

WSL-8~12K1P-BL

Off-grid Inverter 8/10/12kW



- **Oversizing Ratio**
Higher PV/AC ratio up to 1.5,
allowing greater energy harvest
- **Exceptional Load-carrying Capability**
Support battery discharge current of up to 280A
Support higher loads powered by battery only
- **Parallel Connection**
Support parallel connection up to 9 units
- **Powerful Instant Overload Capacity**
Support 2 times the rated power for 5
seconds in off-grid mode
- **Smart Load Management**
Dual AC outputs to power loads on
demand priority
- **Generator Input**
Equipped with GEN port to connect with
diesel generator
- **Seamless Switchover**
UPS-level switching time $\leq 4\text{ms}$
- **Superior High-Temperature Stability**
Allow full-power output up to 12kW under
high-temperature conditions

Application scenario



House



Farm



Telecom



Countryside



Island



Pasture

TECHNICAL SPECIFICATION

Model	WSL-8K1P-BL		WSL-10K1P-BL		WSL-12K1P-BL	
Solar Input Data						
Recommended Max. PV Array Size	16000W		20000W		24000W	
Max. PV Input Power	12000W		15000W		18000W	
Max. Input Voltage	500V					
Start-up Voltage	90V					
MPPT Voltage Range	90~450V					
Max. Input Current per MPPT	30+30A					
Max. Short Circuit Current per MPPT	44+44A					
Number of MPPT	2					
Number of Strings per MPPT	2+2					
Battery Data						
Battery Type	Li-Ion / Lead-acid					
Nominal Battery Voltage	48V					
Battery Voltage Range	40~60V					
Max. Discharge Current	190A	230A		280A		
Max. Charge/Discharge Power	8000W	10000W		280A		
Li-Ion Battery Activation	Yes					
Li-Ion Battery Communication	CAN / RS485					
Max. Solar Charge Current	180A	220A		250A		
Max. AC Charge Current	160A	190A		210A		
Max. Charge Current (PV+AC)	180A	220A		250A		
AC Input Data (Grid / GEN)						
Nominal Input Voltage	230Vac, L / N / PE					
Input Voltage Range	90~280Vac					
Max. AC Current From Utility Grid	70A	70A		70A		
Max. Apparent Power from Utility Grid	8000VA	10000VA		12000VA		
Max AC Current From Generator	60A	60A		60A		
Max. Apparent Power From Generator	8000VA	10000VA		12000VA		
AC Frequency Range	50 / 60Hz (Auto sensing)					
Inverter Output Data						
Nominal Output Power	8000W	10000W		12000W		
Peak Apparent AC Power	16000VA	20000VA		24000VA		
Nominal AC Voltage	230Vac					
Nominal Grid Frequency	50 / 60Hz					
Voltage Waveform	Pure Sine Wave					
Transfer Time	4ms					
Max.Output Current	34.8A	43.5A		52.2A		
Overload Protection	30s@102%-110% load；10s@110%-130% load；5s@130%-200% load					
THDv (@linearload)	<5%					
Efficiency						
Peak Efficiency	94%					
MPPT Efficiency	≥99.9%					
Protection						
PV Reverse Polarity Protection	Yes					
AC Short-circuit Current Protection	Yes					
Grid Monitoring	Yes					
Over-current Protection	Yes					
Over-voltage Protection	Yes					
AC Surge Protection	Yes					
DC Surge Protection	Yes					
System Parameters						
Dimension (W*H*D)	625*400*120mm					
Weight	17.9kg					
Relative Humidity	5%~95% (Non-condensing)					
Operating Temperature Range	-10℃~60℃					
Noise Emission	≤50dB					
Altitude	2000m					
Cooling Method	Fan Cooling					
Ingress Protection	IP21					
Characteristic						
Number of AC Output	2					
Display	LCD & APP					
Communication Interface	RS485 / USB / CAN / Wi-Fi (built-in) Dry-Contact					
Parallel Capability	9					

*The data in this table is for reference only, and is subject to actual delivery.