

Single-Phase Off-Grid Inverter

6.5 kW



High Efficiency

- 27A string current for compatibility with high-current PV modules
- Built-in 120A solar charger for fast PV charging
- Up to 99.5% PV charging efficiency for more energy stored from the same PV system

Reliable Power

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

Flexible Compatibility

- Up to 9 units in parallel for flexible system configurations
- Wide 40V~450V MPPT voltage range for greater 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

	XN6548-MAX
Input DC (PV)	
Max. usable PV input power	9kW
Max. input voltage	500V
Start-up voltage	60V
MPPT voltage range	60V~450V
Max. input current per MPPT	27A
Max. short circuit current per MPPT	33A
MPPT number / Strings per MPPT	1/1
Battery Input	
Battery type	Lithium battery, Lead-acid battery
Battery voltage range	48V
Max. charge / discharge current	120A / 140A
Number of battery port / BMS port	1/1
Communication Interface	RS232 / RS485 / CAN
Input / Output AC (Grid)	
Max. input current	40A
Rated grid voltage	208 / 220 / 230 / 240V
Operating voltage range	90V~280V
Grid connection type	L + N + PE
Rated grid frequency	50 / 60 Hz
Output AC (Back-up)	
Rated output power	6.5kW
Max. apparent output power	12kVA
Rated output voltage, frequency	208 / 220 / 230 / 240V , 50/60Hz
On/off grid switch time	10ms
THDv	≤ 3%
Peak output power, Duration	1min @102%~120% ; 10s @120%~200%
Input AC (Generator)	
Rated input current	26A
Rated input voltage, frequency	208 / 220 / 230 / 240V , 50/60Hz
Efficiency	
Max. efficiency	99.0%
Max. battery charging efficiency by PV	99.5%
Max. battery discharge efficiency	94.0%@48VDC
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)	336 x 410 x 110mm
Weight	Approx.8.4kg
Topology	L + N + PE
Self-consumption	< 30W
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

Disclaimer: The above data are theoretical values measured in INVT's internal laboratory under specific test conditions. Actual performance may vary depending on product variation, software version, operating conditions, and environmental factors. Please refer to actual conditions.