Three Phase Hybrid Inverter

SUN-5/6/8/10/12/15/20/25K-SG01HP3-EU-AM2





- 100% unbalanced output
- AC couple to retrofit existing solar system
- Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 50A
- High voltage battery, higher efficiency
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Technical Data

Model	SUN-5K-SG01 HP3-EU-AM2	SUN-6K-SG01 HP3-EU-AM2	SUN-8K-SG01 HP3-EU-AM2	SUN-10K-SG01 HP3-EU-AM2	SUN-12K-SG01 HP3-EU-AM2	SUN-15K-SG01 HP3-EU-AM2	SUN-20K-SG01 HP3-EU-AM2	SUN-25K-SG01 HP3-EU-AM2
Battery Input Data								
Battery Type	Lithium-ion							
Battery Voltage Range (V)	160-700							
Max. Charging Current (A)	30	30	37					50
Max. Discharging Current (A)	30	30	37					50
Charging Strategy for Li-ion Battery	Self-adaption to BMS							
Number of Battery Input	1							
PV String Input Data								
Max. PV Access Power (W)	10000	12000	16000	20000	24000	30000	40000	50000
Max. PV Input Power (W)	8000	9600	12800	16000	19200	24000	32000	40000
Max. PV Input Voltage (V)	1000							
Start-up Voltage (V)	180							
MPPT Voltage Range (V)	150-850							
Rated PV Input Voltage (V)	600							700
Max. Operating PV Input Current (A)	20+20				26+20		26+26	
Max. Input Short-Circuit Current (A)	30+30				39+30		39+39	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1				2/2+1		2/2+2	
AC Input/Output Data								
Rated AC Input/Output Active Power (W)	5000	6000	8000	10000	12000	15000	20000	25000
Max. AC Input/Output Apparent Power (VA)	5500	6600	8800	11000	13200	16500	22000	27500
Rated AC Input/Output Current (A)	7.6/7.3	9.1/8.7	12.2/11.6	15.2/14.5	18.2/17.4	22.8/21.8	30.4/29	37.9/36.3
Max. AC Input/Output Current (A)	8.4/8	10/9.6	13.4/12.8	16.7/16	20/19.2	25/24	33.4/31.9	41.7/39.9
Max. Continuous AC Passthrough (grid to load) (A)	40				80			
Peak Power (off-grid) (W)	1.5 times of rated power, 10s							
Power Factor Adjustment Range	0.8 leading to 0.8 lagging							
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un							
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65							
Grid Connection Form	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 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 (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection							
Surge Protection Level	TYPE II(DC), TYPE II(AC)							
Interface								
Communication Interface	RS485/RS232/CAN							
Monitor Mode	GPRS/WIFI/Bluetooth/4G							
LCD/LED Display	LCD							
General Data								
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating							
Permissible Ambient Humidity	0-100%							
Permissible Altitude	2000m							
Noise (dB)	≤55							
Ingress Protection(IP) Rating	IP 65							
Inverter Topology	Non-Isolated							
Over Voltage Category	OVC II(DC), OVC III(AC)							
Cabinet Size (WxHxD mm)	408×638×237 (Excluding Connectors and Brackets)							
Weight (kg)	30.5							
Type of Cooling	Natural Cooling		Intelligent Air Cooling					
Warranty	Standard 5 years, extended warranty							
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105							
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2							

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