

8. Datasheet

<i>Model</i>	<i>SUN-14K-SG05LP3-EU-SM2</i>	<i>SUN-15K-SG05LP3-EU-SM2</i>	<i>SUN-16K-SG05LP3-EU-SM2</i>	<i>SUN-18K-SG05LP3-EU-SM2</i>	<i>SUN-20K-SG05LP3-EU-SM2</i>
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range(V)	40-60				
Max. Charging Current(A)	260	280	300	330	350
Max. Discharging Current(A)	260	280	300	330	350
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	2				
PV String Input Data					
Max. PV Input Power(W)	22400	24000	25600	28800	32000
Max. PV Input Voltage(V)	800				
Start-up Voltage(V)	160				
PV Input Voltage Range(V)	160-800				
MPPT Voltage Range(V)	160-650				
Full Load MPPT Voltage Range(V)	310-650	330-650	350-650	400-650	440-650
Rated PV Input Voltage(V)	550				
Max. Operating PV Input Current(A)	36+36				
Max. Input Short-Circuit Current(A)	54+54				
No. of MPP Trackers/No. of Strings MPP Tracker	2/2+2				
Max. Inverter Backfeed Current to The Array	0				
AC Input/Output Data					
Rated AC Input/Output Active Power(W)	14000	15000	16000	18000	20000
Max. AC Input/Output Apparent Power(VA)	15400	16500	17600	19800	22000
Peak Power (off-grid)(W)	2 times of rated power, 10s				
Rated AC Input/Output Current(A)	21.3/20.3	22.8/21.8	24.3/23.2	27.3/26.1	30.4/29
Max. AC Input/Output Current(A)	23.4/22.4	25/24	26.7/25.6	30/28.7	33.4/31.9
Max. Continuous AC Passthrough (grid to load)(A)	70				
Max. Output Fault Current(A)	46.8	50	53.4	60	66.8
Max. Output Overcurrent Protection(A)	100				
Rated Input/Output Voltage/Range(V)	220/380V,230/400V 0.85Un-1.1Un				
Grid Connection Form	3L+N+PE				
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz				
Power Factor Adjustment Range	0.8 leading-0.8 lagging				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Injection Current	<0.5%In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	>99%				
Equipment Protection					
DC Polarity Reverse Connection Protection	Yes				
AC Output Overcurrent Protection	Yes				
AC Output Overvoltage Protection	Yes				
AC Output Short Circuit Protection	Yes				
Thermal Protection	Yes				
DC Terminal Insulation Impedance Monitoring	Yes				

DC Component Monitoring	Yes
Ground Fault Current Monitoring	Yes
Arc fault circuit interrupter (AFCI)	Optional
Power Network Monitoring	Yes
Island Protection Monitoring	Yes
Earth Fault Detection	Yes
DC Input Switch	Yes
Overvoltage Load Drop Protection	Yes
Residual Current (RCD) Detection	Yes
Surge Protection Level	TYPE II(DC), TYPE II(AC)
Interface	
Display	LCD+LED
Communication Interface	RS232, RS485, CAN
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)
General Data	
Operating Temperature Range	-40 to +60 C, >45 C Derating
Permissible Ambient Humidity	0-100%
Permissible Altitude	3000m
Noise	< 60 dB
Ingress Protection(IP) Rating	IP 65
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II(DC), OVC III(AC)
Cabinet size(W*H*D) [mm]	456W×750H×268.5D (Excluding connectors and brackets)
Weight(kg)	50.6
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy
Type of Cooling	Intelligent Air Cooling
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2