

SPH 3000-6000TL-HU

- Scalable system configuration
- Smart bypass function ensures continues critical loads
- Max. 6kW backup power
- Max. 16A PV input per string
- 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

GROWATT

www.ginverter.com

Datasheet	SPH 3000TL-HU	SPH 3600TL-HU	SPH 4000TL-HU	SPH 4600TL-HU	SPH 5000TL-HU	SPH 6000TL-HU
Input Data (PV)						
Max. recommended PV power (for module STC)	6000W	7200W	8000W	9200W	10000W	12000W
Max. DC voltage	600V					
Start voltage	100V					
MPPT voltage range/Nominal voltage	100V~560V/370V					
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					
AC Input /Output Data						
Rated output/input power	3000W	3680W	4000W	4600W	5000W	6000W
Rated output apparent power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA
Nominal AC voltage / (range)	230V / (180Vac-260Vac)					
AC grid 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 grid connection type	Single phase					
Battery Data (DC)						
Battery voltage range	42~59V					
Minimum full load voltage	46V			48V		
Rated charging and discharging current	66/66A	75/75A	85/85A	96/96A	105/105A	125/125A
Continuous charging/ discharging power	3000W	3680W	4000W	4600W	5000W	6000W
Type of Battery	lithium /Lead-acid					
EPS Output Data						
Rated output apparent power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA
Nominal AC output voltage	230V					
Nominal AC output 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%
Euro weighted efficiency	97%	97%	97.10%	97.10%	97.20%	97.20%
MPPT efficiency	≥99.5%					
Protection Devices						
PV switch	Yes					
DC/AC surge protection	Type II/III					
Insulation resistance monitoring	Yes					
AC short-circuit protection	Yes					
Ground fault monitoring	Yes					
Grid monitoring	Yes					
AFCI	Yes					
Anti-islanding protection	Yes					
Residual-current monitoring unit	Yes					
General Data						
Dimensions(W/H/D)	605/458/186mm					
Weight	32kg					
Operating temperature range	-25℃ ... +60℃					
Nighttime power consumption	< 10 W					
Cooling	Natural					
Protection degree	IP66					
Altitude	3000m					
Relative humidity	0~100%					
PV connection	MC4					
AC connection	connector					
Battery connection	connector					
Display	LCD					
Interfaces	RS485/ USB /CAN/Wi-Fi/GPRS					
Warranty	10 years					
Place of production	Made in China					
CE, IEC62109, IEC61000, AS4777.2:2020, CEC						

* The maximum operation 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.

* 2023 SHENZHEN GROWATT NEW ENERGY CO.,LTD All rights reserved. Subject to change without notice.