

Model	SUN-3K-HD
Input Side	
Max. DC Input Power (kW)	6
Max. DC Input Voltage (V)	550
Start-up DC Input Voltage (V)	80
MPPT Operating Range (V)	70~550
Max. DC Input Current (A)	13+13
Max. Short Circuit Current (A)	19.5+19.5
Number of MPPT / Strings per MPPT	2/1
Output Side	
Rated Output Power (kW)	3
Max. Active Power (kW)	3.3
Rated AC Grid Voltage (V)	220 / 230
AC Grid Voltage Range (V)	160Vac~295Vac (this may vary with grid standards)
Rated Grid Frequency (Hz)	50 / 60 (Optional)
Operating Phase	Single phase
Rated AC Grid Output Current (A)	13.1
Max. AC Output Current (A)	15
Output Power Factor	0.8 leading ~ 0.8 lagging
Grid Current THD	<3%
DC Injection Current (mA)	<0.5%
Grid Frequency Range	47~52 or 57~62 (Optional)
Efficiency	
Max. Efficiency	97.5%
Euro Efficiency	98.3%
MPPT Efficiency	>99%
Protection	
DC Reverse-Polarity Protection	Yes
AC Short Circuit Protection	Yes
AC Output Overcurrent Protection	Yes
Output Overvoltage Protection	Yes
Insulation Resistance Protection	Yes
Ground Fault Monitoring	Yes
Anti-islanding Protection	Yes
Temperature Protection	Yes
Integrated DC Switch	Yes
Remote software upload	Yes
Remote change of operating parameters	Yes
Surge protection	DC Type II / AC Type II
General Data	
Size (mm)	330W×310H×172D
Weight (kg)	11
Topology	Transformerless
Internal Consumption	<1W (Night)
Running Temperature	-25~60°C
Ingress Protection	IP65
Noise Emission (Typical)	<55 dB
Cooling Concept	Smart cooling
Max. Operating Altitude Without Derating	2000m
Designed Lifetime	>20 years
Grid Connection Standard	IEC61727, IEC62116, IEC60068, IEC61683, VDE0126-1-1
Operating Surroundings Humidity	0-100%
Safety EMC / Standard	IEC62109-1/-2, IEC61000-6-2, IEC61000-6-4, IEC61000-3-11, IEC61000-3-12
Features	
DC Connection	MC-4 mateable
AC Connection	IP65 rated plug
Display	LCD 240 × 160
Interface	RS485/RS232/Wifi/LAN