

NOVA 3000

Hybrid Off-grid Inverter

3000W

Maximum Solar Power

93%

Peak Efficiency

120V AC

AC Output

48V DC

Battery Voltage



FEATURES



Pure sine wave inverter



LED Display



WiFi/GPRS remote monitoring (optional)



With CAN/RS485 for BMS communication



Integrated MPPT charge controller



Configurable grid or solar input priority



48V battery system



Compatible to mains voltage or generator power



High frequency inverter with small size and light weight



Overload, short circuit and deep discharge protection

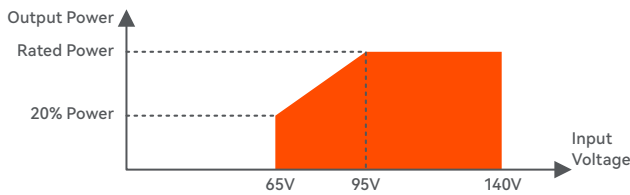


Parallel operation up to 6 unit

LINE MODE SPECIFICATIONS

Input Voltage Waveform	Sinusoidal (utility or generator)
Nominal Input Voltage	120VAC
Low Loss Voltage	95VAC±5V (UPS); 65VAC±5V (Appliances)
Low Loss Return Voltage	100VAC±5V (UPS); 70VAC±5V (Appliances)
High Loss Voltage	140VAC±5V
High Loss Return Voltage	135VAC±5V
Max AC Input Voltage	150VAC
Nominal Input Frequency	50Hz/60Hz (Auto Detection)
Low Loss Frequency	40±1Hz
Low Loss Return Frequency	42±1Hz
High Loss Frequency	65±1Hz
High Loss Return Frequency	63±1Hz
Output Short Circuit Protection	Circuit Breaker
Efficiency (Line Mode)	>95% (Rated R Load, Battery Full Charged)
Transfer Time	10ms Typical, 20ms Max@ Single <30ms@ Parallel

Output power derating:
When AC input voltage drops to 95V, the output power will be derated.



INVERTER MODE SPECIFICATIONS

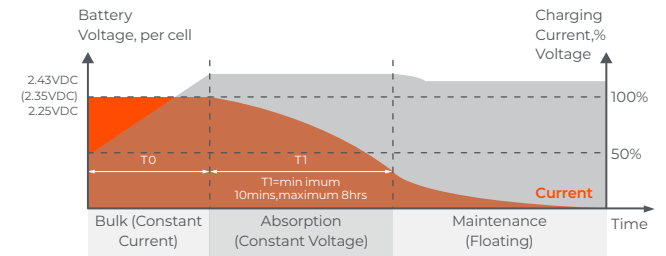
Rated Output Power	3000VA/3000W
Output Voltage Waveform	Pure Sine Wave
Output Voltage Regulation	120VAC±5%
Output Frequency	50Hz / 60Hz (Default)
Peak Efficiency	90%
Overload Protection	5s@≥150% Load; 10s@110%~150% Load
Surge Capacity	2*Rated Power For 5 Seconds
Nominal DC Input Voltage	48VDC
Cold Start Voltage	46.0VDC
Cold Start SOC (Li Mode)	Default 30%, Low DC Cut-off SOC +10%
Low DC Warning Voltage	
@Load<20%	44.0VDC
@20%≤Load<50%	42.8VDC
@Load≥50%	40.4VDC
Low DC Warning Return Voltage	
@Load<20%	46.0VDC
@20%≤Load<50%	44.8VDC
@Load≥50%	42.4VDC
Low DC Cut-off Voltage	
@Load<20%	42.0VDC
@20%≤Load<50%	40.8VDC
@Load≥50%	38.4VDC

Low DC Cut-off Voltage(Li Mode)	42.0VDC
Low DC Warning SOC(Li Mode)	Low DC Cut-off SOC +5%
Low DC Warning Return SOC (Li Mode)	Low DC Cut-off SOC +10%
Low DC Cut-off SOC(Li Mode)	Default 20%, 5%~50% settable
High DC Recovery Voltage	56.4VDC(C.V. charging voltage)
High DC Cut-off Voltage	60.8VDC
No Load Power Consumption	<50W

CHARGE MODE SPECIFICATIONS

Utility Charging Mode

Charging Current (UPS) @ Nominal Input Voltage	Default: 30A, max 40A
Bulk Charging Voltage	
Flooded Battery	58.4VDC
AGM/Gel Battery	56.4VDC
Floating Charging Voltage	54VDC
Overcharge Protection	60VDC
Charging Algorithm	3-Step
Charging Curve	



Solar Input

Efficiency	98.0% Max.
Max. PV Array Open Circuit Voltage	145VDC
PV Array MPPT Voltage Range	60VDC~115VDC
Max. PV Charging Current	34VDC
Default Charging Current	80A
Battery Voltage Accuracy	±0.3%
PV Voltage Accuracy	±2V

Joint Utility and Solar Charging

Max Charging Current	120Amp
Default Charging Current	60Amp

GENERAL SPECIFICATIONS

Safety Certification	CE
Operating Temperature Range	0°C to 55°C
Storage Temperature	-15°C~ 60°C
Humidity	5% to 95% Relative Humidity (Non-condensing)
Dimension	17.9x13.8x5.1 inches / 455x350x130 mm
Net Weight	11.5(kg)/25.4(lb)