

# SPH 3000-6000TL-HUB

All-In-One Energy Storage Solution

- Easy installation with modular design
- Faster energy store with 0.75C battery charge power
- Smart bypass function ensures continues critical loads
- Max. 16A PV input per string
- Type II/III SPD on DC/AC side
- Up to 2 DC/AC Ratio
- VPP interface ready



P O W E R  
- I N G  
T O M O R R O W  
R R O W

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# System Parameters

System schematic	
Battery model	ALP 5.0L-E1
Battery type	LiFePO4
Number of Inverter module	1
Number of battery module	1, 2, 3, 4, 5, 6, 7, 8
Energy capacity	5kWh, 10kWh, 15kWh, 20kWh, 25kWh, 30kWh, 35kWh, 40kWh
Weight	80kg, 125kg, 170kg, 215kg, 260kg, 305kg, 350kg, 395kg
Dimension (W/D/H)	690/186/1102mm, 690/186/1397mm, 690/186/1692mm, 690/186/1987mm, 690/186/1692mm/690/186/705mm, 690/186/1692mm/690/186/1000mm, 690/186/1692mm/690/186/1295mm, 690/186/1987mm/690/186/1295mm

Inverter Module	SPH 3000TL-HUB	SPH 3600TL-HUB	SPH 4000TL-HUB	SPH 4600TL-HUB	SPH 5000TL-HUB	SPH 6000TL-HUB
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## Input Data (PV)

Max. recommended PV power (for module STC)	6000W	7200W	8000W	9200W	10000W	12000W
Max. DC voltage	600V					
Start voltage	100V					
Nominal voltage	370V					
MPP work voltage range	100V~560V					
No. of MPP trackers	2					
No. of PV strings per MPP tracker	1					
Max. input current per MPP tracker	16A					
Max. short-circuit current per MPP tracker	24A					

## Output/Input Data (AC)

AC nominal power	3000W	3680W	4000W	4600W	5000W	6000W
Rated AC apparent power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA
Nominal AC voltage/range	230V ; 180Vac-260Vac					
Nominal frequency/range	50/60Hz; 45~55Hz/55~65Hz					
Rated input/output current	13A/13A	16A/16A	17.3A/17.3A	20A/20A	21.7A/21.7A	26A/26A
Max. input/output current	16/16A	16/16A	22/22A	22/22A	27/27A	27/27A
Adjustable power factor	0.8leading...0.8lagging					
THDi	<3%					
AC connection	Single phase					

## Backup Power(AC)

Rated output apparent power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA
Nominal voltage	230V					
Nominal frequency	50/60Hz					
Rated output current	13A	16A	17.3A	20A	21.7A	26A
THDv	3%					
Switch time	≤15ms					

## Efficiency

Max. efficiency	97.20%	97.20%	97.30%	97.40%	97.50%	97.60%
MPPT efficiency	≥99.5%	≥99.5%	≥99.5%	≥99.5%	≥99.5%	≥99.5%

## Battery Data (DC)

Battery module	ALP 5.0L-E1
Normal voltage	51.2V
Number of battery modules	1~8
Energy capacity	5~40kWh
Max. discharge/charge rate	0.75C
DoD	92%
Dimensions (W/D/H)	690/185/295mm

## General Data

Operating temperature range	0°C ... +45°C
DC/AC surge protection	Type II/III
Altitude	3000m
Self-Consumption	< 10 W
Cooling	Natural
Relative humidity	5~95%
Protection degree	IP66
PV connection	MC4
AC connection	Connector
Battery connection	Quick Terminal
Installation method	Floor/Wall mount
Display	LCD
Warranty	10 years
Interfaces	RS485/USB/CAN/Wi-Fi/GPRS
Country of manufacturing	Made in China

CE, IEC62109, IEC61000, AS4777.2:2020, CEC

\* The maximum working voltage is 560V, and if it exceeds 560V, the system will not work or stop working; The maximum input voltage is 600V, there is a risk of damage if the maximum value is exceeded.

\* Due to the limitation of battery discharge current, if there is only one pack, the maximum discharge power of the inverter is only 3.8kw. If the discharge power needs to reach >4kw, the minimum capacity configuration requires two packs."

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