

INVERTERS

SUN-3-6K-SG06LP1-EU-BM1-BM2

Hybrid inverter · Single-phase · 3 – 6 kW · 6 models


3 – 6 kW

RATED POWER

Single-phase

PHASE

1

MPPT TRACKERS

97.6 %

MAX. EFFICIENCY

Parameter	Unit	SUN-3K-SG06LP1-EU-BM1	SUN-3.6K-SG06LP1-EU-BM2	SUN-4K-SG06LP1-EU-BM2	SUN-4.6K-SG06LP1-EU-BM2	SUN-5K-SG06LP1-EU-BM2	SUN-6K-SG06LP1-EU-BM2
PV input							
Max. PV input power	W	6000	7200	8000	9200	10000	12000
Max. usable PV input power	W	4800	5760	6400	7360	8000	9600
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					
Max. short-circuit current per MPPT	A	27					
Number of MPPT trackers		1	2				
PV strings per MPPT		1					
AC output							
Rated output power	W	3000	3600	4000	4600	5000	6000
Max. apparent power	VA	3300	3960	4400	4600	5500	6600
Rated AC voltage	V	230					
Rated AC output current	A	13.1	15.7	17.4	20	21.8	26.1
Max. AC output current	A	14.4	17.3	19.2	20	24	28.7
Phase		Single-phase					
Rated AC frequency	Hz	50/60					
Total harmonic distortion (THDi)	%	<3					
Power factor		0.8 leading to 0.8 lagging					
Peak (surge) power	W	6000	7200	8000	9200	10000	12000
Peak power duration (off-grid)	s	10					
Rated AC voltage options	V	220; 230					

Parameter	Unit	SUN-3K-SG06LP1-EU-BM1	SUN-3.6K-SG06LP1-EU-BM2	SUN-4K-SG06LP1-EU-BM2	SUN-4.6K-SG06LP1-EU-BM2	SUN-5K-SG06LP1-EU-BM2	SUN-6K-SG06LP1-EU-BM2
AC voltage range		0.85 Un-1.1 Un					
Grid connection type		L+N+PE					
Grid frequency range (50 Hz / 60 Hz)	Hz	45-55 / 55-65					
Max. continuous AC passthrough (grid to load)	A	50					
DC injection current		<0.5% In					
Generator input		Yes					
Max. parallel units		16					
Battery							
Battery type		Lead-acid or lithium-ion					
Battery voltage range	V	40 – 60					
Max. charge current	A	70	90	95	120		135
Max. discharge current	A	70	90	95	120		135
Charging strategy for Li-ion battery		Self-adaption to BMS					
Number of battery inputs		1					
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	310 × 460 × 218					
Weight	kg	15.6					
Ingress protection (IP rating)		IP65					
Operating temperature range	°C	-40 – 60					
Relative humidity	%	0 – 100					
Max. operating altitude	m	3000					
Cooling		Natural cooling					
Noise level	dB	<45					
Topology		Non-isolated (solar), isolated (battery)					
Overvoltage category		OVC II (DC), OVC III (AC)					
Warranty	years	5 – 10					

Parameter	Unit	SUN-3K-SG06LP1-EU-BM1	SUN-3.6K-SG06LP1-EU-BM2	SUN-4K-SG06LP1-EU-BM2	SUN-4.6K-SG06LP1-EU-BM2	SUN-5K-SG06LP1-EU-BM2	SUN-6K-SG06LP1-EU-BM2
Communication							
Display		Colorful touch LCD					
Communication interfaces		Wi-Fi; RS485; CAN					
Certifications							
Certifications and standards		IEC/EN 61000-6-1/2/3/4; IEC/EN 62109-1; IEC/EN 62109-2					
Grid codes		IEC 61727; IEC 62116; CEI 0-21; EN 50549; NRS 097; RD 140; UNE 217002; OVE-Richtlinie R25; G99; VDE-AR-N 4105					

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.

E-mail lidreamtec@163.com
WhatsApp +86 133 5280 0772