

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

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

| 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 |
|--|---------------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| Input data(PV) | | | | | | |
| 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 | | | | | |
| Output data(AC) | | | | | | |
| 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 | | | | | |
| Battery data (DC) | | | | | | |
| 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 battery | | | | | |
| Backup power(AC) | | | | | | |
| 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 | | | | | |
| Efficiency | | | | | | |
| 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% |
| Protection devices | | | | | | |
| 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 | | | | | |
| General data | | | | | | |
| 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/WIFI/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.