

# 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



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## System Parameters

System schematic								
Battery model					ALP 5.0L-E1			
Battery type					LiFePO4			
Number of Inverter module	1	2	3	4	5	6	7	8
Number of battery module	5kWh	10kWh	15kWh	20kWh	25kWh	30kWh	35kWh	40kWh
Energy capacity	80kg	125kg	170kg	215kg	260kg	305kg	350kg	395kg
Weight	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 5500TL-HUB	SPH 6000TL-HUB	
Input Data (PV)								
Max. recommended PV power (for module STC)	6000W	7200W	8000W	9200W	10000W	11000W	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	5500W	6000W	
Rated AC apparent power	3000VA	3680VA	4000VA	4600VA	5000VA	5500VA	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	26.7A/23.9A	26A/26A	
Max. input/output current	16/16A	16/16A	22/22A	22/22A	27/27A	27.3A/25A	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	5500VA	6000VA	
Nominal voltage				230V				
Nominal frequency				50/60Hz				
Rated output current	13A	16A	17.3A	20A	21.7A	23.9A	26A	
THDv				3%				
Switch time				≤15ms				
Efficiency								
Max. efficiency	97.20%	97.20%	97.30%	97.40%	97.50%	97.60%	97.60%	
MPPT efficiency	≥99.5%	≥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				0.7C				
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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