

Single-Phase Off-Grid Inverter

1.2 kW



Reliable Power

- Up to 2 times peak output as on-grid transferring to off-grid
- Seamless switchover keeps lights and appliances running

High Efficiency

- Built-in 100A solar charger for fast PV charging
- Up to 99.5% PV charging efficiency for more energy stored from the same PV system

Flexible Compatibility

- 17V~115V MPPT voltage range for great PV compatibility
- Supports both lithium and lead-acid batteries for greater flexibility

High Safety

- Multiple electrical protections for enhanced operational safety
- Reliable operation at high altitudes and in demanding environments

	XN1212-MAX
Input DC (PV)	
Max. usable PV input power	800W
Max. input voltage	115V
Start-up voltage	20V
MPPT voltage range	17 V~115 V
Max. input current per MPPT	18A
Max. short circuit current per MPPT	22A
MPPT number / Strings per MPPT	1/1
Battery Input	
Battery type	Lithium battery, Lead-acid battery
Battery voltage range	12V
Max. charge / discharge current	100A
Number of battery port / BMS port	1 / 1
Communication Interface	RS232 / RS485 / CAN
Input / Output AC (Grid)	
Max. input current	50A
Rated grid voltage	208 / 220 / 230 / 240 V
Operating voltage range	90V~280V
Grid connection type	L+N+PE
Rated grid frequency	50 / 60 Hz
Output AC (Back-up)	
Rated output power	1.2kW
Max. apparent output power	2.4kVA
Rated output voltage, frequency	208/220/230/240V , 50/60Hz
On/off grid switch time	10 ms
THDv	≤ 3%
Peak output power, Duration	1min @102%~120% ; 10s @120%~200%
Input AC (Generator)	
Rated input current	50A
Rated input voltage, frequency	208/220/230/240V ; 50/60Hz
Efficiency	
Max. efficiency	96.0%
Max. battery charging efficiency by PV	99.5%
Max. battery discharge efficiency	90.0% @12VDC
Protection	
AC short-circuit protection	Yes
Integrated DC switch	Yes
Residual current protection	Yes
Insulation resistance monitoring	Yes
String current monitoring	Yes
Surge protection	Yes
General Data	
Dimensions (W × H × D)	217 x 301 x 97mm
Weight	Approx.3.5kg
Topology	Isolated
Self-consumption	< 20W
Operating temperature/ humidity	-10℃ ~60 ℃ / 5%-95% (Non-condensing)
Ingress protection rating	IP21
Display	LCD
Communication interface	RS232 / RS485 / CAN
Cooling method	Forced-air cooling
Max. operating altitude	4000m (Derating above 1000 m)
Safety/ EMC standards	IEC/EN 62109-1 & -2; IEC 61683; IEC 61000

software version, operating conditions, and environmental factors. Please refer to actual conditions.