



NANUK SE

ENERGY STORAGE HYBRID INVERTER

- Nanuk SE 12/15/20/25/30KHB
- Three Phase & HV Battery
- Application: Residential & Small-Medium C&I Use



Excellent Performance

- Maximum efficiency of 98.4%
- Supporting continuous overload capacity of 110%
- Maximum battery charge/discharge current of 2*75A



High Flexibility

- Large MPPT current, compatible with high-power solar panels
- Advanced parallel function



Safety & Reliability

- Key components from well-known international brands
- IP66 protection rating, ensuring adaptability to complex outdoor environment
- Multiple built-in protections, with optional AFCI 2.0



Intelligent Maintenance

- Quick commission via mobile app, 24/7 remote monitoring, configuration and upgrade
- Advanced energy management mechanism, with multiple built-in working modes and flexible customized settings

	Nanuk SE 12KHB-D3	Nanuk SE 15KHB-D3	Nanuk SE 20KHB-D3	Nanuk SE 25KHB-T3	Nanuk SE 30KHB-T3
Efficiency					
Max. Efficiency (PV to AC)	98.2%	98.2%	98.2%	98.4%	98.4%
Eur. Efficiency (PV to AC)			97.9%		
Max. Efficiency (BAT to AC)			98.0%		
Input (PV)					
Max. PV Usable Power	30,000W	30,000W	30,000W	45,000W	45,000W
Max. PV Voltage			1,000V		
Start-up Voltage			150V		
MPPT Operating Voltage Range			160V-950V		
Max. Input Current per MPPT	32A/32A	32A/32A	32A/32A	32A/32A/32A	32A/32A/32A
Max. Short Circuit Current per MPPT	40A/40A	40A/40A	40A/40A	40A/40A/40A	40A/40A/40A
String per MPPT	2/2	2/2	2/2	2/2/2	2/2/2
Nos. of MPPT	2	2	2	3	3
Input/Output (BAT)					
Battery Type			Lithium-ion/Lead-acid		
Battery Voltage Range at Rated Power	230V-800V	285V-800V	380V-800V	190V-800V	230V-800V
Battery Voltage Range			120V-800V		
Max. Charge/Discharge Current	60A/60A	60A/60A	60A/60A	2*75A/2*75A	2*75A/2*75A
Max. Charge/Discharge Power	30,000W/14,400W	30,000W/18,000W	30,000W/24,000W	45,000W①/30,000W	45,000W/36,000W
Output (Grid)					
Nominal AC Output Power	12,000W	15,000W	20,000W	25,000W	30,000W
Max. AC Output Apparent Power	13,200VA	16,500VA	22,000VA	27,500VA	33,000VA
Max. AC Output Power (PF=1)	13,200W	16,500W	22,000W	27,500W	33,000W
Max. AC Output Current	3*20A	3*25A	3*33.3A	3*41.7A	3*50A
Max. Single Phase Power	10,000VA	10,000VA	10,000VA	11,000VA	11,000VA
Max. Input Power	36,000VA	40,000VA	40,000VA	45,000VA	45,000VA
Max. Input Current	3*54.5A	3*60.6A	3*60.6A	3*68.2A	3*68.2A
Nominal Grid Voltage			380V/400V/415V, 3W+N+PE		
Grid Voltage Range			277V-520V (Adjustable)		
Nominal Grid Frequency			50Hz/60Hz		
Grid Frequency Range			45Hz-55Hz/55Hz-65Hz (Adjustable)		
Power Factor			>0.99@ Rated Power (Adjustable 0.8 LD – 0.8LG)		
THDI			<3%@ Rated Power		
Output (Back up)					
Nominal Output Power	12,000W	15,000W	20,000W	25,000W	30,000W
Nominal Output Current	3*18.2A	3*22.7A	3*30.3A,	3*37.9A	3*45.5A
Peak Output Apparent Power (5min)	14,400VA	18,000VA,	24,000VA,	30,000VA	36,000VA
Peak Output Apparent Power(10s)	18,000VA	22,500VA	30,000VA	37,500VA	45,000VA
Nominal Output Voltage			380V/400V/415V, 3W+N+PE		
Nominal Output Frequency			50Hz/60Hz		
Transfer Time			<10ms (Typical)		
THDV			<3%@100% R Load		
Protection					
Protection Category			Class I		
DC Switch			Yes		
Anti-islanding Protection			Yes		
AC Overcurrent Protection			Yes		
DC/AC Overvoltage Protection			DC Type II, AC Type III		
AC Short Circuit Protection			Yes		
DC Reverse Protection			Yes		
Surge Arrester			DC Type II, AC Type II		
Insulation Resistance Detection			Yes		
Leakage Current Protection			Yes		
AFCI 2.0			Optional		
General					
Max. Operation Altitude			4000m(>2000m derating)		
Ingress Protection Degree			IP66		
Operating Temperature Range			25 °C ~ 60 °C(>45°C derating)		
Relative Humidity			0~100%		
Cooling Method	Natural Cooling	Natural Cooling	Natural Cooling	Smart Fan Cooling	Smart Fan Cooling
Mounting			Wall bracket		
Dimensions (W*H*D)			660mm*596mm*235mm		
Weight	45kg	45kg	45kg	55kg	55kg
PV Connection Way			MC4/H4		
HMI & COM					
Display			Bluetooth & APP+LED		
Communication Interface			RS485/CAN (for BMS), RS485, DRM/RS485 (for Meter), Optional:LAN, 3*DO, 2*DI		
Certification					
Safety			IEC/EN 62109-1&2		
EMC			IEC/EN 61000		
Grid Code			VDE 4105, EN 50549-1, CEI 0-21, NRS 097-2-1, RD 1699/661/647/413, UNE 217002, AS 4777.2, C10/11,		
Warranty			IEC 61727/62116		
			5 Years/10 Years (Optional)		

Remarks: ① For single battery port connected, the maximum charge power is 25,500W. When two ports are used, the power can reach 45,000W.
-The range of output voltage and frequency may vary depending on different grid codes.
-Specifications are subject to change without advanced notice.