RICH SOLAR | NOVA™ Series Inverters

NOVA SUPERCHARGER 2K / 3K
INVERTER CHARGER



NOVA SUPERCHARGER 2K



NOVA SUPERCHARGER 3K

High-Performance Power Output & Transfer Reliability

Delivers 2,000W or 3,000W continuous pure sine wave output (<5% THD) with 91% efficiency, ensuring clean, utility-grade AC power.

High-surge capability up to 2× rated power for 5 seconds, supporting motor loads such as refrigerators and power tools.

Built-in automatic transfer switch ensures uninterrupted power, seamlessly switching between inverter (battery) and shore/grid power.

Intelligent Charging & Battery Management

Advanced 3-stage charging (Bulk, Absorption, Float) with optimized profiles for AGM, $LiFePO_4$, and User-defined battery types.

Supports dead-battery charging, even from 0VDC.

User-programmable low-voltage cutoff (10.5V–12.8V) for battery protection.

Power Share feature dynamically reduces charge current to avoid overloading limited AC sources (e.g., small generators).

Power-factor-corrected (PFC) charger ensures efficient AC input usage.

Configurable Power Control & System Integration

Selectable Normal or Fast (UPS) transfer speed prevents resets of sensitive electronics.

Adjustable AC output voltage (108/110/120V) and frequency (50 /60Hz) for regional compatibility.

Ignition control (ACC) allows synchronized on/off with vehicle ignition in RV or mobile setups.

Load Search Mode minimizes standby power by activating only when loads exceed 25W.

Supports optional remote control panel via dedicated remote port.

Comprehensive Protection & Marine/RV Readiness

Multiple safety protections: overload, over-temperature, low battery alarm/shutdown, short circuit, and reverse polarity.

LCD display plus status LEDs provide real-time visibility of input/ output voltage, frequency, power, battery status, and fault codes.

Built to withstand mobile and marine environments—corrosion -resistant and vibration-resistant, with optional drip shield for specific mounting orientations.

Suitable for RVs, commercial vehicles, off-grid cabins, and backup power applications.

Intertek FC CE RoHS

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SPECIFICATIONS

Model	RS-V2P12C	RS-V3P12C
Product Name	NOVA SUPERCHARGER 2K	NOVA SUPERCHARGER 3K
INVERTER PERFORMANCE		
Continuous Power	2,000W	3,000W
Surge Power (5s)	4,000W	6,000W
Output Voltage	120VAC ±5%	
AC Output Voltage Options	108/110/120VAC	
Output Frequency	50/60Hz	
Total Harmonic Distortion (THD)	<5%	
Output Waveform	Pure Sine Wave	
Efficiency	Up to 91%	
DC INPUT		
Nominal DC Input Voltage	12.0V	
DC Input Voltage Range	LBCO–18.0VDC	
CHARGER PERFORMANCE		
Charger Type	3-Stage Smart Charger (Bulk, Absorption, Float)	
Input Voltage Range	100–130VAC	
Charge Current	5–80A (User Selectable)	5–150A (User Selectable)
Full Load AC Current	16A (rms)	25A (rms)
Power Factor	>0.98 @ Rated Power & 120VAC	
Battery Type	$LiFePO_4$, AGM, Gel, Flooded	
TRANSFER SWITCH		
Transfer Time	<20ms	
Transfer Switch Rating	30A	50A
PHYSICAL & ENVIRONMENTAL		
Cooling	Fan-cooled	
Operating Temperature	-40°F to 160°F	
Dimensions (L × W × H)	15.4 × 12.0 × 4.1 in	15.4 × 12.0 × 4.8 in
Net Weight	16.5 lbs	18.5 lbs
Certification	UL 458, FCC Part 15 Class B, CE, RoHS	

SPECIFICATIONS INCLUDED IN THIS DATASHEET ARE SUBJECT TO CHANGE WITHOUT NOTICE.