

# RUGGED GALAXY™ SERIES SOLID-STATE FREQUENCY CONVERTERS SINGLE PHASE OUTPUT 120 VA - 7.5+ KVA



## APPLICATIONS

Utilizing field proven technology, this family of rugged solid-state sinewave frequency converters is suitable for harsh environments and can be customized for unique applications including:

- Shelters
- Tactical Systems
- Shipboard Power
- MIL-STD-810
- MIL-S-901
- HMMWVs
- Mobile Systems
- Ground support
- MIL-STD-461
- MIL-STD-167



**NOVA ELECTRIC**  
[www.novaelectric.com](http://www.novaelectric.com)  
[novasales@theallpower.com](mailto:novasales@theallpower.com)

AS 9100  
BUREAU VERITAS  
Certification  
Certificate No. U0990227-1



A Leader in Frequency Converter Technology since 1966 - 500VA to 500+KVA

MADE IN USA

# RUGGED SINGLE-PHASE SINEWAVE FREQUENCY CONVERTER

CAN MEET MIL-STD-810, MIL-STD-1399, MIL-S-901, MIL-STD-704, & MIL-STD-461 OPTIONALLY

## APPLICATIONS

The rugged Galaxy Series Frequency Converter is designed to provide years of reliable service in harsh shock, vibration, humidity, and EMI environments. Military applications include HMMVW, UAV, Shipboard, Submarine, Shelter, Mobile Power Units, and Aircraft.

## OPTIONS

- Ruggedization against shock, vibration and humidity to MIL-STD-810
- MS Connector or outlets
- Chassis Slides (rack mount models only)
- Frequency Meters
- Elapsed Time Meter
- Custom NEMA Wall-Mount or Floor-Mount Enclosure
- Output Circuit Breaker
- Rail Frequency Hz - 83, 91.66, 100, 200, or 250 Hz.

## SPECIFICATIONS

### ELECTRICAL

AC Input: Most standard 1Ø or 3Ø (specify)  
 AC Output: Most standard 1Ø or 3Ø (specify)  
 Frequency: 50, 60, or 400Hz (specify)  
 Voltage Regulation:  $\pm 1.5\%$  NL to FL  
 Frequency Regulation:  $\pm 0.5\%$  NL to FL  
 Harmonic Distortion: 3% Typical, 5% Max  
 Power Factor: 0.7 lead to 0.7 lag  
 Efficiency at full load: 85-95% (depending on model)  
 Overload: 120% typical

### PROTECTIVE FEATURES

Current Limit, Short Circuit Protection, Thermal Protection, and Semi-Conductor Protection

### ENVIRONMENTAL

Operating Temp.:  $-20^{\circ}$  to  $+50^{\circ}\text{C}$   
 Storage Temp. Range:  $-40^{\circ}$  to  $+71^{\circ}\text{C}$   
 Humidity: to 95% non-condensing  
 Elevation: 10,000 ft. typical  
 Shock: 20g/11mS  
 Audible Noise: 65 dBA at 5 ft. typical  
 Cooling: Forced Air by internal DC brushless fan  
 Vibration: Normal shipping and handling  
 EMI: Designed to meet FCC Part 15, Class A.  
 Designed to meet MIL-STD-461 with optional additional filtering.

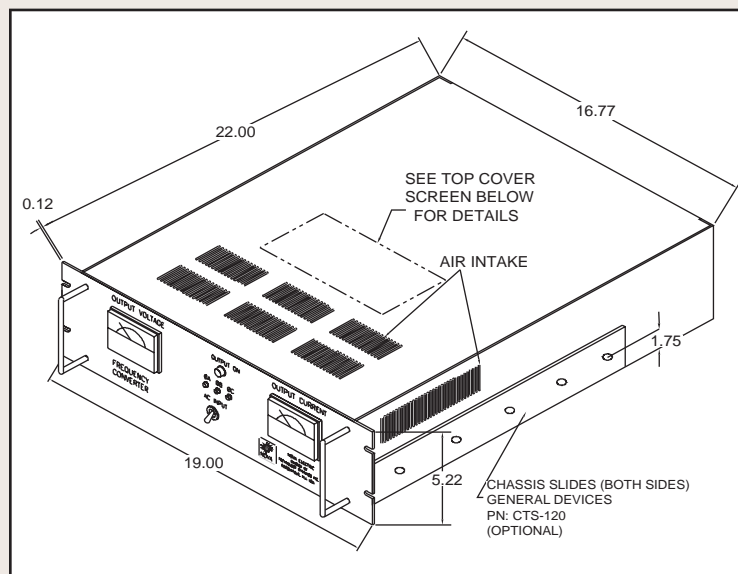
### HIGH-RELIABILITY

MTBF: 30,000 Hours per MIL-HDBK-217  
 MTBR: Less than 30 minutes

## MODEL SELECTION

Partial Model Number	KVA	Output Voltage	Output Frequency Hz	Weight (Lbs.)	Inch Dimensions (H x W x D)
FC1250U FC1260U FC12400U	0.125	220 120 115	50 60 400	30 30 30	5.25" x 9.0" x 11.0"
FC2550U FC2560U FC25400U	0.25	220 120 115	50 60 400	65 65 60	6.75" x 14.25" x 14.25"
GSFC5050 GSFC5060 GSFC50400	0.5	220 120 115	50 60 400	95 105 90	5.25" x 19.0" x 22.0"
GSFC1K50 GSFC1K60 GSFC1K400	1	220 120 115	50 60 400	100 110 95	5.25" x 19.0" x 22.0"
GSFC1.5K50 GSFC1.5K60 GSFC1.5K400	1.5	220 120 115	50 60 400	120 115 110	5.25" x 19.0" x 22.0"
GSFC2K50 GSFC2K60 GSFC2K400	2	220 120 115	50 60 400	125 120 115	5.25" x 19.0" x 22.0"

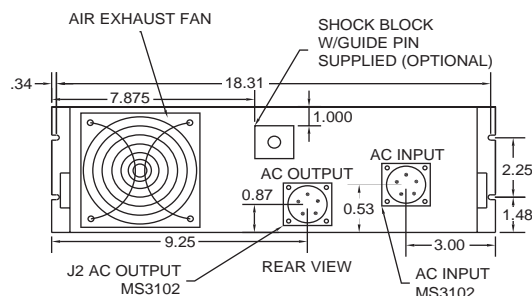
Partial Model Number	KVA	Output Voltage	Output Frequency Hz	Weight (Lbs.)	Inch Dimensions (H x W x D)
GSFC3K50 GSFC3K60	3	220 120	50 60	185 180	8.75" x 19.0" x 23.25"
GSFC3K400	3	115	400	170	5.25" x 19.0" x 22.25"
GSFC4K50 GSFC4K60 GSFC4K400	4	220 120 115	50 60 400	205 195 185	8.75" x 19.0" x 23.25"
GSFC5K50 GSFC5K60 GSFC5K400	5	220 120 115	50 60 400	210 200 190	8.75" x 19.0" x 23.25"
GSFC7.5K50 GSFC7.5K60 GSFC7.5K400	7.5	220 120 115	50 60 400	445 425 400	30.0" x 36" x 17"



## TYPICAL GSFC 1-2 KVA CHASSIS

### NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. EXTERIOR ANS# 61 GRAY SEMI-GLOSS.
3. HANDLES PROJECT 1.50 INCHES FROM PANEL SURFACE.



WEB : [www.novaelectric.com](http://www.novaelectric.com)

E-Mail : [novasales@theallpower.com](mailto:novasales@theallpower.com)

PHONE : (201) 385-0500 FAX : (201) 385-0702



**NOVA ELECTRIC**

A Division of

TECHNOLOGY DYNAMICS, INC.

100 School St., Bergenfield NJ 07621

