SERVOTEC
smart power solutions

Sparkle Series

Hybrid Solar Inverter

www.servotech.in

About

Servotech is dedicated to creating value through transformative change, with a commitment to advancing a green future through sustainable development and relentless innovation. Our eco-friendly products are designed to lead the way in renewable energy and electric mobility. With an extensive presence spanning over two decades we have curated high value solutions.

Our green product portfolio features comprehensive solar solutions, including solar panels, inverters, and batteries. The Sparkle Series hybrid solar inverter are a notable addition to our robust lineup of efficient solar products, reflecting our forward-thinking approach. Recognizing the importance of integrating cutting-edge technology, we have developed these advanced hybrid solar inverters. Servotech continues to push the boundaries of solar technology, ensuring we deliver superior performance and innovation to our customers.

Solar, Simplified with Sparkle Series

Servotech's Sparkle Series with its new and improved advanced technology redefines the concept of renewable power. Crafted with sincerity, built on reliability, Sparkle series is a reflection of Servotech's long lasting legacy of technology driven reliable and durable products.

Here is why you should choose us :

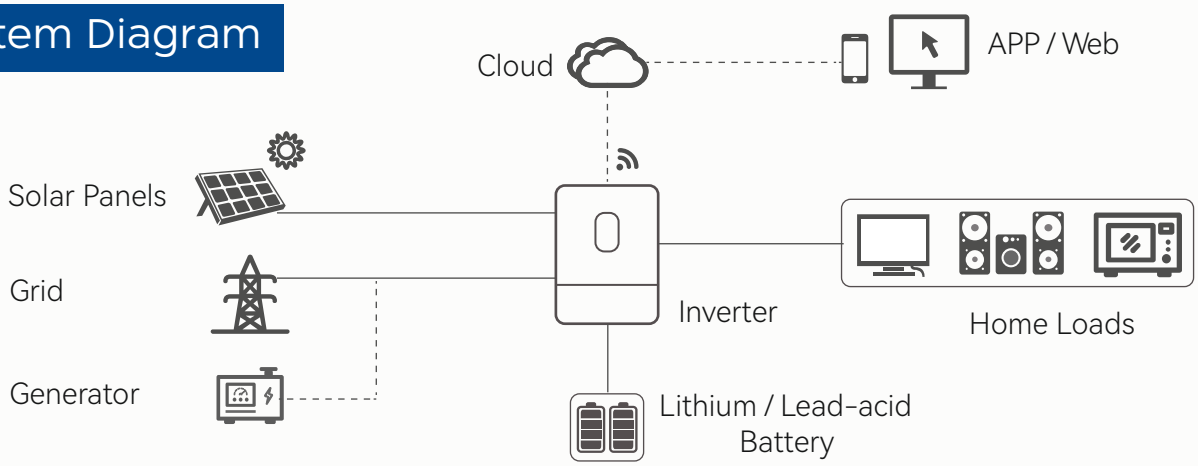
- **Industry Leader:** As a pioneering solar solutions provider, Servotech leads innovation in the renewable energy sector, with products trusted by customers globally.
- **Precision Engineering:** Our hybrid solar inverter are expertly crafted for efficient energy conversion, ensuring maximum power output from your solar panels.
- **High Efficiency:** Designed with a focus on optimal performance, Servotech inverters provide high energy conversion rates, lowering electricity costs and maximizing your solar investment.
- **User-Friendly Design:** Featuring easy-to-use interfaces and simple installation, our inverters offer a seamless experience, making solar power accessible and convenient for all households.

Sparkle Series

Single Phase Hybrid Solar Inverter

- Built-in 100A Solar Charger
- Wide MPPT Range 40-500V
- Workable with Generator
- BMS Support Lithium/ Lead-acid Battery
- Lithium Battery Activation
- Detachable Dust Cover
- WiFi Monitoring

System Diagram



Sparkle Series

Single Phase Hybrid Solar Inverter

Technical Specifications

Model	STAG-HYBINV-5048/S11
AC Input	
Rated Input Voltage (VAC)	208 / 220 / 230 / 240; L + N + PE
Voltage Range (VAC)	90~280±3 (normal mode); 170~280±3 (UPS mode)
Frequency (Hz)	50 / 60 (Auto Adaptive)
AC Output	
Rated Capacity (kW)	3.6
Surge Power (kVA)	7.2
Voltage (VAC)	208 / 220 / 230 / 240
Power Factor (PF)	1
Frequency	50/60Hz±0.1%
Switch Time (ms)	10 (normal mode) / 10 (UPS mode)
Wave Form	Pure Sine Wave
Overload Capacity (Battery Mode)	60s@102%~110% load; 10s@110%~130% load; 3s@130%~150% load; 0.2s@>150% load
Max. E ciency (Battery Mode)	92.7%@24VDC
Parallel Quantity	NA
Charger (PV / AC)	
Solar Charger Type	MPPT
Max PV input Current / Input Power	18A / 5000W
MPPT Range@Operating Voltage (VDC)	40~450
Max PV Open Circuit Voltage (VDC)	500
Max PV Charge Current (A)	100
Max AC Charge Current (A)	100
Max. Charge Current (PV + AC) (A)	100
Battery	
Rated Voltage (VDC)	24
Floating Charge Voltage (VDC)	27
Overcharge Protection (VDC)	30.5
Battery Type	Lithium and Lead-acid
Interface	
HMI	LCD
Interface	RS485 / RS232 / USB / Dry Contact
Monitoring	WiFi (Optional)
General Data	
Ingress Protection	IP21
Operating Temperature	-10 ℃ ~ 50 ℃
Relative Humidity	5% ~ 95% (Non-condensing)
Storage Temperature	-15 ℃ ~ 60 ℃
Net Weight (kg)	6.4
Dimensions (W*H*D)	490*306*115mm (without bracket)
Max. Operating Altitude	4000m (Derating above 1000m)

Sparkle Series

Single Phase Hybrid Solar Inverter

Built-in 120A Solar Charger

Wide MPPT Range 60-500V

28A MAX PV Input

DUAL IN OUT
Dual AC In & Dual AC Out*

BMS
Support Lithium/ Lead-acid Battery

Lithium Battery Activation

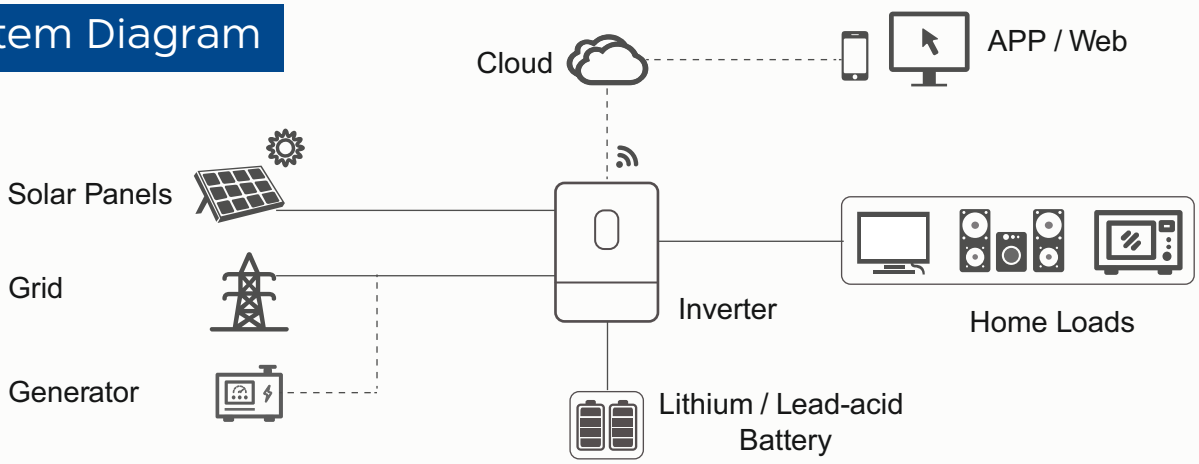
Noise Control Algorithm

WiFi Monitoring

Feed-in to Grid

*Extra interface can be selected as in or out. It cannot support at the same time.

System Diagram



Sparkle Series

Single Phase Hybrid Solar Inverter

Technical Specifications

Model	STAG-HYBINV-8748/S11
AC Input	
Rated Input Voltage (VAC)	208 / 220 / 230 / 240; L + N + PE
Voltage Range (VAC)	90~280±3 (normal mode); 170~280±3 (UPS mode)
Frequency (Hz)	50 / 60 (Auto Adaptive)
AC Output	
Rated Capacity (kW)	6.5
Surge Power (kVA)	12
Voltage (VAC)	208 / 220 / 230 / 240
Power Factor (PF)	1
Frequency	50/60Hz±0.1%
Switch Time (ms)	10 (normal mode) / 10 (UPS mode)
Wave Form	Pure Sine Wave
Overload Capacity (Battery Mode)	10min@102%~120%Load, 1min@120%~150%Load 10S@150%~200%Load, 5s@ > 200%Load
Max. Efficiency (Battery Mode)	93%@48VDC
Parallel Quantity	NA
Charger (PV / AC)	
Solar Charger Type	MPPT
Max PV Input Current / Input Power	28A / 9000W
MPPT Range@Operating Voltage (VDC)	60~450
Max PV Open Circuit Voltage (VDC)	500
Max PV Charge Current (A)	120
Max AC Charge Current (A)	120
Max. Charge Current (PV + AC) (A)	120
Battery	
Rated Voltage (VDC)	48
Floating Charge Voltage (VDC)	54
Overcharge Protection (VDC)	61
Battery Type	Lithium and Lead-acid
Interface	
HMI	LCD
Interface	RS485 / USB / Dry Contact / CT / Meter /
Monitoring	WiFi (Optional)
General Data	
Ingress Protection	IP21
Operating Temperature	-10 ℃~ 50℃
Relative Humidity	5% ~ 95% (Non-condensing)
Storage Temperature	-15 ℃ ~ 60 ℃
Net Weight (kg)	10
Dimensions (W*H*D)	508*338*136.5mm
Max. Operating Altitude	4000m (Derating above 1000m)

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