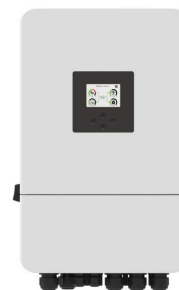


INVERTERS

SUN-5-12K-SG05LP2-US-SM2-SM3

Hybrid inverter · Split-phase · 5 – 12 kW · 5 models


5 – 12 kW

RATED POWER

Split-phase

PHASE

2

MPPT TRACKERS

97.6 %

MAX. EFFICIENCY

Parameter	Unit	SUN-5K-SG05LP2-US-SM2	SUN-6K-SG05LP2-US-SM2	SUN-8K-SG05LP2-US-SM2	SUN-10K-SG05LP2-US-SM3	SUN-12K-SG05LP2-US-SM3
PV input						
Max. PV input power	W	8000	9600	12800	16000	19200
Max. PV input voltage	V	500				
Rated PV input voltage	V	370				
MPPT voltage range	V	150 – 425				
Start-up voltage	V	125				
Max. input current per MPPT	A	18		32		
Max. short-circuit current per MPPT	A	27		60		
Number of MPPT trackers		2			3	
PV strings per MPPT		1		2		
AC output						
Rated output power	W	5000	6000	8000	10000	12000
Max. apparent power	VA	5000	6000	8000	10000	12000
Rated AC voltage	V	240				
Rated AC output current	A	20.9	25	33.4	41.7	50
Max. AC output current	A	20.9	25	33.4	41.7	50
Phase		Split-phase				
Rated AC frequency	Hz	60				
Total harmonic distortion (THDi)	%	<3				
Power factor		0.8 leading to 0.8 lagging				
Peak (surge) power	W	10000	12000	16000	20000	24000
Peak power duration (off-grid)	s	10				
Rated AC voltage options	V	120/240; 120/208				
AC voltage range		0.88 Un-1.1 Un				

Parameter	Unit	SUN-5K-SG05LP2-US-SM2	SUN-6K-SG05LP2-US-SM2	SUN-8K-SG05LP2-US-SM2	SUN-10K-SG05LP2-US-SM3	SUN-12K-SG05LP2-US-SM3
Grid connection type		2L+N+PE				
Grid frequency range (60 Hz)	Hz	55 – 65				
Max. continuous AC passthrough (grid to load)	A	100				
DC injection current		<0.5% In				
Generator input		Yes				
Max. parallel units		16				
Grid / off-grid switchover time	ms	4				
Battery						
Battery type		Lead-acid or lithium-ion				
Battery voltage range	V	40 – 60				
Max. charge current	A	120	135	190	220	
Max. discharge current	A	120	135	190	220	
Charging strategy for Li-ion battery		Self-adaption to BMS				
Number of battery inputs		2				
Time periods for battery charging/discharging		6				
Efficiency						
Max. efficiency	%	97.6				
European efficiency	%	96.5				
MPPT efficiency	%	>99				
Protection						
Protection functions		DC reverse polarity protection; AC output overcurrent protection; Thermal protection; AC output overvoltage protection; AC output short-circuit protection; DC component monitoring; Arc fault circuit interrupter (AFCI)(optional); Anti-islanding protection; DC switch; Insulation impedance detection; Residual current detection				
Surge protection level		Type II (DC), Type II (AC)				
General data						
Dimensions (W x H x D)	mm	386 × 606.5 × 240				
Weight	kg	29.2				
Ingress protection (IP rating)		IP65				
Enclosure type rating		Type 3R				
Operating temperature range	°C	–40 – 60				
Relative humidity	%	0 – 100				
Max. operating altitude	m	3000				
Cooling		Intelligent air cooling				
Noise level	dB	<45				
Topology		Non-isolated (solar), isolated (battery)				
Overvoltage category		OVC II (DC), OVC IV (AC)				
Warranty	years	5 – 10				

Parameter	Unit	SUN-5K-SG05LP2-US-SM2	SUN-6K-SG05LP2-US-SM2	SUN-8K-SG05LP2-US-SM2	SUN-10K-SG05LP2-US-SM3	SUN-12K-SG05LP2-US-SM3
Communication						
Display		Colorful touch LCD				
Communication interfaces		RS485; RS232; CAN				
Certifications						
Certifications and standards		FCC; UL 1741				
Grid codes		IEEE 1547.1; SRD V2.0				

Specifications are subject to change without notice. Values are typical at 25 °C unless stated.
XUSION is a brand of Hunan New Lithium Aviation Technology Co., Ltd.

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