

Sparkle Series Hybrid Solar Inverter



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

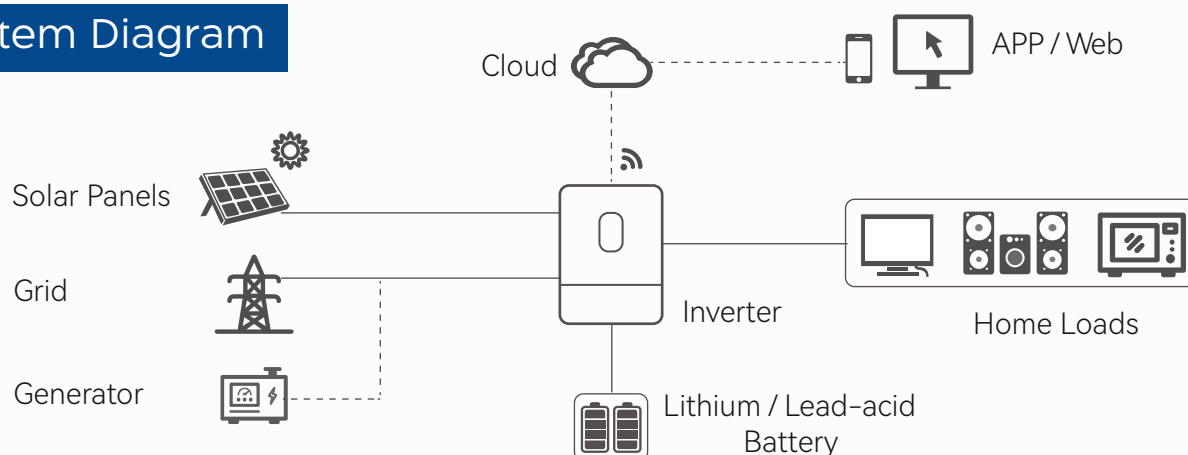


Detachable
Dust Cover



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. Efficiency (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 °C ~ 50 °C |
| Relative Humidity | 5% ~ 95% (Non-condensing) |
| Storage Temperature | -15 °C ~ 60 °C |
| 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



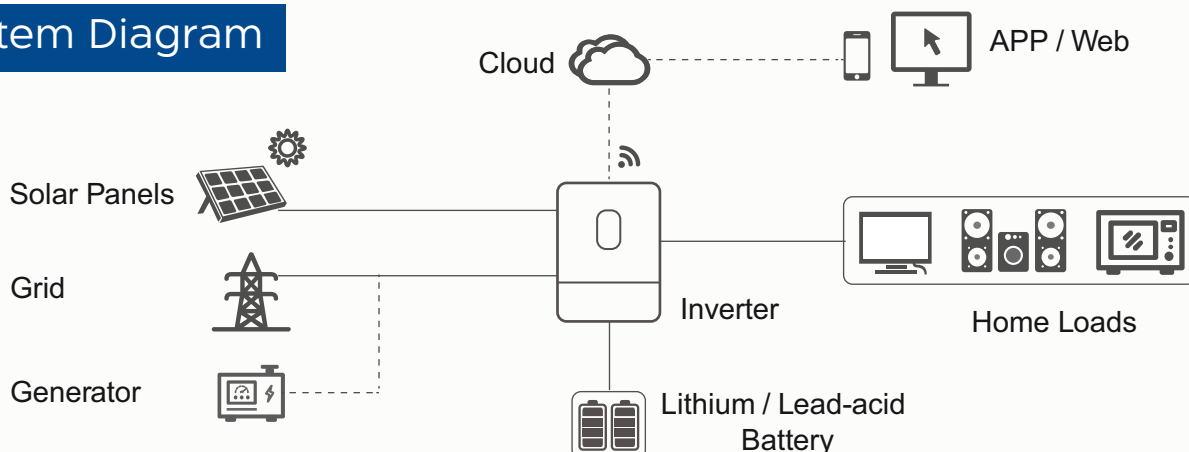
WiFi
Monitoring



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 °C~ 50°C |
| Relative Humidity | 5% ~ 95% (Non-condensing) |
| Storage Temperature | -15 °C ~ 60 °C |
| Net Weight (kg) | 10 |
| Dimensions (W*H*D) | 508*338*136.5mm |
| Max. Operating Altitude | 4000m (Derating above 1000m) |

Servotech Power Systems Ltd.

Registered Office : 806, 8th Floor,
Crown Heights, Hotel Crowne Plaza,
Rohini, New Delhi - 110085

Ph: +91 9818680033, 9311344776



+91 9717691800

Email: servotech@servotechindia.com

Plant & R&D : 76A, Sector-57,
Revenue Estate, Kundli, Sonipat,
Haryana - 131028

Ph: +91 9818680033, 9311344776



+91 9717691800

www.servotech.in

