



CGP1K SERIES PURE-SINEWAVE DC-AC INVERTERS

» INPUT & OUTPUT FULLY ISOLATED

» OUTPUT PROTECTION: SHORT CIRCUIT/
OVERLOAD/OVER TEMPERATURE

» OUTPUT FREQUENCY 50/60 Hz
SELECTABLE BY DIP SWITCH



1000W / 1000VA
12 V, 24 V, 48 V INPUT
SIX MODELS FOR
110V 50/60 Hz & 220V 50/60 Hz OUTPUT



APPLICATIONS

Nova Electric's CGP-Series inverters are intended for commercial and industrial applications wherever pure sine wave 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 $\pm 10V$ output change.
- UL / e-13 / CE / FCC Approved
- Temperature & load controlled cooling fan

ELECTRICAL

Input Voltage: See Table
Output Voltage 110V model: 100/110/115/120 VAC
Output Voltage 220V model: 200/220/230/240 VAC
Output Frequency: 50 or 60 HZ $\pm 0.5\%$ Accuracy
Continuous Power Rating: 1000W/1000VA
Surge Rating: <1750VA (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: $\pm 5\%$ (120V), $\pm 3\%$ (220V)
Protection: Overload, Short Circuit, Reverse Polarity (Fuse), O.T, Over/Under Input Voltage

* Normal Condition: $V_{in}=12.5V / 25V / 50V$ $V_o=100 / 110 / 115 / 120$ VAC 80% Full load (PF=1.0)

** Normal Condition: $V_{in}=12.5V / 25V / 50V$ $V_o=200 / 220 / 230 / 240$ VAC 80% Full load (PF=1.0)

SAFETY & EMC

120V: UL458***, FCC Class B
220V: EN60950-1; EN55022 Class B; EN55024; EN61000-3-2, -3-3; EN61000-4-2, 3, 4, 5, 6, 8, 11
E-MARK (220V): Certified CISPR 25; ISO7637-2

ENVIRONMENTAL

- Operating Temp.: -20° to $+40^\circ$; $+60^\circ\text{C}$ @ 40% Load
- Storage Temp. Range: -30° to $+71^\circ\text{C}$
- Humidity: To 95% non-condensing

INDICATORS

- Input level
- Output level
- Failure (Fault)

*** UL-458 only for GFCI receptacles

	12 V - 120 V	24 V - 120 V	48 V - 120 V	12 V - 220 V	24 V - 220 V	48 V - 220 V
No Load Power Consumption	@12 VDC	@24 VDC	@48 VDC	@12 VDC	@24 VDC	@ 48 VDC
On Mode @ Save Mode	<0.1 A	<0.06 A	<0.05 A	<0.1 A	<0.05 A	<0.05 A
On Mode @ No Load Mode	≤ 1.5 A	≤ 0.8 A	≤ 0.5 A	≤ 1.5 A	≤ 0.8 A	≤ 0.4 A
Input Under - Voltage Protection	10.5 ± 0.3 VDC	21.0 ± 0.5 VDC	42.0 ± 1.0 VDC	10.5 ± 0.3 VDC	21.0 ± 0.5 VDC	42.0 ± 1.0 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 ± 0.5 VDC	50.0 ± 1.0 VDC
Input Over - Voltage Protection	16.5 ± 0.3 VDC	33.0 ± 0.5 VDC	66.0 ± 1.0 VDC	16.5 ± 0.3 VDC	33.0 ± 0.5 VDC	66.0 ± 1.0 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 ± 0.5 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	CGP1K-12-120	CGP1K-12-220	14.65 x 7.87 x 3.27 [372 x 200 x 83]	7.2 lbs [3.26kg]
21 - 33 V	CGP1K-24-120	CGP1K-24-220	14.65 x 7.87 x 3.27 [372 x 200 x 83]	7.2 lbs [3.26kg]
42 - 66 V	CGP1K-48-120	CGP1K-24-220	14.65 x 7.87 x 3.27 [372 x 200 x 83]	7.2 lbs [3.26kg]

MECHANICAL SPECIFICATIONS

