

Introduction

Growatt SPF 3500-5000 ES is a 230VAC output voltage off-grid inverter for back up power and self-consumption application, with a maximum PV input voltage up to 450VDC. It can also work without battery to saving system investment cost.

Product Options



Datasheet	KMSPF 3500 ES	KMSPF 5000 ES
Battery Voltage	48VDC	
Battery Type	Lithium/Lead-acid	

INVERTER OUTPUT	KMSPF 3500 ES	KMSPF 5000 ES
Rated Power	3500VA/ 3500W	5000VA/ 5000W
Parallel Capability	Yes, 6 units maximum	
AC Voltage Regulation (Battery Mode)	23DVAC \pm 5% @50/6DHz	
Surge Power	7000VA	10000VA
Efficiency (Peak)	93%	
Waveform	Pure sine wave	
Transfer Time	10ms typical 20ms Max	

SOLAR CHARGER	KMSPF 3500 ES	KMSPF 5000 ES
Maximum PV Array Power	4500W	6000W
MPPT Range @ Operating Voltage	120VDC - 430VDC	
Number of Independent MPP Trackers / Strings Per MPP Tracker	1/1	
Maximum PV Array Open Circuit Voltage	450VDC	
Maximum Solar Charge Current	80A	100A

AC CHARGER	KMSPF 3500 ES	KMSPF 5000 ES
Charge Current	60A	80A
AC Input Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers) : 90-280 VAC (For Home Appliances)	
Frequency Range	50Hz/60Hz (Auto Sensing)	

PHYSICAL	KMSPF 3500 ES	KMSPF 5000 ES
Protection Degree	IP20	
Dimension(W/H/D)	330/485/135mm	330/485/135mm
Net Weight	11.5kgs	12kgs

OPERATING ENVIRONMENT	KMSPF 3500 ES	KMSPF 5000 ES
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Attitude	<2000m	
Operating Temperature	0°C - 55°C	
Storage Temperature	-15°C - 60°C	

Product Features

- Integrated MPPT charge controller.
- Equalization charging function.
- Work with battery or without battery.
- Maximum PV input voltage up to 450VDC.
- Configurable grid or solar input priority.
- Optional WIFI/ GPRS remote monitoring.
- Support parallel operation for capacity expansion up to 30kW.
- PV and Grid power the load jointly if PV energy insufficient.
- Flexibly schedule the Inverter charging and discharging time.

More Information

Solar panels are a clean source of energy that use the sun's rays to convert them into electricity or heat.

Our clean energy solutions provide electrical power as a way to decarbonize and transition to clean energy in our mission to combat climate change.

Introduction

Growatt SPF 3000TL LVM series inverter has a pure sine wave output inverter also just for 120VAC power supply system. It is perfect for off-grid, backup power and self-consumption applications.

It is a multifunctional off grid solar inverter, integrated with a MPPT 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.

Product Options



Datasheet	SPF 3000TL LVM-24P	SPF 3000TL LVM-48P
Battery Voltage	24VDC	48VDC

INVERTER OUTPUT	SPF 3000TL LVM-24P	SPF 3000TL LVM-48P
Rated Power	3000VA/ 3000W	3000VA/ 3000W
Parallel Capability	Yes	
AC Voltage Regulation (Battery Mode)	120VAC \pm 5% @ 50/60Hz	120VAC \pm 5% @ 50/60Hz
Surge Power	6000VA	6000VA
Efficiency (Peak)	93%	
Waveform	Pure sine wave	
Transfer Time	10 ms (For Personal Computers); 20 ms (For Home Appliances)	

SOLAR CHARGER	SPF 3000TL LVM-24P	SPF 3000TL LVM-48P
Maximum PV Array Power	2000W	4500W
MPPT Range @ Operating Voltage	30VDC ~ 115VDC	60VDC ~ 115VDC
Maximum PV Array Open Circuit Voltage	145VDC	145VDC
Maximum Solar Charge Current	80A	80A
Maximum Efficiency	98%	98%
Standby Power Consumption	2W	2W

AC CHARGER	SPF 3000TL LVM-24P	SPF 3000TL LVM-48P
Charge Current	60A	40A
AC Input Voltage	120 VAC	120 VAC
Selectable Voltage Range	95-140 VAC (For Personal Computers) ; 65-140 VAC (For Home Appliances)	
Frequency Range	50Hz/60Hz (Auto Sensing)	

PHYSICAL	SPF 3000TL LVM-24P	SPF 3000TL LVM-48P
Dimension(W/H/D)	130/350/455mm	
Net Weight	11.5kgs	

OPERATING ENVIRONMENT	SPF 3000TL LVM-24P	SPF 3000TL LVM-48P
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	0°C - 55°C	
Storage Temperature	-15°C - 60°C	

Product Features

- Integrated MPPT charge controller.
- Configurable grid or solar input priority.
- Optional WIFI/ GPRS remote monitoring.
- Parallel for scalability

More Information

Solar panels are a clean source of energy that use the sun's rays to convert them into electricity or heat. Our clean energy solutions provide electrical power as a way to decarbonize and transition to clean energy in our mission to combat climate change.

For more information regarding battery installation please download our pdf [HERE](#).