



# N3H-X Series Split Phase Inverter

## Hybrid On/Off-Grid Inverter

### N3H-X12-US

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



Equipped with 4 MPPTs  
Max. input current of 16A for each MPPT



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



Easy installation with flexible configuration  
plug-and-play



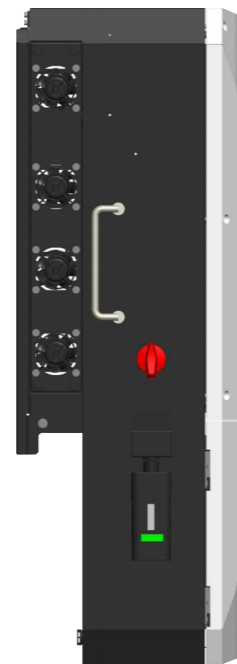
Enables remote intelligent monitoring through SOLARMAN APP



Support OEM/ODM, UL multiple listing for customers



UL1741SA CUL1741/UL1699B CSA 22.2



Model	N3H-X12-US
<b>PV input</b>	
Max.DC input power (kW)	18
No. of MPPT trackers	4
MPPT voltage range (V)	120~430
MAX. DC input voltage (V)	500
MAX. input current per MPPT (A)	16/16/16/16
MAX. short current per MPPT (A)	22
<b>Battery input</b>	
Nominal voltage (V)	48
MAX.charging/discharging current (A)	250/260
Battery voltage range (V)	40-58
Battery type	Lithium /Lead-acid
Charging controller	3-Stage with equalization
<b>AC output(on-grid)</b>	
Nominal output power output to grid (kVA)	12
MAX. apparent power output to grid (kVA)	13.2
Nominal AC voltage(L-N/L1-L2) (V)	(110~120)/(220~240)split phase, 240V single phase
Nominal AC frequency(Hz)	50/60
Nominal AC current (A)	50
Max. AC current (A)	55
Max. grid passthrough current (A)	200
Output power factor	0.8leading~0.8lagging
Output THDi	<3%
<b>AC output(back-up)</b>	
Nominal. apparent power (kVA)	12
Max. apparent power ( no PV) (kVA)	12
Max. apparent power ( with PV) (kVA)	13.2
Nominal output voltage(V)	120/240
Nominal output frequency (Hz)	60
Output THDu	<2%
<b>Protection</b>	
Arc fault protection	Yes
Island protection	Yes
Insulation resistor detection	Yes
Residual current monitoring unit	Yes
Output over current protection	Yes
Back-up output short protection	Yes
Output over voltage protection	Yes
Output under voltage protection	Yes
<b>General data</b>	
Mppt efficiency	99.9%
Europe efficiency(PV)	96.2%
Max. PV to grid efficiency(PV)	96.5%
Max. battery to load efficiency	94.6%
Max. PV to battery charging efficiency	95.8%
Max. grid to battery charging efficiency	94.5%
Operating temperature range (°C)	-25~+60
Relative humidity	0-95%
Operating altitude	0~4,000m(Derating above 2,000m altitude)
Ingress protection	IP65/NEMA 3R
Weight (kg)	53
Weight (with breaker) (kg)	56
Dimensions W*H*D (mm)	495 x 900 x 260
Cooling	FAN cooling
Noise emission (dB)	38
Display	Touch panel
Communication with BMS/Meter/EMS	RS485, CAN
Supported communication interface	RS485, 4G (optional), Wi-Fi
Self-consumption	<25W
Safety	UL1741, UL1741SA&SB all options, UL1699B, CSA -C22.2 NO.107.1-01,RSD(NEC690.5,11,12),
EMC	FCC part 15 class B
Grid connection standards	IEEE 1547, IEEE 2030.5, HECO Rule 14H, CA Rule 21 Phase I,II,III,CEC, CSIP,SRD2.0,SGIP,OGPe,NOM,California Prob65
<b>Other data</b>	
Backup conduit	3"
Grid conduit	3"
AC solar conduit	2"
PV input conduit	2"
Bat input conduit	2"
PV switch	Integrated