

Growatt SPH3000~6000

- VPP interface ready for energy trading
- Multiple workmodes configurable
- Smart load management via dry contact
- Remote smart O&M
- IP65 & Natural cooling



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

GROWATT

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Datasheet	SPH 3000	SPH 3600	SPH 4000	SPH 4600	SPH 5000	SPH 6000
DC input data						
Max. recommended PV power	6600W	6600W	6600W	8000W	8000W	8000W
Start voltage	150V					
Max. PV voltage	550V					
PV voltage range	120V-550V					
MPPT voltage range/ nominal voltage	150V-550V /360V					
Max. input current of tracker A/B	13.5A/13.5A					
Number of MPP trackers / strings per MPP tracker	2/1					
AC Output						
Rated AC output power	3000W	3680W	4000W	4600W	4999W	6000W
Max. AC apparent power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA
Max. output current	16A	16A	22A	22A	22A	27A
Nominal AC output voltage	230V					
Nominal grid frequency	50/60Hz, ±5Hz					
Power factor at rated power	1					
Displacement power factor	0.8leading...0.8lagging					
THDI	<3%					
AC output power(Backup)						
Max. output power	3000W					
Rated AC output voltage	230Vac					
Rated AC output frequency	50/60Hz					
Automatic switchover time	<0.5S					
Battery data						
Battery voltage range	42~59V					
Max. charging voltage	58V					
Max charging and discharging current	66A					
Max charging and discharging power	3000W					
Battery type	Lithium /Lead-acid					
Capacity of battery	50-2000AH					
Efficiency						
Max. efficiency	97.5%	97.5%	97.5%	97.6%	97.6%	97.7%
Euro European efficiency	97.0%	97.0%	97.0%	97.1%	97.1%	97.1%
MPPT efficiency	99.9%					
Protection devices						
DC switch	Yes					
DC reverse polarity protection	Yes					
Battery reverse protection	Yes					
Output over current protection	Yes					
Output over voltage protection	Yes					
Ground fault monitoring	Yes					
Grid monitoring	Yes					
Integrated all-pole sensitive leakage	Yes					
General Data						
Dimensions (W / H / D)	458/565/180mm					
Weight	27kg					
Operating temperature range	-25°C ... +60°C					
Altitude	2000m					
Self-Consumption	< 3 W					
Topology(solar)	Transformerless					
Topology(battery)	HF transformer					
Cooling concept	Natural					
Environmental Protection Rating	IP65					
Relative humidity	100%					
DC connection	MC4/H4(Optional)					
AC connection	Connector					
Interfaces: RS232/RS485/CAN/USB	Yes					
Monitor : RF/WIFI/GPRS	Optional					
Display	LCD+LED					
Warranty: 5 years / 10 years	Yes /Optional					
CE, IEC62109, G98/G99, VDE0126-1-1, AS4777, AS/NZS 3100, CEI 0-21, VDE-AR-N4105, UTE C 15-712, EN50438, EN50549, IEC 61727, IEC 62116, C10/11						