

Three Phase Hybrid Inverter

SUN-14/15/16/18/20K-SG05LP3-EU-SM2



Deye

100

100% unbalanced output, each phase; Max. output up to 50% rated power



AC couple to retrofit existing solar system

10

Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel

350

Max. charging/discharging current of 350A

48

48V low voltage battery, transformer isolation design

6

6 time periods for battery charging/discharging



Support storing energy from diesel generator

Model	SUN-14K-SG05LP3 -EU-SM2	SUN-15K-SG05LP3 -EU-SM2	SUN-16K-SG05LP3 -EU-SM2	SUN-18K-SG05LP3 -EU-SM2	SUN-20K-SG05LP3 -EU-SM2
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	1				
PV String Input Data					
Max. PV Access Power (W)	28000	30000	32000	36000	40000
Max. PV Input Power (W)	22400	24000	25600	28800	32000
Max. PV Input Voltage (V)	800				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	160-650				
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				
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
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				
Peak Power (off-grid) (W)	2 times of rated power, 10s				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
	220/380V, 230/400V 0.85Un-1.1Un				
	50/45-55, 60/55-65				
	3L+N+PE				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.6%				
Euro Efficiency	97.0%				
MPPT Efficiency	>99%				
Equipment Protection					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
	RS485/RS232/CAN				
	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
Operating Temperature Range (	-40 to +60°C, >45°C Derating				
	0-100%				
	3000m				
	<60				
	IP 65				
	Non-Isolated				
	OVC II(DC), OVC III(AC)				
	456×750×268.5 (Excluding Connectors and Brackets)				
	51.9				
	Intelligent Air Cooling				
	5 Years/10 Years				
	the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				
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				