

CGP1.5K SERIES PURE-SINEWAVE DC-AC INVERTERS

» INPUT & OUTPUT FULLY ISOLATED

» OUTPUTPROTECTION: SHORT CIRCUIT/ OVERLOAD/OVER TEMPERATURE

» OUTPUT FREQUENCY 50/60 Hz SELECTABLE BY DIP SWITCH

> 1500W / 1500VA 12 V, 24 V, 48 V INPUT SIX MODELS FOR 10V 50/60 Hz & 220V 50/60 Hz OUTPUT

APPLICATIONS

Nova Electric's CGP-Series inverters are intended for commercial and industrial applications wherever pure sinewave power is needed at 50 or 60 Hz. These inverters are ideal for running electronic loads such as computers, monitors, printers, telecom systems, radios, fluorescent lamps from batteries, field generators, and solar electro-voltaic panels. They can also drive hand drills, motors and small compressors – please consult the factory for proper sizing. These CGP models can also be optionally ruggedized against shock, vibration, and humidity for military applications including vehicle mounted, shipboard, submarine, aircraft, and ground fixed shelters.

- **COMPUTERS**
- **PRINTERS**
- □ MONITORS

- SAIL BOATS
- PHOTO VOLTAIC
- ELECTRIC TOOLS

- ❑ APPLIANCES
- INSTRUMENTS
- 🔲 RVs



For more information, please visit us at www.novaelectric.com or email us at novasales@theallpower.com

STANDARD FEATURES

- Microprocessor based design with absolutely accurate and stable frequency.
- · Compact and light weight, yet rugged and vehicle rated.
- Tightly regulated output voltage and frequency
- Switch selectable 50 or 60 Hz output, all models
- Capable of driving highly reactive loads such as electric tools and appliances.
- · Capable of driving highly capacitive loads such as switching power supplies.
- Three color LED status indicator
- Suitable for vehicle or wall mounting.
- Standard outputs 110V/60Hz, 230V/50Hz.
- Switch selectable ±10V output change.
- UL / e-13 / CE / FCC Approved
- Temperature & load controlled cooling fan

ELECTRICAL

Input Voltage: See Table

VAC 80% Full load (PF=1.0)

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Output Voltage 110V model: 100/110/115/120 VAC Output Voltage 220V model: 200/220/230/240 VAC *Output Frequency:* 50 or 60 HZ ±0.5% Accuracy Continuous Power Rating: 1500W/1500VA Surge Rating: <2650VA (1 second) Efficiency 110V model (full load): 92% - 93% Efficiency 220V model (full load): 92% - 94% Output Waveform Sinewave: <5% THD (120V)* <3% THD (220V)**

Output Regulation: ±5% (120V), ±3% (220V) Protection: Overload, Short Circuit, Reverse Polarity (Fuse), O.T, Over/Under Input Voltage

Normal Condition: Vin=12.5V / 25V / 50V Vo=200 / 220 / 230 / 240

 Failure (Fault) Normal Condition: Vin=12.5V/25V/50V Vo=100/110/115/120

*** UL-458 only for GFCI receptacles

SAFETY & EMC 120V: UL458***; FCC Class B

ENVIRONMENTAL

INDICATORS

Output level

Input level

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220V: EN60950-1; EN55022 Class B; EN55024;

E-MARK (220V): Certified CISPR 25; ISO7637-2

Storage Temp. Range: -30° to +71°C

• Humidity: To 95% non-condensing

EN61000-3-2, -3-3; EN61000-4-2, 3, 4, 5, 6, 8, 11

• Operating Temp.: -20° to +40°; + 60°C @ 40% Load

	12 V - 120 V	24 V - 120 V	48 V - 120 V	12 V - 220 V	24 V - 220 V	48 V - 220V
No Load Power Consumption	@12 VDC	@24 VDC	@48 VDC	@12 VDC	@24 VDC	@ 48 VDC
On Mode @ Save Mode On Mode @ No Load Mode	<0.1 A ≤1.8 A	<0.06 A ≤1.0 A	<0.05 A ≤0.5 A	<0.1 A ≤1.8 A	<0.05 A ≤1.0 A	<0.05 A ≤0.5 A
Input Under - Voltage Protection	$10.5\pm0.3\text{VDC}$	$21.0\pm0.5\text{VDC}$	$42.0\pm1.0\text{VDC}$	$10.5\pm0.3\text{VDC}$	$21.0\pm0.5\text{VDC}$	$42.0\pm1.0\text{VDC}$
Input Under - Voltage Recovery	12.5 ± 0.3 VDC	25.0 ± 0.5 VDC	50.0 ± 1.0 VDC	12.5 ± 0.3 VDC	$25.0\pm0.5\text{VDC}$	50.0 ± 1.0 VDC
Input Over - Voltage Protection	$16.5\pm0.3\text{VDC}$	$33.0\pm0.5\text{VDC}$	66.0 ± 1.0 VDC	$16.5\pm0.3\text{VDC}$	$33.0\pm0.5\text{VDC}$	$66.0\pm1.0\text{VDC}$
Input Over - Voltage Recovery	14.5 ± 0.3 VDC	29.0 ± 0.5 VDC	58.0 ± 1.0 VDC	14.5 ± 0.3 VDC	$29.0\pm0.5\text{VDC}$	58.0 ± 1.0 VDC

MODEL SELECTION

INPUT VDC	120 V MODELS 50 Hz or 60 Hz	220 V MODELS 50 Hz or 60 Hz	DIMENSIONS (L" x W" x H") [mm]	WEIGHT
10.5 - 16.5 V	CGP1.5K-12-120	CGP1.5K-12-220	16.57 x 9.76 x 3.27 [421 x 248 x 83]	9.1 lbs [4.14 kg]
21 - 33 V	CGP1.5K-24-120	CGP1.5K-24-220	16.57 x 9.76 x 3.27 [421 x 248 x 83]	9.1 lbs [4.14 kg]
42 - 66 V	CGP1.5K-48-120	CGP1.5K-24-220	16.57 x 9.76 x 3.27 [421 x 248 x 83]	9.1 lbs [4.14 kg]

MECHANICAL SPECIFICATIONS



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