

# OFF-GRID PV SOLUTION

Single-phase off-grid Inverter

BN1012C/1024C/1512C/1524C/2012C/2024C (E)

BN3012C/3024C/4048C/5048C/6048C (E)



10ms Seamless Switching



Diesel



6 Units Parallel



With Transformer



MPPT



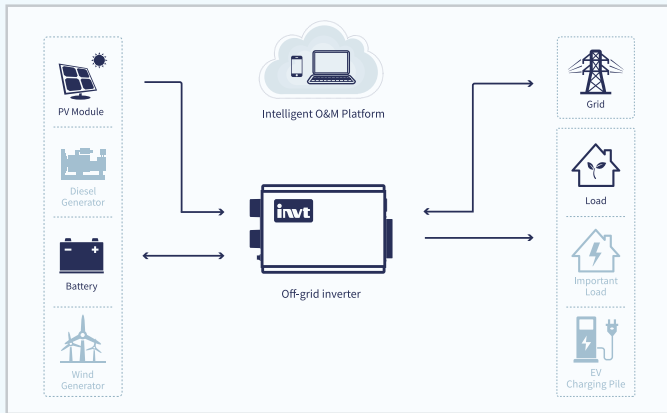
Lithium Battery



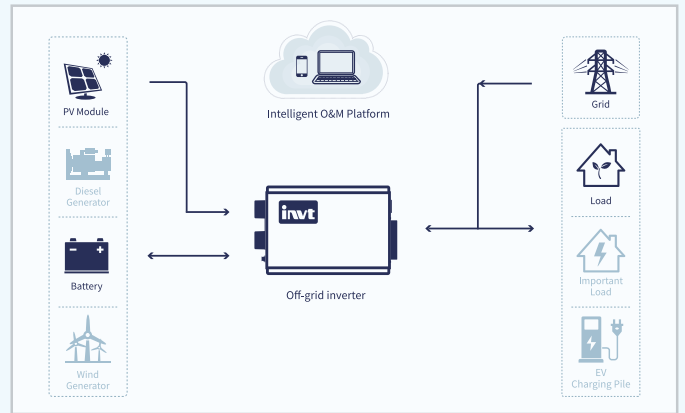
Grid



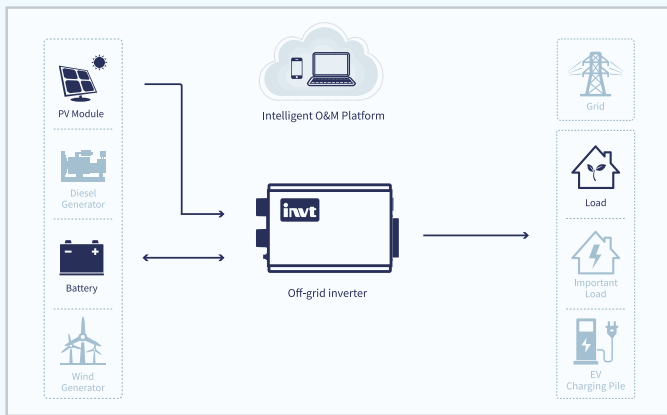
# Solution



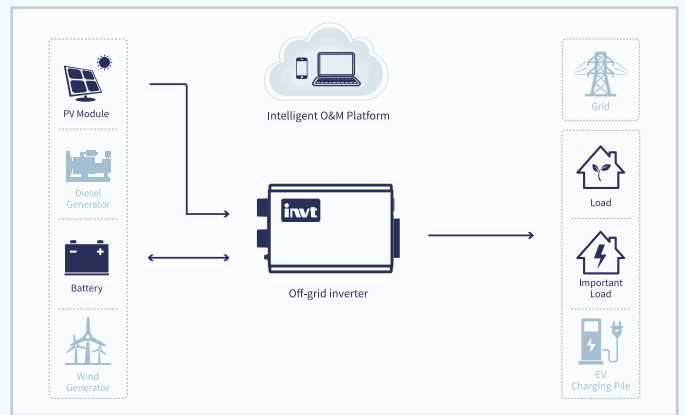
• With Various / Isolated loads



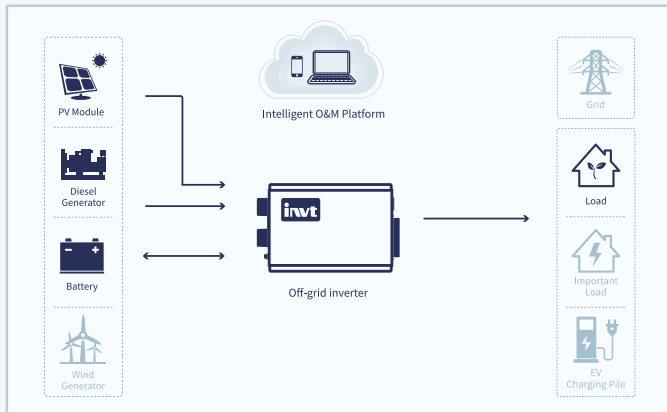
• Mains / Photovoltaic Complementary System



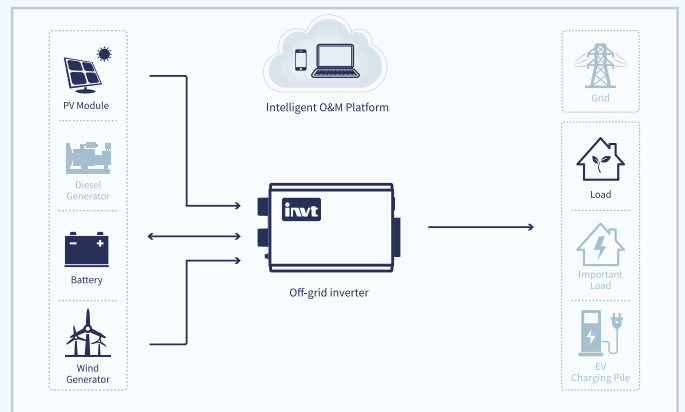
• Island and Ship Off-grid Applications / PV+Off-grid Electricity Vending System / Photovoltaic UPS



• Portable Power Supply



• Diesel Engine + Off-grid



• Off-grid+ Wind Power Complementary System

# Configuration table

Inverter	Solar Panel								Mounting Structure	PV Cable	
	60 Cells				72 Cells					4mm <sup>2</sup>	6mm <sup>2</sup>
	260W	275W	280W	290W	310W	315W	320W	330W			
1~3KW	4	4	4	4	4	4	4	4	1 set	200m	100m
4~6KW	12	12	12	12	10	10	10	10			



# Product Introduction

## Efficient

- Multiple charging topology, to maximize battery performance.
- Multiple working priority settings.
- Electricity bypass quick charging function.
- Solar panel MPPT charging technology.

## Smart

- Global integrated monitor management, APP with one-button registration.
- Parallel operation up to 6 units.

## Reliable

- Over-load and short-circuit protection.
- Capable of linear load or non-linear load.

## Simple

- Easy to maintain.



# Specification

	BN1012C/E	BN1024C/E	BN1512C/E	BN1524C/E	BN2012C/E	BN2024C/E
<b>Line mode</b>						
AC input voltage (V)	220/230/240					
Rated frequency (Hz)	50/60(auto detection)					
Transfer time (ms)	(AC to DC or DC to AC):10ms (typical)					
<b>Inverter mode</b>						
Output voltage waveform	Sine wave					
Rated output power (VA) / (W)	1000/1000		1500/1500		2000/2000	
Rated output voltage (V)	220/230/240(±10%)					
Rated output frequency (Hz)	50±0.3/60±0.3					
Efficiency	>88%					
Over-load protection	(110%<load<125%)±10%:Fault(shutdown output) after 15min; (125%<load<150%)±10%:Fault(shutdown output) after 60s; load>150%±10%:Fault(shutdown output) after 20s					
Peak power (10s) (VA)	3000		4500		6000	
<b>Charge (Line)</b>						
Charge current (A)	35	20	45	25	65	35
Over charge protection	Bat. V≥15.7 is 12VDC mode, (*2 is 24VDC input mode,*4is 48VDC mode)every 1s & fault after 60s					
<b>Charge (Solar) (E series is not included)</b>						
MPPT voltage range (V)	12VDC mode:15-55; 24VDC mode:18-78					
Max. PV input voltage (V)	12VDC mode:70; 24VDC mode:100					
Rated charge current (A)	45					
Max. full load charging efficiency	98%					
<b>Others</b>						
Dimension (L x W x H mm)	410x264x180				460x264x180	
Weight (kg)	15.7	16	19.9	19	21.9	22
Degree of protection	IP20 (forced air, variable speed fan)					
Operating temperature range	-15°C to 40°C(-25°C ~ 60°C for storage)					
Safe certificate / EMC certificate	CE(EN62040-1, EN62040-2)/C2					
Factory warranty (years)	1					

	BN3012C/E	BN3024C/E	BN4048C/E	BN5048C/E	BN6048C/E
<b>Line mode</b>					
AC input voltage (V)	220/230/240				
Rated frequency (Hz)	50/60(auto detection)				
Transfer time (ms)	(AC to DC or DC to AC):10ms (typical)				
<b>Inverter mode</b>					
Output voltage waveform	Sine wave				
Rated output power (VA) / (W)	3000/3000	4000/4000	5000/5000	6000/6000	
Rated output voltage (V)	220/230/240(±10%)				
Rated output frequency (Hz)	50±0.3/60±0.3				
Efficiency	>88%				
Over-load protection	(110%<load<125%)±10%:Fault(shutdown output) after 15min; (125%<load<150%)±10%:Fault(shutdown output) after 60s; load>150%±10%:Fault(shutdown output) after 20s				
Peak power (10s) (VA)	11000	12000	15000	18000	
<b>Charge (Line)</b>					
Charge current (A)	75	50	35	40	50
Over charge protection	Bat. V≥15.7 is 12VDC mode, (*2 is 24VDC input mode,*4is 48VDC mode)every 1s & fault after 60s				
<b>Charge (Solar) (E series is not included)</b>					
MPPT voltage range (V)	12VDC mode:15-55; 24VDC mode:18-78		50-130		
Max. PV input voltage (V)	12VDC mode:70; 24VDC mode:100		200		
Rated charge current (A)	45		60		
Max. full load charging efficiency	98%				
<b>Others</b>					
Dimension (L x W x H mm)	460x264x180		510x264x180	555x264x180	
Weight (kg)	26.3	26	29.2	34.5	37.3
Degree of protection	IP20 (forced air, variable speed fan)				
Operating temperature range	-15°C to 40°C(-25°C ~ 60°C for storage)				
Safe certificate / EMC certificate	CE(EN62040-1, EN62040-2)/C2				
Factory warranty (years)	1				

## Applications



• Hebei, China 10KW



• Nigeria 6KW



• Xizang, China 1KW



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