



SpartanLync

TECHNOLOGIES



All-in-One Solar & Storage System

This product utilizes an intelligent microgrid management system to deliver a multi-energy complementary power supply. It prioritizes photovoltaic (PV) generation, backed up by diesel generators or the grid. It is suitable for microgrid scenarios in remote, off-grid or areas with unstable power supply. It is also applicable for self-consumption of solar energy in urban green buildings.

Product Features

Flexible & Convenient

- Standard rack-mounted modular design for flexible configuration, easy maintenance, and simple expansion.
- Free combination of different module types (DC/DC, DC/AC, STS) to suit specific site requirements.
- DC/DC modules support various types of storage batteries or PV components, and can also enable DC remote power supply with voltage and power control.
- DC/DC features dual inputs, configurable in parallel or independently, enabling multiple MPPTs and optimized multi-channel battery management.

Smart & Reliable

- High-efficiency version employs a single-stage DC/AC structure, improving system efficiency.
- Both DC/DC and DC/AC utilize three-level circuit design for high conversion efficiency.
- Advanced interleaving control technology minimizes ripple current, extending battery lifespan.
- Patented harmonic suppression technology allows intelligent adaptation to diverse scenarios like commercial & industrial applications, microgrids, and distribution station terminals.
- The microgrid intelligent management system auto-identifies module quantity and functions, integrates multiple operational strategies and communication interfaces for unified dispatch and intelligent management.
- During grid power outages or faults, the STS module automatically isolates the faulty circuit while the solar-storage system provides off-grid power, ensuring supply reliability.

Configuration Recommendations:

- **PV + Storage, Peak Shaving:**
Saves the need for a low-frequency transformer.
- **Microgrid Multi-Energy Supply:**
Requires a low-frequency transformer.
- **Uninterrupted Power for Critical Loads:**
Requires a low-frequency transformer.

Product Parameters

| Model | DC50 | DC100 | DC150 | DC250 |
|---|--|-------------------------------|---------------------------------|---|
| Grid/Diesel Generator Port | | | | |
| Rated Power | 50 kW | 100 kW | 150 kW | 250 kW |
| Max. Power | 55 kW | 110 kW | 165 kW | 275 kW |
| Rated Current | 72 A | 144 A | 216 A | 361 A |
| Max. Current | 79 A | 158 A | 238 A | 397 A |
| Rated Voltage | 400V (-15%~+10%), 3W+N+PE | | | |
| Rated Frequency | 50/60 Hz (±5 Hz) | | | |
| Total Current Harmonic Distortion (THD) | < 3% (at rated power) | | | |
| Adjustable Power Factor Range | -1 (leading) ~ +1 (lagging) | | | |
| DC/AC Circuit Topology | Three-Level DC/AC | | | |
| Load Port | | | | |
| Rated Power | 50 kW | 100 kW | 150 kW | 250 kW |
| Rated Voltage | 400 Vac | | | |
| Output Voltage Distortion | < 3% (linear load) | | | |
| Unbalanced Load Capability | 100% | | | |
| Overload Capability | 100% long-term operation; 120% for 1 minute | | | |
| PV Side | | | | |
| PV Open-Circuit Voltage Range | 250V ~ (Battery Min. Voltage - 20V) | | | |
| PV Rated Power | 50 kW | 100 kW | 150 kW | 250 kW |
| MPPT Number | 1 | 2 | 3 | 5 |
| DC/DC Circuit Topology | Three-Level DC/DC | | | |
| Battery Side | | | | |
| Battery Voltage Range | 585 - 950 V | | | |
| Full Load Voltage Range | 585 - 950 V | | | |
| General Parameters | | | | |
| Protection Level | IP21 (Indoor); IP55 (Outdoor) | | | |
| Noise | < 75 dB | | | |
| Ambient Temperature | -25°C ~ 60°C (Derating above 45°C) | | | |
| Cooling Method | Intelligent Forced Air Cooling | | | |
| Altitude | 3000 m (Derating above 3000 m) | | | |
| Communication Interface | RS485 / CAN 2.0 / Ethernet / Dry Contact | | | |
| Dimensions (W*D*H) mm | 800*800*2100 (Indoor) 900*1000*2100 (Outdoor) | | | 1200*1000*2100 (Indoor) 1350*1000*2100 (Outdoor) |
| Weight (Approx.) kg | 608 (Indoor) 700 (Outdoor) | 886 (Indoor) 970 (Outdoor) | 1120 (Indoor) 1200 (Outdoor) | 1580 (Indoor) 1600 (Outdoor) |