SUNSYNK MAX

DATASHEET

SYNK-16K-SG01LP1

Model	SYNK-16K-SG01LP1
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range	40~60V
Max. Charge Current	290A
Max. Discharge Current	290A
Charging Curve	3 Stages/Equalization
External Temperature Sensor	Yes
Charging Strategy for Li-Ion Battery	Self-Adaptation to BMS
PV String Input Data	
Max. PV Input Power	20800W
Max. PV Input Voltage	500V
MPPT Voltage Range	150V~425V
Start-up Voltage	125V
Max. Operating PV Input Current	26A + 26A + 26A
Max. PV Isc	44A + 44A + 44A
No. of MPPT / Strings Per MPPT	3 / 2+2+2
AC Output Data	
Rated AC Output Active Power	16000W
Max. AC Output Apparent Power	17600VA
Peak Power (Off-Grid)	2 times of rated power, 10 S
AC Output Rated Current	72.7/69.6A
Max. AC Current	80/76.5A
Max. Continuous AC Passthrough	100A
Power Factor	0.8 leading to 0.8 lagging
Output Frequency and Voltage	50Hz/60Hz; 220/230Vac (single phase)
Grid Connection Form	L+N+PE
Total Current Harmonic Distortion (THDi)	<3% (of nominal power)
DC Current Injection	< 0.5% In
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
MPPT Efficiency	> 99%
Protection	
Integrated	PV Arc Fault Detection, PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection
Surge Protection Level	TYPE II(DC), TYPE II(AC)
Over Voltage Category	OVC II(DC), OVC III(AC)
Certifications and Standards	
Grid Regulation	EN 50549-1, AS-NZS 4777.2, NRS 097-2-1; Additional connections available upon request
EMC / Safety Regulation	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

General Data	
Operating Temperature Range	-40 to +60°C, >45°C Derating
Cooling	Intelligent Air Cooling
Noise	<50dB
Communication with BMS	RS485; CAN
Net Weight	52kg
Gross Weight	60kg
Size	464W×763H×282D mm (Excluding connectors and brackets)
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 Years

NOTE:

Safe Transport and Handling of Inverter:

When transporting the equipment, use its original packaging and keep it as a complete unit. Store the product in a dry environment, avoiding direct sunlight, and maintain a temperature range between -40°C and 60°C. Since the equipment can be quite heavy, always consider its total weight when moving, transporting, or installing it, ensuring that the installation site has adequate load-bearing capacity. Transporting and installing the inverter should be carried out solely by qualified personnel.