

# SPH 4000~10000TL3 BH-UP

- 100% three-phase imbalance output
- Smart phase-level power export limitation
- Wide battery voltage 100-550V
- UPS function, 10ms transition
- Scalable system configuration
- VPP interface ready
- DC/AC type II SPD
- 1.5 DC/AC Ratio



**GROWATT**

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Datasheet	SPH 4000TL3 BH-UP	SPH 5000TL3 BH-UP	SPH 6000TL3 BH-UP	SPH 7000TL3 BH-UP	SPH 8000TL3 BH-UP	SPH 10000TL3 BH-UP
<b>Input data(PV)</b>						
Max. recommended PV power (for module STC)	6000W	7500W	9000W	10500W	12000W	15000W
Max. DC voltage			1000			
Start voltage			120V			
MPP voltage range			120V-1000V/600V			
No. of MPP trackers			2			
No. of PV strings per MPP tracker			1			
Max. input current per MPP tracker			13.5A			
Max. short-circuit current per MPP tracker			16.9A			
<b>Output data(AC)</b>						
AC nominal power	4000W	5000W	6000W	7000W	8000W	10000W
Max. AC apparent power	4000VA	5000VA	6000VA	7000VA	8000VA	10000VA
Nominal AC voltage (range*)			230V/400V (310~476V)			
AC grid frequency (range)			50Hz/60Hz (45Hz-55Hz/55Hz-65Hz)			
Max. output current	6.1A	7.6A	9.1A	10.6A	12.1A	15.2A
Adjustable power factor			0.8leading...0.8lagging			
THDI			<3%			
AC grid connection type			3W+N+PE			
<b>Battery data (DC)</b>						
Battery voltage range			100~550V			
Max charging and discharging current			25A			
Continuous charging and discharging power	4000W	5000W	6000W	7000W	8000W	10000W
Type of battery			lithium/lead-acid			
<b>Backup power(AC)</b>						
Max. AC output power	4000W	5000W	6000W	7000W	8000W	10000W
Max. AC apparent power	4000VA	5000VA	6000VA	7000VA	8000VA	10000VA
Max. output current	6.1A	7.6A	9.1A	10.6A	12.1A	15.2A
Nominal AC output voltage			230V/400V			
Nominal AC output frequency			50/60Hz			
THDv			<3%			
Switch time			<10ms			
<b>Efficiency</b>						
MAX. efficiency	97.6%	97.8%	98.0%	98.2%	98.2%	98.2%
European efficiency	97.0%	97.2%	97.3%	97.4%	97.4%	97.5%
Euro battery discharge efficiency			97.4%			
MPPT efficiency			99.9%			
<b>Protection devices</b>						
DC switch			Yes			
DC reverse polarity protection			Yes			
AC/DC surge protection			Type II			
Battery reverse protection			Yes			
AC short-circuit protection			Yes			
Ground fault monitoring			Yes			
Grid monitoring			Yes			
Anti-islanding protection			Yes			
Residual-current monitoring unit			Yes			
Insulation resistance monitoring			Yes			
<b>General data</b>						
Dimensions (W / H / D)			505/453/198mm			
Weight			30kg			
Operating temperature range			-25 °C ... +60 °C			
Nighttime power consumption			<13W			
Topology			Transformerless			
Cooling			Natural			
Protection degree			IP65			
Relative humidity			0~100%			
Altitude			3000m			
DC connection			H4 / MC4 (Optional )			
AC connection			Connector			
Display			LCD+LED			
Interfaces: RS485/CAN/USB			Yes			
Monitor : RF/MIFI/GPRS			Optional			
Warranty: 5 years / 10 years			Yes / Optional			

CE, IEC62109, IEC 62040, VDE-AR-N 4105, VDE 0126, UTE C 15-712, C10/C11, EN50549, CEI 0-21, CEI 0-16, IEC62116, IEC61727, AS/NZS 4777 , G98, TOR Erzeuger

\* The AC Voltage Range may vary depending on specific country grid standard.