh		
		
x 1		x 2

60 kW / 180 kWh		
	or	
x 1		x 1
		
		x 3

Inverter	Battery ²	Rated Grid Voltage	Rated AC Output	Storage Capacity	Estimate Backup Time	Max. Inverter Parallel
1× 60K-3P-480V	2 × HV48100 12S	277 V / 480 V	60 kW	120 kWh	2 H	10
1× S6-EH3P60K-H-US	2 × HV48100 12S	480V	60 kW	120 kWh	2 H	6
1× S6-EH3P50K-H-US	2 × HV48100 12S	480V	50 kW	120 kWh	2.4 H	6
1× 60K-3P-480V	3 × HV48100 12S	277 V / 480 V	60 kW	180 kWh	3 H	10
1× S6-EH3P60K-H-US	3 × HV48100 12S	480V	60 kW	180 kWh	3 H	6

1. Only needed if each inverter has more than 2 battery cabinets.

2. Up to 6 Battery cabinets (240 kWh) per Inverter. Each inverter must have same quantity of battery cabinets.

HV48100 15S- UL 9540 Ed.3 Certified Indoor ESS Solution

Recommended Paired Inverter Models



Sol-Ark
30K-3P-208V



solis
S6-EH3P30-H-US
S6-EH3P30K-H-LV-US

Series Number		Bill of Materials	Sub-total
1	162002100029	30K-3P-208V	1 pc
	N/A	S6-EH3P30K-H-US / S6-EH3P30K-H-LV-US	
2	110403100116	HV48100 15S Cabinet	1 pcs
3	151201100050	HV48100 BCU	2 pcs
4	151201100052	HV48100 BMU	14 pcs

30 kW / 70 kWh		
	or	
x 1		x 1
		
		x 1

Series Number		Bill of Materials	Sub-total
1	162002100029	30K-3P-208V	1 pc
	N/A	S6-EH3P30K-H-US / S6-EH3P30K-H-LV-US	
2	110403100116	HV48100 15S Cabinet	2 pcs
3	151201100050	HV48100 BCU	4 pcs
4	151201100052	HV48100 BMU	28 pcs
5	110403100136 ¹	HV C01 Combiner Box	1 pc
6	161412101415 ¹ 161412101416	HV C01 to Inverter Power cable Set	2 pcs
7	110409100233 ¹	HUB BOX	1 pc
8	161412101352 ¹	HV48100 BCU Dry Contact Connectors	4 pcs

30 kW / 140 kWh		
	or	
x 1		x 1
		
		x 2

Inverter	Battery ²	Rated Grid Voltage	Rated AC Output	Storage Capacity	Estimate Backup Time	Max. Inverter Parallel
1 × 30K-3P-208V	1 × HV48100 15S	120/208V	30 kW	70 kWh	2.3 H	10
1 × S6-EH3P30K-H-LV-US	1 × HV48100 15S	208V/240V	26.5 kW / 30 kW	70 kWh	2.6 H / 2.3 H	6
1 × S6-EH3P30K-H-US	1 × HV48100 15S	480V	30 kW	70 kWh	2.3 H	6
1 × 30K-3P-208V	2 × HV48100 15S	120/208V	30 kW	140 kWh	4.7 H	10
1 × S6-EH3P30K-H-LV-US	2 × HV48100 15S	208V/240V	26.5 kW / 30 kW	140 kWh	5.3 H / 4.7 H	6
1 × S6-EH3P30K-H-US	2 × HV48100 15S	480V	30 kW	140 kWh	4.7 H	6

1. Only needed if each inverter has more than 1 battery cabinet (2P7S).

2. 2P7S: Up to 3 Battery cabinets (210 kWh) per Inverter. Each inverter must have same quantity of battery cabinets.

HV48100 SE – UL 9540 Ed.3 Certified Outdoor ESS Solution

* Fire Suppression System Integrated

Recommended Paired Inverter Models

2P7S



Sol-Ark

30K-3P-208V



solis

S6-EH3P30K-H-US
S6-EH3P30K-H-LV-US

1P12S



Sol-Ark

60K-3P-480V



solis

S6-EH3P50K-H-US
S6-EH3P60K-H-LV-US

2P7S

Series Number		Bill of Materials	Sub-total
1	162002100029	30K-3P-208V	1 pc
	N/A	S6-EH3P30K-H-US / S6-EH3P30K-H-LV-US	
2	110403100126	HV48100 SE Cabinet	1 pcs
3	110403100138	HV48100 BCU	2 pcs
4	110403100123	HV48100 BMU	14 pcs

1P12S

Series Number		Bill of Materials	Sub-total
1	162002100119	60K-3P-480V	1 pc
2	110403100126	HV48100 SE Cabinet	2 pcs
3	110403100138	HV48100 SE BCU	2 pcs
4	110403100123	HV48100 SE BMU	24 pcs

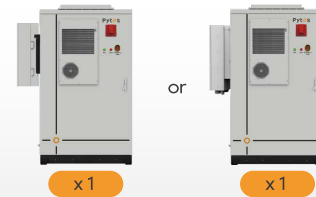
1P14S

Series Number		Bill of Materials	Sub-total
1	N/A	S6-EH3P50K-H-US	1 pc
2	110403100126	HV48100 SE Cabinet	2 pcs
3	110403100138	HV48100 BCU	2 pcs
4	110403100123	HV48100 BMU	28 pcs

Series Number		Bill of Materials	Sub-total
1	N/A	S6-EH3P60K-H-US	1 pc
2	110403100126	HV48100 SE Cabinet	2 pcs
3	110403100138	HV48100 SE BCU	2 pcs
4	110403100123	HV48100 SE BMU	28 pcs

Series Number		Bill of Materials	Sub-total
1	N/A	S6-EH3P60K-H-US	1 pc
2	110403100126	HV48100 SE Cabinet	3 pcs
3	110403100138	HV48100 SE BCU	3 pcs
4	110403100123	HV48100 SE BMU	42 pcs
5	110403100136 ¹	HV C01 Combiner Box	1 pc
6	161412101415 ¹ 161412101416	HV C01 to Inverter Power cable Set	2 pcs

30 kW / 70 kWh



60 kW / 120 kWh



50 kW / 140 kWh



60 kW / 140 kWh



60 kW / 210 kWh



Inverter	Battery ²	Rated Grid Voltage	Rated AC Output	Storage Capacity	Estimate Backup Time	Max. Inverter Parallel
1 × 30K-3P-208V	1 × HV48100 SE (2P7S)	120/208V	30 kW	70 kWh	2.3 H	10
1 × S6-EH3P30K-H-LV-US	1 × HV48100 SE (2P7S)	208V/240V	26.5 kW / 30 kW	70 kWh	2.6 H / 2.3 H	6
1 × S6-EH3P30K-H-US	1 × HV48100 SE (2P7S)	480V	30 kW	70 kWh	2.3 H	6
1 × 60K-3P-480V	2 × HV48100 SE (1P12S)	277 V / 480 V	60 kW	120 kWh	2 H	10
1 × S6-EH3P50K-H-US	2 × HV48100 SE (1P14S)	480V	50 kW	150 kWh	3 H	6
1 × S6-EH3P60K-H-US	2 × HV48100 SE (1P14S)	480V	60 kW	150 kWh	2.5 H	6
1 × S6-EH3P60K-H-US	3 × HV48100 SE (1P14S)	480V	60 kW	225 kWh	3.75 H	6

1. Only needed if each inverter has more than 1 battery cabinet (2P7S) / 2 battery cabinets (1P14S/1P12S)

2. 2P7S: Up to 3 Battery cabinets (210 kWh) per Inverter. Each inverter must have same quantity of battery cabinets.

1P12S: Up to 6 Battery cabinets (360 kWh) per Inverter. Each inverter must have same quantity of battery cabinets.

1P14S: Up to 6 Battery cabinets (450 kWh) per Inverter. Each inverter must have same quantity of battery cabinets.

Key Accessories

110403100136 – HV C01

- 16.93 × 24.41 × 9.33 inch / 430 × 620 × 237 mm, 55 lb / 25 kg
- IP65 outdoor rated
- Integrated Busbar (300 Adc, 1000 Vdc rated) and Breaker (325 Adc, 1000 Vdc rated)
- 6 sets of M6 studs for battery, 3 sets of M6 studs for inverter
- Combiner box for the HV series batteries



110409100233 – HUB BOX

- Communication HUB for multiple battery cabinet expansion
- 22.05×16.77×6.69 in / 560 × 426 × 170 mm
- IP 65 outdoor rated
- 48V Power Supply (Input Voltage Range: 85 ~ 264 Vac; Output Voltage: 43.2 ~ 55.2 Vdc – power supply for HUB) and HUB included



161412101415 & 161412101416 – HV C01 to Inverter Power cable Set

- Power cable set between HV C01 and Inverter
- 4 AWG, 78.74 in / 2000 mm
- One side M6 ring terminal, and unterminated wire on the other side



110409100233 – Dry Contact Connectors

- Required for each HV48100 BCU if HUB BOX is used



Where to Buy

