



# CGP700W 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



700W / 700VA  
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

SAIL BOATS

APPLIANCES

PRINTERS

PHOTO VOLTAIC

INSTRUMENTS

MONITORS

ELECTRIC TOOLS

RVs



For more information, please visit us at [www.novaelectric.com](http://www.novaelectric.com) or email us at [novales@theallpower.com](mailto:novales@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:** 700W/700VA  
**Surge Rating:** <1230VA (1 second)  
**Efficiency 110V model (full load):** 91% - 93%  
**Efficiency 220V model (full load):** 91% - 94%  
**Output Waveform Sinewave:** <5% THD (120V)\*  
 <3% THD (220V)\*\*  
**Output Regulation:**  $\pm 5\%$  (120V),  $\pm 3\%$  (120V)  
**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°; +60°C @ 40% Load
- Storage Temp. Range: -30° to +71°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
<b>No Load Power Consumption</b>	@12 VDC	@24 VDC	@48 VDC	@12 VDC	@24 VDC	@ 48 VDC
<b>On Mode @ Save Mode</b>	<0.1 A	<0.06 A	<0.05 A	<0.1 A	<0.06 A	<0.05 A
<b>On Mode @ No Load Mode</b>	$\leq 1.5$ A	$\leq 0.8$ A	$\leq 0.5$ A	$\leq 1.5$ A	$\leq 0.8$ A	$\leq 0.5$ A
<b>Input Under - Voltage Protection</b>	10.5 $\pm$ 0.3 VDC	21.0 $\pm$ 0.5 VDC	42.0 $\pm$ 1.0 VDC	10.5 $\pm$ 0.3 VDC	21.0 $\pm$ 0.5 VDC	42.0 $\pm$ 1.0 VDC
<b>Input Under - Voltage Recovery</b>	12.5 $\pm$ 0.3 VDC	25.0 $\pm$ 0.5 VDC	50.0 $\pm$ 1.0 VDC	12.5 $\pm$ 0.3 VDC	25.0 $\pm$ 0.5 VDC	50.0 $\pm$ 1.0 VDC
<b>Input Over - Voltage Protection</b>	16.5 $\pm$ 0.3 VDC	33.0 $\pm$ 0.5 VDC	66.0 $\pm$ 1.0 VDC	16.5 $\pm$ 0.3 VDC	33.0 $\pm$ 0.5 VDC	66.0 $\pm$ 1.0 VDC
<b>Input Over - Voltage Recovery</b>	14.5 $\pm$ 0.3 VDC	29.0 $\pm$ 0.5 VDC	58.0 $\pm$ 1.0 VDC	14.5 $\pm$ 0.3 VDC	29.0 $\pm$ 0.5 VDC	58.0 $\pm$ 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	CGP700W-12-120	CGP700W-12-220	12.99 x 7.87 x 3.27 [330 x 200 x 83]	5.7 lbs [3.2 kg]
21 - 33 V	CGP700W-24-120	CGP700W-24-220	12.99 x 7.87 x 3.27 [330 x 200 x 83]	5.7 lbs [3.2 kg]
42 - 66 V	CGP700W-48-120	CGP700W-48-220	12.99 x 7.87 x 3.27 [330 x 200 x 83]	5.7 lbs [3.2 kg]

## MECHANICAL SPECIFICATIONS

