

Leading - edge Technology

- ▶ Rated power 1KW to 5KW
- ▶ PWM solar charge controller
- ▶ High frequency inverter with small size and light weight
Pure sine wave AC output
- ▶ Overload, short circuit and deep discharge protection
- ▶ Configurable AC/ solar input priority via LCD setting
- ▶ Compatible to mains voltage or generator power
- ▶ WIFI/ GPRS remote monitoring (optional)
- ▶ Parallel operation available for Growatt SPF 4KW/5KW



Growatt SPF Series

Growatt SPF series off grid solar inverter is integrated with a PWM solar charge controller, a high frequency pure sine wave inverter and a UPS function module in one machine, which is perfect for off grid backup power and self-consumption applications. The transformerless design provides reliable power conversion in compact size. Besides, it's worry-free to start up motor-type loads such as motors, water pumps, and compressors as well as the common home device. Growatt SPF 4KW/5KW can be wired in parallel to increase the output capacity.

| Datasheet | Growatt SPF 1000TL HVP | Growatt SPF 2000TL HVP | Growatt SPF 3000TL HVP | Growatt SPF 4000TL HVP | Growatt SPF 5000TL HVP |
|-----------|------------------------|------------------------|------------------------|------------------------|------------------------|
|-----------|------------------------|------------------------|------------------------|------------------------|------------------------|

| | | | | | |
|-----------------|-------|-------|-------|-------|-------|
| Battery voltage | 12VDC | 24VDC | 24VDC | 48VDC | 48VDC |
|-----------------|-------|-------|-------|-------|-------|

INVERTER OUTPUT

| | | | | | |
|--------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| RATED POWER | 1000VA/ 1000W | 2000VA/ 2000W | 3000VA/ 3000W | 4000VA/ 4000W | 5000VA/ 5000W |
| Parallel Capability | No | No | No | Yes, 6 units | Yes, 6 units |
| AC Voltage Regulation (Battery Mode) | 230VAC \pm 5% @ 50/60Hz | 230VAC \pm 5% @ 50/60Hz | 230VAC \pm 5% @ 50/60Hz | 230VAC \pm 5% @ 50/60Hz | 230VAC \pm 5% @ 50/60Hz |
| Surge Power | 2000VA | 4000VA | 6000VA | 8000VA | 10000VA |
| Efficiency (Peak) | 90% | 93% | 90% | 93% | 90% |
| Waveform | | | | | |

SOLAR CHARGER

| | | | | | |
|---------------------------------------|-------|-------|-------|-------|-------|
| Maximum PV Array Power | 900W | 1800W | 1800W | 3600W | 3600W |
| Maximum PV Array Open Circuit Voltage | 50VDC | 75VDC | 75VDC | 90VDC | 90VDC |
| Maximum Solar Charge Current | 50A | 50A | 50A | 50A | 50A |
| Standby Power Consumption | 1W | 2 W | 2 W | 5 W | 5W |

AC CHARGER

| | | | | | |
|--------------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|
| Charge Current | 20A | 30A | 30A | 60A | 60A |
| AC Input Voltage | 230 VAC | 230 VAC | 230 VAC | 230 VAC | 230 VAC |
| Selectable Voltage Range | 170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances) | | | | |
| Frequency Range | 50Hz/60Hz (Auto sensing) | 50Hz/60Hz (Auto sensing) | 50Hz/60Hz (Auto sensing) | 50Hz/60Hz (Auto sensing) | 50Hz/60Hz (Auto sensing) |

AC BYPASS

| | | | | | |
|---------------|---|--|--|--|--|
| Transfer Time | 10 ms (For Personal Computers); 20 ms (For Home Appliances) | | | | |
|---------------|---|--|--|--|--|

PHYSICAL

| | | | | | |
|---------------------------|-------------|-------------|-------------|-------------|-------------|
| Dimension, D x W x H (mm) | 120x315x390 | 120x315x390 | 120x315x390 | 130x350x445 | 130x350x445 |
| Net Weight (kgs) | 6 | 8 | 8 | 14.5 | 14.5 |

OPERATING ENVIRONMENT

| | | | | | |
|-----------------------|---|---|---|---|---|
| Humidity | 5% to 95% Relative Humidity(Non-condensing) | 5% to 95% Relative Humidity(Non-condensing) | 5% to 95% Relative Humidity(Non-condensing) | 5% to 95% Relative Humidity(Non-condensing) | 5% to 95% Relative Humidity(Non-condensing) |
| Operating Temperature | 0°C - 55°C | 0°C - 55°C | 0°C - 55°C | 0°C - 55°C | 0°C - 55°C |
| Storage Temperature | -15°C - 60°C | -15°C - 60°C | -15°C - 60°C | -15°C - 60°C | -15°C - 60°C |