

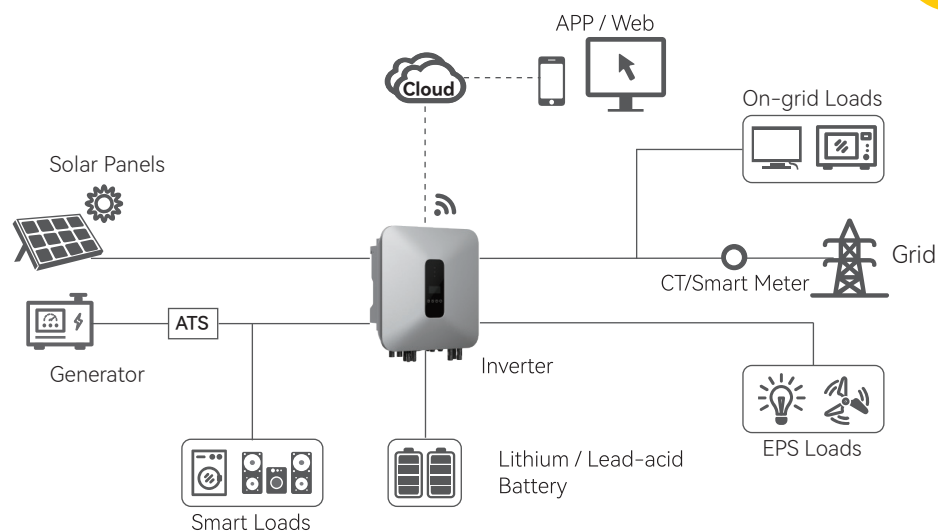
Single Phase Hybrid Inverter



NKI-3KS-AH2 / NKI-3K6S-AH2 / NKI4KS-AH2
NKI-5KS-AH2 / NKI-6KS-AH2

- Wide MPPT range
- 2 MPPT trackers
- Type II SPD on DC/AC
- 19A MPPT input current per string
- IP66 protection level
- Integrated and concise design

System Diagram



*Generator function is available in some market.

Specifications

Model	NKI-3KS-AH2	NKI-3K6S-AH2	NKI-4KS-AH2	NKI-5KS-AH2	NKI-6KS-AH2
PV Input					
Max. PV Input Power(kW)	4.5	5.5	6	7.5	9
Max. PV Open Circuit Voltage(V)	550				
MPPT Range@Operating Voltage(VDC)	80~520				
Full Power MPPT Voltage Range(VDC)	117~500V	145~500V	158~500V	197~500V	250~500V
Start-up Voltage(VDC)	90				
Max. Input Current per MPPT(A)	19/19				
Max. Short-circuit Current(A)	25/25				
MPPT Tracker/Strings	2 / 1				
Nominal Input Voltage(V)	360				
AC Output(On-Grid)					
Nominal Output Power to Grid(kW)	3	3.68	4	5	6
Max. Apparent Power to Grid(kVA)	3	3.68	4	5	6
Max. Apparent Power from Grid(kVA)	3	3.68	4	5	6
Max. Apparent Current from Grid(A)	13.1	16	17.4	21.8	26.1
Nominal Output Current from Grid(A)	13.1	16	17.4	21.8	26.1
Max. Output Current to Grid(A)	13.1	16	17.4	21.8	26.1
Nominal Voltage/Frequency	230V(176V~280V), 50/60Hz, L+N+PE				
Adjustable Power Factor	0.8leading~0.8lagging				
THDI	<2%				
AC Output(BackUp)					
Nominal Output Power(kW)	3	3.68	4	5	6
Max. Apparent Power(kVA)	3	3.68	4	5	6
Nominal Output Current(A)	13.1	16	17.4	21.8	26.1
Max. Output Current(A)	13.1	16	17.4	21.8	26.1
Nominal Voltage/Frequency	230V(176V~238V), 50/60Hz, L+N+PE				
Automatic Switch Time(ms)	<20				
THDu	<2%				
Overload Capacity	110%,10s /130%,3s /150%,50ms				
Efficiency					
Max. Efficiency	96.65%				
Europe Efficiency	97.50%				
MPPT Efficiency	99.00%				
Max. Battery Charge/Discharge Efficiency	94.60%				
Battery					
BatteryVoltage Range(V)	40~60				
Recommended Battery Voltage(V)	48				
Max. Charging Voltage(V)	60				
Max. Charging/Discharging Current(A)	80/80	80/80	80/80	120/120	120/120
BatteryType	Lithium and Lead Acid Battery				
Protection					
DC Switch	Yes				
DC Reverse Polarity Protection	Yes				
DC/AC Surge Protection	Type II/Type II				
AC Overvoltage Protection	Yes				
AC Short-circuit Protection	Yes				
Ground Fault Monitoring	Yes				
Anti-islanding Protection	Yes				
Residual-current Monitoring	Yes				
Insulation Resistance Monitoring	Yes				
Peak/Valley Time Setting	Yes				
General Data					
HMI	LCD & APP				
BMS	RS485; CAN				
EMS/Meter	RS485				
Communication	WiF/LAN				
Ingress Protection	IP66				
Operating Temperature Range	-25~60 °C				
Relative Humidity	0~95%(Non-condensing)				
Max. Operating Altitude	4000m(Derating above 3000m)				
Cooling	Natural				
Noise Emission	≤ 29dB				
Dimensions(W*H*D)	485*525*225mm(without terminal and bracket)				
Net Weight(kg)	23.5	23.5	23.5	24	24
Self-consumption(W)	<15				
Standard Compliance					
Safety Regulation	IEC/EN62109-1/-2				
EMC	IEC/EN61000-6-1/-2/-3/-4				
GridRegulation	IEC61727; Europe: EN50549; Belgium: C10/11; Spain: NTS-631; Italy: CEI 021				