

# Sparkle Series

Grid-Feed Inverter with Integrated Energy Storage

---



# 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 Hybrid Solar Inverter with Integrated Energy Storage 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 bring you the next level of innovation with integrated batteries to keep you powered even when the grid can't. 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.

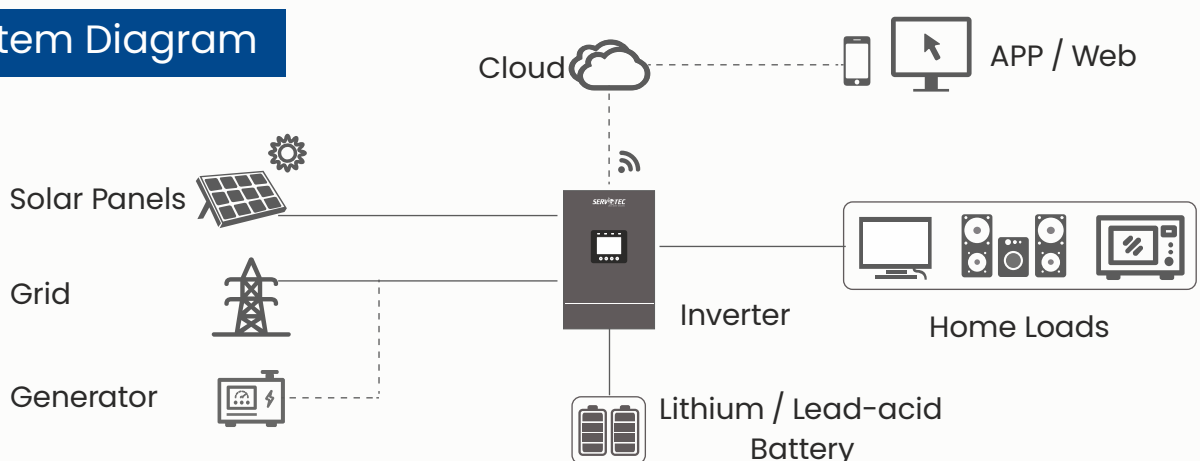
# Sparkle Series

## Grid-Feed Inverter with Integrated Energy Storage



 Built-in 100A – 160A Solar Charger	 Wide MPPT Range 40-500V	 Workable with Generator	 BMS Support Lithium/ Lead-acid Battery	 27, 28, 45A MAX PV Input	 Noise Control Algorithm
 DUAL IN OUT Dual AC In & Dual AC Out*	 WiFi Monitoring	 Feed-in to Grid	 Lithium Battery Activation	 5 Inch Display	

### System Diagram



# Sparkle Series

## Grid-Feed Inverter with Integrated Energy Storage

### Technical Specifications

Model	STAG-HYBINV-5048/S11	STAG-HYBINV-7548/S11	STAG-HYBINV-7548/S11-IP66	STAG-HYBINV-15048/S11
<b>AC Input</b>				
Rated Input Voltage (VAC)	208 / 220 / 230 / 240; L + N + PE			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)			
<b>AC Output</b>				
Rated Capacity (kW)	3.6	6.0	6	12.0
Surge Power (kVA)	7.2	12	12	24
Voltage (VAC)	220 / 230 / 240			
Power Factor (PF)	0.8			
Frequency	50 / 60Hz±0.1%			
Switch Time (ms)	20ms normal mode & 10ms UPS mode			
Wave Form	Pure Sine Wave			
Overload Capacity (Battery Mode)	60s@102%~125% load; 10s> 125% load,			
Max. Efficiency (Battery Mode)	92.7%@24VDC	93%@48VDC	94%@48VDC	94%@48VDC
Parallel Quantity	NA			
<b>Charger (PV / AC)</b>				
Solar Charger Type	MPPT			
Max PV input Current / Input Power	18A / 5000W	27A / 9000W	19Ax2	Using 1 MPPT 29A/9kW, Using 2 MPPT's 22.5A/ Per MPPT, Total 15kW
MPPT Range (VDC)	40~450	60~450	250~500V	60~450
Max PV Open Circuit Voltage	500	500	550	500
Max PV Charge Current (A)	100	120	25/25	160
Max AC Charge Current (A)	100	120	120	160
Max. Charge Current (PV + AC) (A)	100	120	120	160
<b>Battery</b>				
Rated Voltage (VDC)	24	48		
Floating Charge Voltage (VDC)	27	54		
Overcharge Protection (VDC)	30.5	61		
Battery Type	Lithium and Lead-acid			
DC Switch	NA	NA	Yes	NA
DC Reverse Polarity Protection	NA	NA	Yes	NA
<b>Interface</b>				
HMI	LCD	LCD	5 Inch LCD	Touch LCD & APP
Interface	RS485 / RS232 / USB / Dry Contact			
Monitoring	WiFi (Optional)			
<b>General Data</b>				
Ingress Protection	IP21	IP21	IP66	IP21
Operating Temperature	-10 °C~ 50 °C			
Relative Humidity	5% - 95% (Non-condensing)			
Storage Temperature	-15 °C~ 60 °C			
Net Weight (kg)	6.4	10	24	15
Dimensions (W*H*D)	490*306*115mm (without bracket)	410*336*110 mm ±5mm	525*485*205 mm ±5mm (Without Terminal & Bracket)	495*425*120 mm ±5mm
Max. Operating Altitude	4000m (Derating above 1000m)			



**INDIA'S**  
**TRUSTED**



रहो रेशन  
बिना टेंशन...

## Servotech Renewable Power System Ltd.

**Corporate Office :** 806, 8th Floor, Crown Heights, Sector-10, Rohini, New Delhi - 110085

**Ph: 011-41183116, +91 9818680033**

 **+91 9311313734**

**Email:** [servotech@servotechindia.com](mailto:servotech@servotechindia.com)

**Website:** [www.servotech.in](http://www.servotech.in)

**Reg. Add. & Kundli Plant:** Khata No. 1970, Khewat No. 1672, Khasra No. 21/20/2/2, Revenue Estate, Kundli, P.S.Rai, Sonipat, Haryana - 131029

**Safabad Plant:** Killa No. 14/6/1/2 (0-3), 6/2/3 (5-13) Village-Safabad, Pana Paposhian, Rai, Sonipat, Haryana - 131029

**Warehouse:** Khasra No. 8/5, 6, 14/2, 15/1, 16/2 Min & 17, Jakhali Road, Jhundpur, Sonipat, Haryana - 131021

