



Description

iMars BN series single-phase off-grid inverter adopt the combination technology of integrating traditional isolated UPS function and solar inverter . to provide the flexible and reliable system solution for residential or industrial uninterruptible power requirements.

Features

- Protection class IP20;
- Isolated internal transformer design to ensure the stability and reliability;
- Capable of providing the continuous power to linear load or non-linear load of lamp, computer, fridge, air-conditioner and the industrial devices;
- MPPT solar charging technology;
- Electricity Quick charging function;
- Multiple charging voltage grades to adapt to more battery types, to maximize battery performance;
- over-load and short-circuit protection;
- multiple working mode are optional for different working priority (Grid / battery/saving mode);
User-friendly multiple communication module(RS485, RS232, Ethernet, GPRS, WIFI) are optional to
- be compatible with more monitoring device : mobile ,computer, internet/remote operation;
- Support 12/24V battery, 120V/230V (50/60Hz) output .

Specification

	BN1024C	BN1524C	BN2024C	BN3024C	BN4048C	BN5048C	BN6048C
--	---------	---------	---------	---------	---------	---------	---------

LINE MODE

AC input voltage (V)	220/230						
AC output voltage range (V)	155~272 (±2%)						
Rated frequency (Hz)	50HZ/ 60HZ (auto detection)						
Frequency range (Hz)	47+0.3Hz ~ 55+0.3Hz for 50Hz; (57+0.3Hz ~ 65+0.3Hz for 60Hz)						
Over-load/Short-circuit protection	Circuit breaker						
Efficiency /Transfer time (ms) (AC to DC / DC to AC)	>95%/10ms (typical)						
Bypass relay current (A)	30			40			

INVERT MODE

Output voltage waveform	Sine wave						
Rated output power (VA)/(W)	1000/1000	1500/1500	2000/2000	3000/3000	4000/4000	5000/5000	6000/6000
Power factor	1						
Rated output voltage (V)/Output voltage regulation	230/±10%						
Rated Output frequency (Hz)	50Hz ±0.3Hz/60Hz ± 0.3Hz						
Efficiency	>85%						
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	11000	12000	15000	18000
Capable of starting electric motor (HP)	1		2		3	4	5
Output short-circuit protection	Current limit (Fault after 10s)						
Output breaker current (A)	10		30		40		
DC input voltage (V)/Min. DC start voltage (V)	24 /22				48/ 44		
DC input voltage range (V)	20.0~32 , ±0.6Vdc regulation (Low alarm:21V; Shut-down: 20V; High fault: 32V; High recovery:31V)				40.0~64 , ± 0.6Vdc regulation (Low alarm:21V; Shut-down: 40V; High fault: 64V; High recovery:62V)		
Main operating mode	0-6 level, line priority; 7-9 level, battery priority						

CHARGE (LINE)

Charge current (A)	20	25	35	50	35	40	50
Charge current regulation (A)	± 5						
Battery voltage range (V)	20 ~31.4				40 ~62.8		
Charge short-circuit protection	Circuit breaker				Breaker		
Breaker current (A)	10			30			
Over charge protection	Bat. V ≥ 31.4Vdc, beeps 0.5s every 1s & fault after 60s				Bat. V ≥ 62.8Vdc, beeps 0.5s every 1s & fault after 60s		

CHARGE (SOLAR)

MPPT voltage range (V)	18-78			64-145			
Max. PV input voltage (V)	100			145			
Max. PV open circuit voltage (V)	78			145			
Rated charge current (A)	45			60			
Max. full load charging efficiency	98%						
Battery short-circuit protection	Fuse						
Solar panel wiring protection	Anti reverse connecting protection						

OTHERS

Dimension (H x W x D mm)	410 x 264 x 180		460 x 264 x 180		555 x 264 x 180		
Weight (kg)	16	19	22	26	31	34	36
Degree of protection/Factory warranty (years)	IP20 (forced air, variable speed fan)/1						
Operating temperature range/Relative humidity	-15°C to 40°C (-25°C ~60°C for storage)/5% to 95%						
Noise (dB)	< 60						
Communication interface	RS-485/GPRS/WIFI/Remote control						
Safe certificate / EMC category	CE(EN62040-1, EN62040-2)/ C2						



Sales E-mail: solar@invt.com.cn Service E-mail: solar-service@invt.com.cn Website: www.invt-solar.com