



N3H-X Series Split Phase Inverter

Hybrid On/Off-Grid Inverter

N3H-X5-US/N3H-X8-US/N3H-X10-US

120V/240V(split phase) , 208V(2/3 phase) , 230V(single phase)



Equipped with 4 MPPT
Max. input current of
14A for each MPPT



AC coupling function
Max. 3 pcs parallel for
on-grid and off-grid



Easy installation with
flexible configuration
plug-and-play



Enables remote intelligent
monitoring through
SOLARMAN APP



Support OEM/ODM
UL multiple listing
for customers



UL1741SA CUL1741/
UL1699B CSA 22.2



object	Description
1	BAT input/BAT output
2	WIFI
3	Communication Port
4	CTL 2
5	CTL 1
6	Load 1
7	Ground
8	PV input
9	PV output
10	Generator
11	Grid
12	Load 2



Web

www.amensolaress.com

Technical Data	N3H-X5 -US	N3H-X8 -US	N3H-X10 -US
PV Input Data			
MAX.DC Input Power	7.5KW	12KW	15KW
No.of MPPT Trackers	4		
MPPT Range	120 - 430V		
MAX.DC Input Voltage	500V		
MAX.Input Current	14A×4		
Battery Input Data			
Nominal Voltage(Vdc)	48V	48V	48V
MAX.Charging/Discharging Current	120A/120A	190A/190A	190A/210A
Battery Voltage Range	40-60V		
Battery Type	Lithium and Lead Acid Battery		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
AC Output Data(On-Grid)			
Nominal Output Power Output to Grid	5KVA	8KVA	10KVA
MAX. Apparent Power Output to Grid	5.5KVA	8.8KVA	11KVA
Output Voltage Range	110-120V220-240V split phase, 208V(2/3 phase), 230V(1 phase)		
Output Frequency	50/60Hz (45 to 54.9Hz / 55 to 65Hz)		
Nominal AC Current Output to Grid	20.8A	33.3A	41.7A
Max.AC Current Output to Grid	22.9A	36.7A	45.8A
Output Power Factor	0.8leading ...0.8lagging		
Output THDI	< 2%		
AC Output Data(Back-Up)			
Nominal. Apparent Power Output	5KVA	8KVA	10KVA
MAX. Apparent Power Output	5.5KVA	8.8KVA	11KVA
Nominal Output Voltage L-N/L 1-L2	120/240V		
Nominal Output Frequency	60Hz		
Output THDU	< 2%		
Efficiency			
Europe Efficiency	>=97.8%		
MAX. Battery to Load Efficiency	>=97.2%		
Protection			
Grounding Detection	YES		
Arc Fault Protection	YES		
Island Protection	YES		
Battery Reverse Polarity	YES		
Insulation Resistor Detection	YES		
Residual Current Monitoring Unit	YES		
Output Over Current Protection	YES		
Back-up Output Short Protection	YES		
Terminal Temperature Detection	YES		
Output Over Voltage Protection	YES		
Output Under Voltage Protection	YES		
General Data			
Output Conduit	25.4mm		
PV Input Conduit	25.4mm		
BAT Input Conduit	34.5mm		
Operating Temperature Range	-25 ~ +60℃		
Relative Humidity	0-95%		
Operating Altitude	0~4000m		
Ingress Protection	IP65/NEMA 3R		
Weight	41kg		
Size (Width*Height*Depth)	430mm x 710mm x 220mm		
Cooling	Air Cooling		
Noise Emission	<38dB		
Display	LCD		
Communication With BMS/Meter/EMS	CAN, RS485		
Supported Communication Interface	RS485, WLAN, 4G (optional)		
Self-consumption at Night	< 15W (with battery enabling < 20W)		
Safety	UL1741SA all options , UL1699B, CSA 22.2		
EMC	FCC Part 15 Class		
Grid Connection Standards	IEEE 1547, IEEE 2030.5, Hawaii Rule 14H, Rule 21 Phase I,II,III		