

# Growatt SPA1000~3000TL BL

- IP65 & Natural cooling
- Supports retrofit & New system
- Compatible with 1 & 3 phase system
- Workmodes programmable
- Online Smart Service



P O W E R  
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T O M O -  
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Datasheet†	SPA1000TL BL	SPA2000TL BL	SPA3000TL BL
<b>AC connection</b>			
Rated AC apparent power	1000VA	2000VA	3000VA
Max. AC current	6A	10A	16A
AC nominal voltage (range)	230V (180V-270V)	230V (180V-270V)	230V (180V-270V)
AC grid frequency (range)	50Hz / 60Hz (±5Hz)	50Hz / 60Hz (±5Hz)	50Hz / 60Hz (±5Hz)
Power factor, configurable	1, 0.8leading...0.8lagging	1, 0.8leading...0.8lagging	1, 0.8leading...0.8lagging
THDi	<3%	<3%	<3%
AC connection	Single phase	Single phase	Single phase
<b>AC output power (Back-up)</b>			
Rated AC output apparent power	1000VA	2000VA	3000VA
Rated AC output voltage	230V	230V	230V
Rated AC output frequency	50Hz / 60Hz	50Hz / 60Hz	50Hz / 60Hz
<b>Battery data</b>			
Battery voltage range	42~59V	42~59V	42~59V
Max charging voltage	58V	58V	58V
Max charging and discharging current	24A	44A	66A
Peak charging and discharging power	1000W	2000W	3000W
Battery Type	Lithium /Lead-acid	Lithium /Lead-acid	Lithium /Lead-acid
DoD	80% /50%	80% /50%	80% /50%
Capacity of battery	2~12 kWh	2~12 kWh	2~12 kWh
<b>Efficiency</b>			
Max. Charge efficiency	92.5%	94.0%	94.5%
Max. Discharge efficiency	92.0%	93.5%	94.0%
<b>Protection devices</b>			
Battery reverse protection	yes	yes	yes
Output over current protection	yes	yes	yes
Output over voltage protection-varistor	yes	yes	yes
Ground fault monitoring	yes	yes	yes
Grid monitoring	yes	yes	yes
Integrated all - pole sensitive leakage current monitoring unit	yes	yes	yes
<b>General Data</b>			
Dimensions (W / H / D) in mm	428/458/180	428/458/180	428/458/180
Weight	17kg	17kg	17kg
Operating temperature range	- 25°C ... +60°C	- 25°C ... +60°C	- 25°C ... +60°C
Noise emission (typical)	≤ 25 dB(A)	≤ 25 dB(A)	≤ 25 dB(A)
Altitude	2000m	2000m	2000m
Self-Consumption	<4W	<4W	<4W
Inverter Topology	transformerless	transformerless	transformerless
DC/DC topology	HF transformer	HF transformer	HF transformer
Cooling concept	Natural	Natural	Natural
Environmental Protection Rating	IP65	IP65	IP65
Relative humidity	100%	100%	100%
<b>Features</b>			
AC connection	connector	connector	connector
Battery connection	Screw	Screw	Screw
Display	LCD	LCD	LCD
Interfaces: RS485/ USB /CAN/WI-FI/RF	yes/yes/yes/opt/opt	yes/yes/yes/opt/opt	yes/yes/yes/opt/opt
Warranty:5 years/10 years	yes/opt	yes/opt	yes/opt

CE, IEC62109, G83, VDE0126-1-1, VDE-AR-N4105, CEI 0-21, IEC62116&IEC61727, EN50438, AS4777, AS/NZS 3100