



**NOVA ELECTRIC**



### STANDARD FEATURES

- Microprocessor Based Design With Absolutely Accurate & Stable Frequency
- Compact & Light Weight, Yet Rugged & Vehicle Rated
- Tightly Regulated Output Voltage & Frequency
- Switch Selectable 50 or 60 Hz Output, All Models
- Capable Of Driving Highly Reactive Loads Such As Electric Tools & 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

### CONTACT

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## CGP Series 3 KW Pure Sinewave COTS Inverters

- INPUT & OUTPUT FULLY ISOLATED
- OUTPUT PROTECTION: SHORT CIRCUIT/ OVERLOAD/OVER TEMPERATURE
- OUTPUT FREQUENCY 50/60 HZ SELECTABLE BY DIP SWITCH



- 3000W / 3000VA
- 12 V, 24 V, 48 V INPUT
- SIX MODELS FOR 110V 50/60 HZ & 220V 50/60 HZ OUTPUT



### GENERAL OVERVIEW

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 load 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.

- Input & Output Fully Isolated
- Output Protection: Short Circuit / Overload / Overtemperature
- Output Frequency 50/60 Hz Selectable By Dip Switch

### Applications:

- Computers
- Printers
- Monitors
- Sail Boats
- Photo Voltaic
- Electric Tools
- Appliances
- Instruments
- RVs

**The Leader In Rugged Power Conversion Technology Since 1966**

*Some optional equipment shown. Specifications subject to change without notice.*

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## SPECIFICATIONS

### Electrical

<b>INPUT VOLTAGE</b>	See Table
<b>OUTPUT VOLTAGE 110V MODEL</b>	100/110/115/120 VAC
<b>OUTPUT VOLTAGE 220V MODEL</b>	200/220/230/240 VAC
<b>OUTPUT FREQUENCY</b>	50 or 60 HZ $\pm 0.5\%$ Accuracy
<b>CONTINUOUS POWER RATING</b>	3000W/3000VA
<b>SURGE RATING</b>	<6000VA (1 Second)
<b>EFFICIENCY 110V MODEL (FULL LOAD)</b>	90% – 92%
<b>EFFICIENCY 220V MODEL (FULL LOAD)</b>	90% – 94%
<b>OUTPUT WAVEFORM SINEWAVE</b>	<5% THD (120V)*
<b>OUTPUT WAVEFORM SINEWAVE</b>	<3% THD (220V)**
<b>OUTPUT VOLTAGE REGULATION</b>	$\pm 5\%$ (120V), $\pm 3\%$ (220V)

### Environmental

<b>OPERATING TEMP.</b>	-20° to +40°; + 60°C @ 40% Load
<b>STORAGE TEMP. RANGE</b>	-30° to +71°C
<b>HUMIDITY</b>	To 95% Non-condensing
<b>AIRFLOW</b>	Intake (Fans) to Exhaust Vents in Chassis Panels

### Safety & EMC

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

### Protective Features

<b>OVERLOAD</b>
<b>SHORT CIRCUIT</b>
<b>REVERSE POLARITY (FUSE)</b>
<b>OVERTEMPERATURE</b>
<b>OVER/UNDER INPUT VOLTAGE</b>

\* Normal Condition: Vin=12.5V / 25V / 50V Vo=100 / 110 / 115 / 120 VAC 80% Full load (PF=1.0)

\*\* Normal Condition: Vin=12.5V / 25V / 50V Vo=200 / 220 / 230 / 240 VAC 80% Full load (PF=1.0)

\*\*\* UL-458 only for GFCI receptacles

\*\*\*\* Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## CGP SERIES 3000 W PURE SINEWAVE COTS INVERTERS

	CGP3K-12-120	CGP3K-24-120	CGP3K-48-120	CGP3K-12-220	CGP3K-24-220	CGP3K-48-220
No Load Power Consumption On Mode @ Save Mode On Mode @ No Load Mode	@12VDC <0.1A $\leq 1.8A$	@24VDC <0.06A $\leq 1.0A$	@48VDC <0.05A $\leq 0.5A$	@12VDC <0.1A $\leq 1.8A$	@24VDC <0.05A $\leq 1.0A$	@48VDC <0.05A $\leq 0.5A$
Input Under – Voltage Protection	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
Input Under – Voltage Recovery	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
Input Over – Voltage Protection	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
Input Over – Voltage Recovery	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

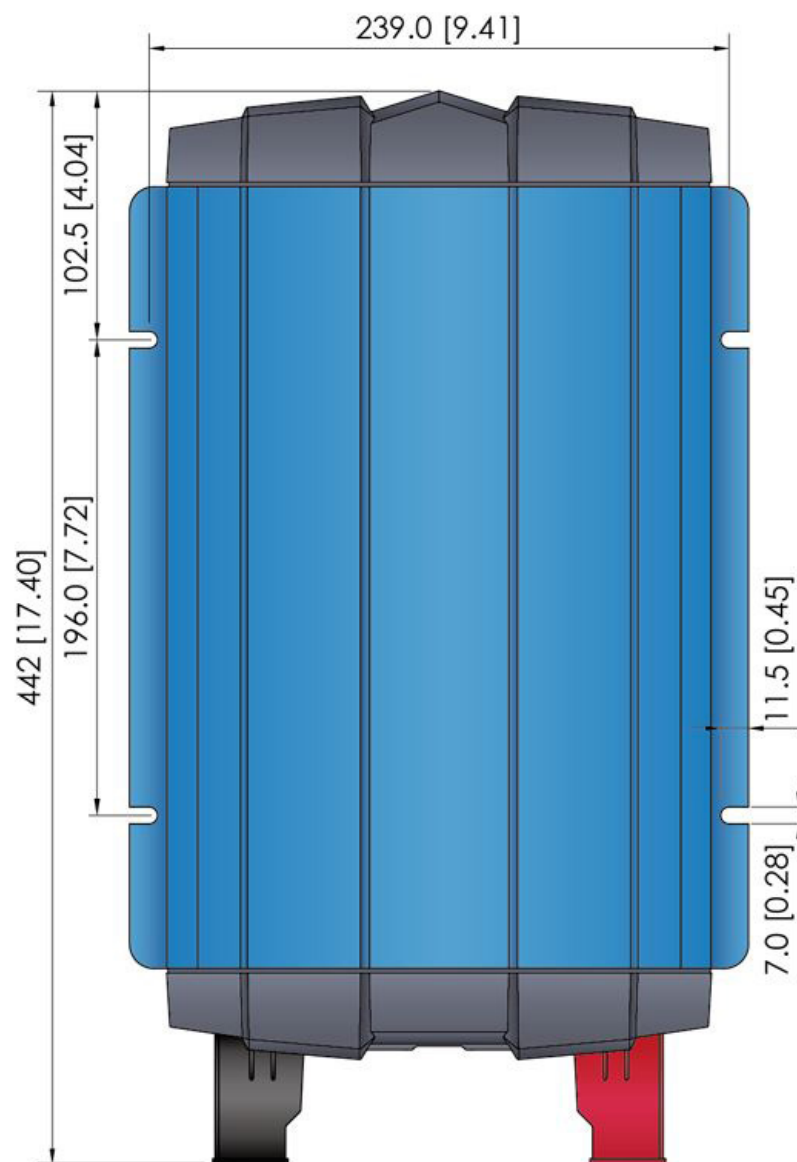
### Model Selection

INPUT VDC	120 V MODELS 50 HZ OR 60 HZ	220 V MODELS 50 HZ OR 60 HZ	DIMENSIONS (L" X W" X H") [IN]	DIMENSIONS (L" X W" X H") [MM]	WEIGHT
10.5 – 16.5 V	CGP3K-12-120	CGP3K-12-220	17.40 x 10.40 x 6.22	442 x 255 x 158	18.07 lbs [8.20 kg]
21 – 33 V	CGP3K-24-120	CGP3K-24-220	17.40 x 10.40 x 6.22	442 x 255 x 158	18.07 lbs [8.20 kg]
42 – 66 V	CGP3K-48-120	CGP3K-24-220	17.40 x 10.40 x 6.22	442 x 255 x 158	18.07 lbs [8.20 kg]

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CGP SERIES 3 KW PURE SINEWAVE COTS INVERTERS OUTLINE DRAWING





# RUGGED AC POWER SYSTEMS



**SELECT UNITS QUALIFIED TO MIL-STD-810, MIL-S-901, MIL-STD-1399, MIL-STD-461, MIL-STD-167, MIL-STD-740, RTCA/DO-160, AND MORE**

## RUGGED TRUE ONLINE UPS



500 W – 500+ KW

*Rack Mount, Bulkhead Mount, and Freestanding*

*Single and Three Phase*

*50, 60, and 400 Hz.*

## PURE SINEWAVE DC-AC INVERTERS



100 W – 500+ KW

*Rack Mount, Bulkhead Mount, and Freestanding*

*Single and Three Phase*

*50, 60, and 400 Hz.*

## SOLID-STATE FREQUENCY CONVERTERS



100 W – 500+ KW

*Rack Mount, Bulkhead Mount, and Freestanding*

*Single and Three Phase*

*50, 60, and 400 Hz.*

## POWER DISTRIBUTION UNITS (PDUs)



*Basic, Switched, Auto-Transfer Switching, and Metered Configurations*

*Rack Mount, Bulkhead Mount, and Freestanding*

*Single and Three Phase*

## CUSTOM EMI FILTERS



*For MIL-STD-461 Compliance*

*Rack Mount, Bulkhead Mount, and Freestanding*

*Single and Three Phase*

## RUGGED PORTABLE TRANSFORMERS



100 W – 500+ KW

*Rack Mount, Bulkhead Mount, and Freestanding*

*Single and Three Phase*

## EXTERNAL MAINTENANCE BYPASS SWITCHES (MBSSs)



*Rack Mount, Bulkhead Mount, and Freestanding*

*Single and Three Phase*

## CUSTOM DESIGNS



*Designed & Built to Spec*

*Integrated AC & DC Capabilities*

*Multiple Outputs*

## RELIABLE AC POWER WHEN AND WHERE YOU NEED IT SEVERE ENVIRONMENT PRODUCTS



- AIRBORNE
- SHIPBOARD
- MOBILE
- RACK MOUNT & FREESTANDING

- 50, 60, AND 400 Hz
- AIR & WATER COOLED
- SINGLE AND THREE PHASE
- LIGHTWEIGHT DESIGNS

