



STS-12K-HY2P3P

Solar Hybrid Inverter

Efficiency

- Advanced MPPT technology with up to 99.9% efficiency
- Up to 22+22A PV input current

Safety

- Comprehensive security from hardware to software
- Multiple safety certifications

All in one

- Up to 260A charging current
- Support Li-ion battery BMS communication

Reliable

- Outputs high quality pure sine wave AC power
- Up to 72kW load power for most household needs

User-Friendly

- Industrial design with a modern aesthetic look
- Easy to install and simple to use

Intelligent

- Exclusive Li-ion battery BMS dual activation
- Time-slot function to save cost

Application scenario



House



Farm



Telecom



Countryside



Island



Pasture

Shark
TOPSUN

MODEL	STS-12K-HY2P3P	Can Be Set
INVERTER OUTPUT		
Rated Output Power	12,000W	
Max. Peak Power	24,000W	
Rated Output Voltage	230/400Vac, three-phase	✓
Capacity of Motor Load	6HP	
Rated Frequency	50/60Hz	✓
Output Waveform	pure sine wave	
Num. of Parallel	1~6 units	
Switching Time	10ms (typical)	
BATTERY		
Battery Types	Li-ion / Lead-Acid / User Defined	✓
Rated Battery Voltage	48Vdc	
Voltage Range	40~60Vdc	✓
Max. PV Charging Current	260A	✓
Max. Utility / Generator Charging Current	120A	✓
Max. Hybrid Charging Current	260A	✓
PV INPUT		
No. of MPPT	2	
Max. Input Power	9,000W/9,000W	
Max. Input Current	22A/22A	
Max. Open-circuit Voltage	800Vdc/800Vdc	
MPPT Operating Voltage Range	200~650Vdc/200~650Vdc	
UTILITY / GENERATOR INPUT		
Input Voltage Range	phase voltage 170~280V, line voltage 305~485V	
Input Frequency Range	50/60Hz	
Bypass Overload Current	63A	
EFFICIENCY		
MPPT Tracking Efficiency	99.9%	
Max. Battery Inverter Efficiency	≥92%	
European Efficiency	97.5%	
GENERAL		
Dimensions	620*445*130mm	
Weight	27kg	
Protection Degree	IP20, indoor only	
Ambient Temp	-10~55°C, >45°C derated	
Noise	<60dB	
Cooling Method	air cooling	
Warranty	18 months	
COMMUNICATION		
Internal Interface	RS485 / CAN / USB / Dry contact	✓
External Module (optional)	Wi-Fi / GPRS	✓
CERTIFICATION		
Safety	IEC62109-1, IEC62109-2	
EMC	EN61000-6-1,EN61000-6-3,FCC15 classB	
RoHS	Yes	