

SM-ONYX-UL-10KW

Single-Phase IP66 Hybrid Solar Inverter



5 YEARS **UNLIMITED INVERTER PARTS WARRANTY**

LifeTime Free Service Warranty

Terms & Conditions Apply



Maximize PV Input Power

Upto 200% oversizing Allowed with **3 MPPT's**
Support high Power Module with 30A PV Input Current
Support AC Coupled Solar Input



Versatile Application

Stackable upto 9 Units
Stand Generator Connection for whole-Home & Office Backup
Four Application Modes
Remote Configuration & upgrade



Flexible Battery Configuration

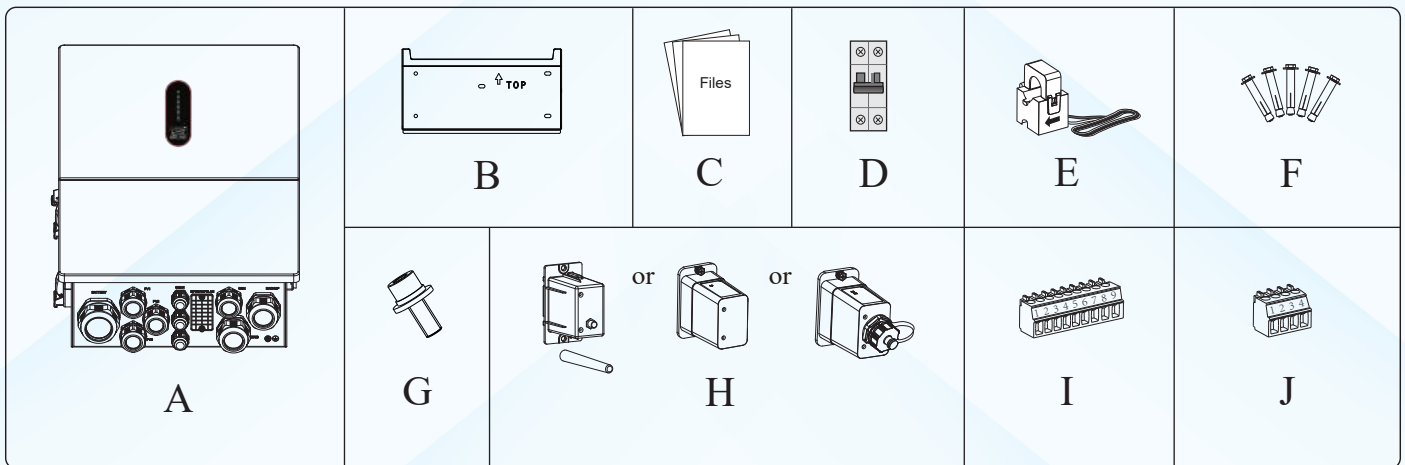
Support 40-60V Lithium or Lead-acid Battery
Maximum Battery Charge/Discharge Current of 210A



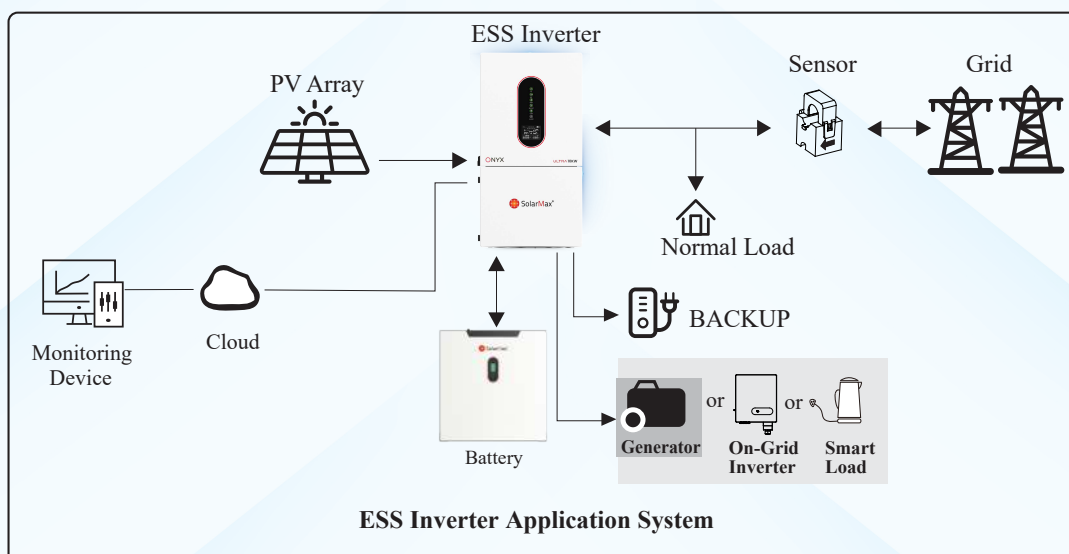
Stable Output Power

Continuous 110% of nominal AC Power
Maximum 11KW AC Output Power
Seamless backup Transition (<10ms)

Product Overview



SN.	Quantity	Description
A	1	Inverter
B	1	Mounting Bracket
C	1	File Package
D	1	Battery Breaker (Built in)
E	1	Current Transformer (CT) clamp
F	5	M6 Expansion screws
G	1	M6 Security screw
H	1	Wi-Fi module
I	1	9-Pin terminal
J	3	4-Pin terminal



Model		SM-ONYX-UL-10KW	
Efficiency			
Max. Efficiency (PV to AC)		98.0%	
MPPT. Efficiency (BAT to AC)		>99%	
Input (PV)			
Max. PV Input Power		16,000W	
MPPT Range (Full Load)		200V to 480V	
MPPT Range		70V to 540V	
Max. DC Voltage		600V	
Max. Input Current per MPPT		30A/22A/22A	
Max. Short Circuit Current per MPPT		40A/30A/30A	
String per MPPT		2/2/2	
MPP Tracker No.		3	
Input/Output (BAT)			
Compatible Battery Type		Lithium-ion / Lead-Acid	
Nominal Battery Voltage (Full Load)		48V	
Battery Voltage Range		40V-64V	
Max. Charge/Discharge Current		210A / 210A	
Max. Charge/Discharge Power		10,000W / 10,000W	
Lithium Battery Charge Curve		Self-Adaption to BMS	
Output (Grid)			
AC Input Max.Power		15,000W	
AC Output Rated Power		10,000W	
AC Output Maximum Power		11,000W	
AC Output Maximum Apparent Power		11,000W	
Nominal Voltage		220V/230/240 (Single Phase)	
Maximum Current (Output)		50A	
Maximum Current (Input)		65.3A	
Power Factor Range		-0.8 (lagging) to 0.8 (leading)	
Rated Frequency		50/60 Hz	
Output (Back up)			
Nom. Power		10,000VA	
Maximum Power (60s)		15,000VA	
Apparent Power (1s)		20,000VA	
Nominal Voltage		230V (Single Phase)	
THD		3% (R) , 5% (RCD)	
Parallel		9 pcs	
General			
Temp. Range		-25C~60C(>45C Derating)	
Max. Operation Altitude		4,000 m	
Topology		Transformerless (PV to Grid) / Transformer (Battery to Grid)	
Protection		IP66	
Noise Emission		45 dB	
Humidity		0~100%, non-condensing	
Cooling		Smart Cooling	
Display		Bluetooth + APP + LED + LCD	
Communication Interface		RS485/CAN(for BMS), DRM/RS485(for Meter), DI, 1*DO, Wifi , Optional LAN	
Protection			
Anti-islanding / Ac Over- Current Ac Short-Circuit / Ac Over-Voltage		Yes	
SPD		DC Type2 , AC Type2	
Insulation Detection / GFCI / GEN		Yes	
Mechanical		Compliance	
W x H x D	420 mm × 800 mm × 240 mm	Safety / Standards	IEC: 62109-1 / IEC: 62109-2 / IEC: 61683 / IEC 62116 / IEC: 61727
Weight	35 kg	Overvoltage Cat.	DC: OVC II / AC: OVC III
DC switch	Internal	EMC Emission	EN 61000