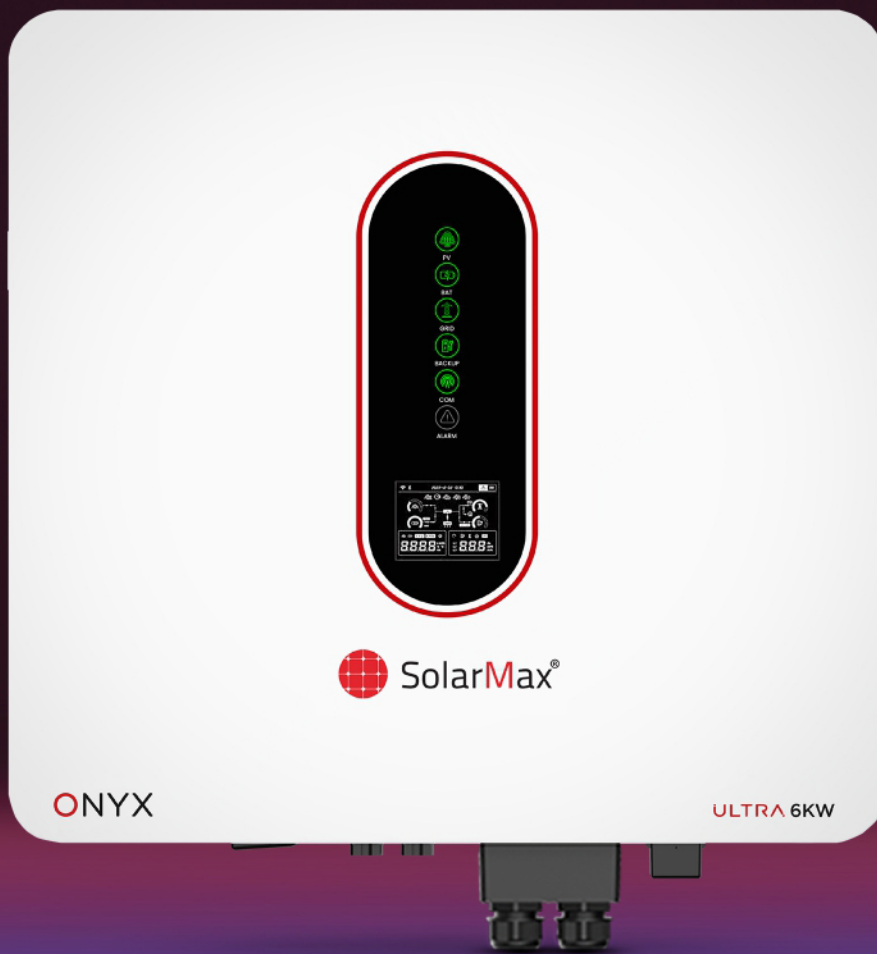


# 6KW SOLAR MPPT INVERTER



Dual MPPT  
PV input 9KW



Built-in  
CT Function



Reset  
ON/OFF Button



Sync with  
Generator



Parallel in  
Single & Three Phase



LED Indication &  
LCD Display

**LIFETIME FREE SERVICE WARRANTY**

6 Years Unlimited Replacement Warranty

\*Terms & Conditions Apply

**MODEL****SM-ONYX-UL-6KW**

<b>Input (PV)</b>	
MAX PV Power (W)	9000W
Max PV Voltage (V)	550VDC
Max input current (input A/input B) (A)	30A (15A + 15A)
Max short current (input A/input B) (A)	40A (20A + 20A)
Start operating voltage (V)	90VDC
MPPT voltage range (V)	70-520VDC
No.of MPPT trackers	2
String per MPP tracker	1
<b>Input (BATTERY)</b>	
Compatible battery type	Lithium-ion / Lead-acid
Nominal battery voltage (V)	48VDC
Battery voltage range (V)	40-60VDC
Max. charge/discharge current (A)	120A / 120A
Max. charge/discharge power (W)	6000W / 6000W DUAL
Charging curve	3 Stages / Equalization
Lithium battery charge curve	Self-adaption to BMS
<b>Output (Grid)</b>	
Nominal AC output power (W)	6000W DUAL
Max. AC output apparent power (VA)	6000W DUAL
Max.AC output power (PF=1) (W)	6000W DUAL
Max. AC output current (A)	27.2A
Rated AC voltage (V)	220VAC
AC voltage range (V)	150-300VAC (adjustable)
Rated grid frequency (Hz)	50Hz / 60Hz
AC frequency range (Hz)	45-55Hz / 55-65Hz (adjustable)
Grid connection	Single Phase
THDI	<3%
<b>Output (Back up)</b>	
Nominal output voltage (V)	230VAC
Nominal output frequency (Hz)	50 / 60Hz
Nominal output power (W)	6000W
Nominal output current (A)	26A
Transfer time (ms)	10(typ) / 20(max)
THDV	<3% @100% R Load
<b>Protection</b>	
Protection category	Class I
DC switch	Support
Anti-islanding protection	Support
AC overcurrent protection	Support
AC short circuit protection	Support
DC reverse connection	Support
Surge Arrester	DC Type III, AC Type III
Insulation detection	Support
Leakage current protection	Support
PV overvoltage category	II
AC overvoltage category	III
<b>Efficiency</b>	
Max.Efficiency (PV to AC)	>97.3%
Max.Efficiency (BAT to AC)	>94.0%
MPPT Efficiency	>99.0%
<b>General</b>	
Max. operation altitude (m)	4000
Noise emission (dB)	<35
Operating temperature range	-25~60
Relative humidity (%)	0~100
Cooling concept	Natural Cooling
Mounting	Wall bracket
Dimensions (W*H*D)	515mm*450mm*175mm
Weight	25Kg
PV connection way	MC4/H4
Battery connection way	Dedicated DC connector
AC connection way (grid & back up)	Dedicated AC connector
<b>HMI &amp; COM</b>	
Display	LCD+LED+APP
Communication interface	RS485/CAN (for BMS), RS485, USB, DRM/RS485 (for Meter), Bluetooth, Wifi, Optional: GPRS/Ethernet

Product specifications are subject to change without further notice.