

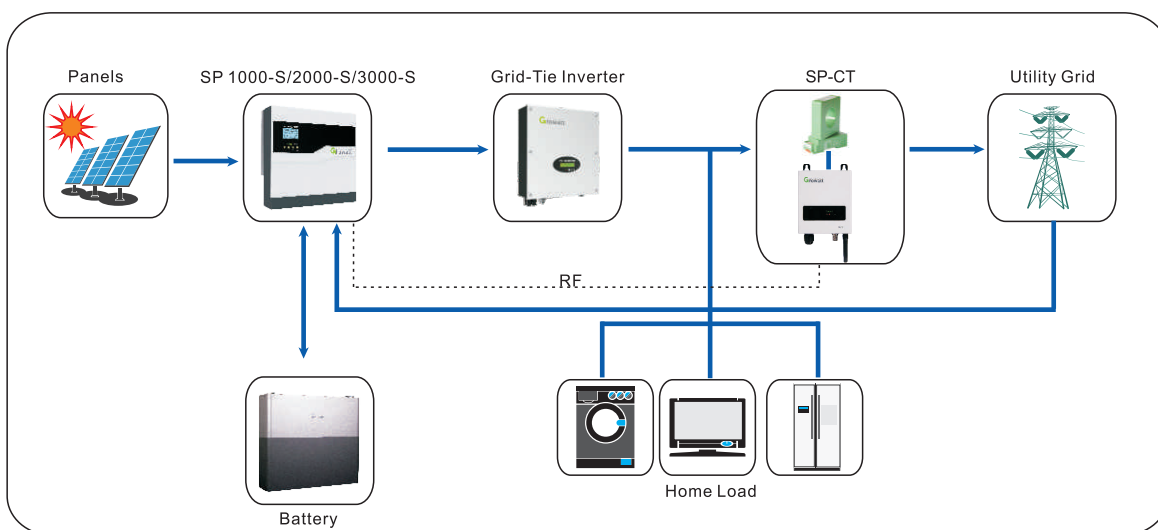
## Residential Storage Product

Growatt SP1000-S/SP2000-S/SP3000-S



### Leading - Edge Technology

- ▶ Communication ,RS232 / RF / WiFi
- ▶ Wireless current sensor is optional
- ▶ Easy add to existing photovoltaic system
- ▶ Free to choose battery type and capacity
- ▶ Store energy from solar energy and off peak electricity
- ▶ Programmable discharging time period for battery
- ▶ Compatible with almost all brands string inverter
- ▶ Local graphic LCD @ four buttons, convenient to operate



### GROWATT NEW ENERGY TECHNOLOGY Co.,LTD

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Datasheet	Growatt SP 1000-S	Growatt SP2000-S	Growatt SP3000-S
<b>PV input data</b>			
Recommended input power range	2000W~4000W	3000W~6000W	3000W~6000W
Max. input current	30A *1	30A *1	30A *1
Input DC voltage range	100V~580VDC	100V~580VDC	100V~580VDC
<b>Technical data</b>			
Max. charging and discharging power	1000W	2000W	3000W
Full load DC voltage range while charging	100V~450VDC	200V~450VDC	200V~450VDC
Output voltage range while discharging	150V~400VDC	150V~450VDC	150V~450VDC
Rated output voltage while discharging	300V	380V	380V
Max. input current (from PV) while charging	6.7A	6.7A	10A
Max. output current (to inverter) while discharging	6.7A	6.7A	10A
Rated output current (to inverter) while discharging	1.7A/per string	2.6A/per string	4A/per string
Number of MPP trackers/strings per MPP tracker	2/1	2/1	2/1
Output strings(to inverter)	2	2	2
Max. AC charging power	500W	1000W	1000W
<b>Battery data</b>			
Battery type	Lead-acid / Lithium	Lead-acid / Lithium	Lead-acid / Lithium
Recommend battery capacity range	50-200AH	90-400AH	150-500AH
Daily total electricity supply	1~4 kWh	2~9 kWh	3~12 kWh
Deep of discharge	50% DOD / 80% DOD	50% DOD / 80% DOD	50% DOD / 80% DOD
Battery voltage range	46V~58VDC	46V~58VDC	46V~58VDC
Max. charging voltage	58VDC / 57VDC	58VDC / 57VDC	58VDC / 57VDC
Max. charging current	≤23A	≤45A	≤66A
Max. discharging current	≤23A	≤45A	≤66A
<b>Protection devices</b>			
Over voltage protection	Yes	Yes	Yes
Low voltage protection	Yes	Yes	Yes
Over current protection	Yes	Yes	Yes
Over load protection	Yes	Yes	Yes
Output current short protection	Yes	Yes	Yes
DC reverse polarity protection	Yes	Yes	Yes
<b>Others</b>			
Maximum efficiency	94.0%	94.0%	94.5%
Dimensions(W/H/D)	445/450/162mm	445/450/162mm	445/450/162mm
Weight	16.7 kg	16.7 kg	16.7 kg
Input grid voltage range (single phase)	230Vac±15%	230Vac±15%	230Vac±15%
Operating temperature range	0 °C~+40 °C	0 °C~+40 °C	0 °C~+40 °C
Altitude	2000m	2000m	2000m
Cooling concept	Natural	Natural	Natural
Environmental protection rating	IP20 (indoor used)	IP20 (indoor used)	IP20 (indoor used)
Noise emission (typical)	≤25dB	≤25dB	≤25dB
DC connection	MC4/H4(opt)	MC4/H4(opt)	MC4/H4(opt)
Battery connection	Screw terminal	Screw terminal	Screw terminal
Display	LED+LCD	LED+LCD	LED+LCD
Current sensor:Wired/Wireless	Yes / opt	Yes / opt	Yes / opt
Interfaces:RS232 / RF / WiFi	Yes / Yes / opt	Yes / Yes / opt	Yes / Yes / opt
Warranty	5 years	5 years	5 years
Certificates and approvals	CE,SAA,CEI	CE,SAA,CEI	CE,SAA,CEI

Note: \*1 Current from PV array, not only to SP, but also to PV inverter.