



NOVA ELECTRIC



POPULAR OPTIONS

- Ruggedization Against High Shock, Vibration and Humidity
- MS Connector Mates
- Chassis Slide Guides
- Internal Transfer Switch (Static or Electromechanical)
- High IP Protection for Front / Rear Panels (Typically IP32)
- Input Volt and Amp Meter Set (Available on Select Models)
- Elapsed Time Meter (Available on Select Models)
- Rugged Transit Cases and Custom Enclosures
- Environmental Stress Screening Services

CONTACT

100 School Street,
Bergenfield, NJ 07621 USA
(201) 385-0500
novaelectric.com
info@novaelectric.com



Galaxy Series Rack Mount 120 VDC Nominal Input / 1-5 KVA Pure Sine Wave DC-AC Inverters



3-5 KVA 5U Chassis Shown with Optional Equipment

GENERAL OVERVIEW

The transformer-isolated Galaxy Series Rugged Inverters are designed for harsh environment, military, and utility applications, and feature an optional advanced Internal Suppression Filter Network (ISFN) to suppress the significant transients usually associated with these types of conditions. They can be built to meet MIL-STD-810, MIL-S-901, MIL-STD-1472, MIL-STD-461, MIL-STD-167 and other standards optionally. Transformer-isolated topology makes these Inverters suitable for very high inrush loads, such as motors and compressors. These models utilize the most durable components, offering maximum field-proven reliability for severe environment and high reliability applications such as:

- Utility Applications
- Military Applications: Including HMMWV, UAV, Shipboard, Submarine, Aircraft, Mobile Power Units, Shelters, Transportable Systems, Tactical Systems, Ground Support, and more
- Heavy-Duty Industrial Applications
- Demanding Commercial Applications
- Communications Systems
- Utility Applications
- MIL-STD-810
- MIL-S-901
- MIL-STD-167

The Leader In Rugged Power Conversion Technology Since 1966

Rev B-January-8-2020



NOVA ELECTRIC



POPULAR OPTIONS

- Ruggedization Against High Shock, Vibration and Humidity
- MS Connector Mates
- Chassis Slide Guides
- Internal Transfer Switch (Static or Electromechanical)
- High IP Protection for Front / Rear Panels (Typically IP32)
- Input Volt and Amp Meter Set (Available on Select Models)
- Elapsed Time Meter (Available on Select Models)
- Rugged Transit Cases and Custom Enclosures
- Environmental Stress Screening Services

CONTACT

100 School Street,
Bergenfield, NJ 07621 USA
(201) 385-0500
novaelectric.com
info@novaelectric.com



SPECIFICATIONS

Electrical

INPUT VOLTAGE	105 - 150 VDC (Extended Range Available)
OUTPUT VOLTAGE	See Table
FREQUENCY	50 Hz, 60 Hz, 400 Hz (±0.5%)
FREQUENCY REGULATION	±0.5% N.L. to F.L.
VOLTAGE REGULATION	±1.5% N.L. to F.L.
EFFICIENCY	Approximately 80% (Depending On Model)
REACTIVE LOAD	0.75 Lead to 0.75 Lag
DISTORTION	5% THD, 3% Single Harmonic
OVERLOAD	125% for 5 Minutes
OVERLOAD PROTECTION RANGE	Automatic Overload & Short Circuit Protection
SYNC & PHASE LOCK RANGE	±3 Hz, Typical (50/60 Hz models)
TRANSIENT RESPONSE	Approx. 1/4 Cycle Recovery to 95% of Nominal

Environmental & Mechanical

OPERATING TEMP.	-20°C to +50°C Standard -40°C to +71°C Optional
COOLING	By Internal DC Brushless Fan
VIBRATION	Normal Shipping and Handling
SHOCK	20g, 11 mS Half Sinewave
HUMIDITY	to 95% RH Non-Condensing
EMI	Designed to Meet FCC Part 15, Class A, Can Meet MIL-STD-461 with Additional Filtering



1-2 KVA 3U Chassis

PARTIAL 60 Hz MODEL SELECTION – SPECIALTY VOLTAGES AND FREQUENCIES AVAILABLE UPON REQUEST

MODEL	OUTPUT VAC	OUTPUT FREQ. (Hz)	CONT. OUTPUT POWER	APPROX. WEIGHT (LB)	SIZE (HxWxL)	RACK PANEL HEIGHT
GS1K60-120	120	60	1 KVA	87	5.25" x 19" x 22"	3U
GS1.5K60-120	120	60	1.5 KVA	105	5.25" x 19" x 22"	3U
GS2K60-120	120	60	2 KVA	120	5.25" x 19" x 22"	3U
GS2.5K60-120	120	60	2.5 KVA	125	8.75" x 19" x 21.25"	5U
GS3K60-120	120	60	3 KVA	130	8.75" x 19" x 21.25"	5U
GS5K60-120	120	60	5 KVA	140	8.75" x 19" x 21.25"	5U

PARTIAL 50 Hz MODEL SELECTION – SPECIALTY VOLTAGES AND FREQUENCIES AVAILABLE UPON REQUEST

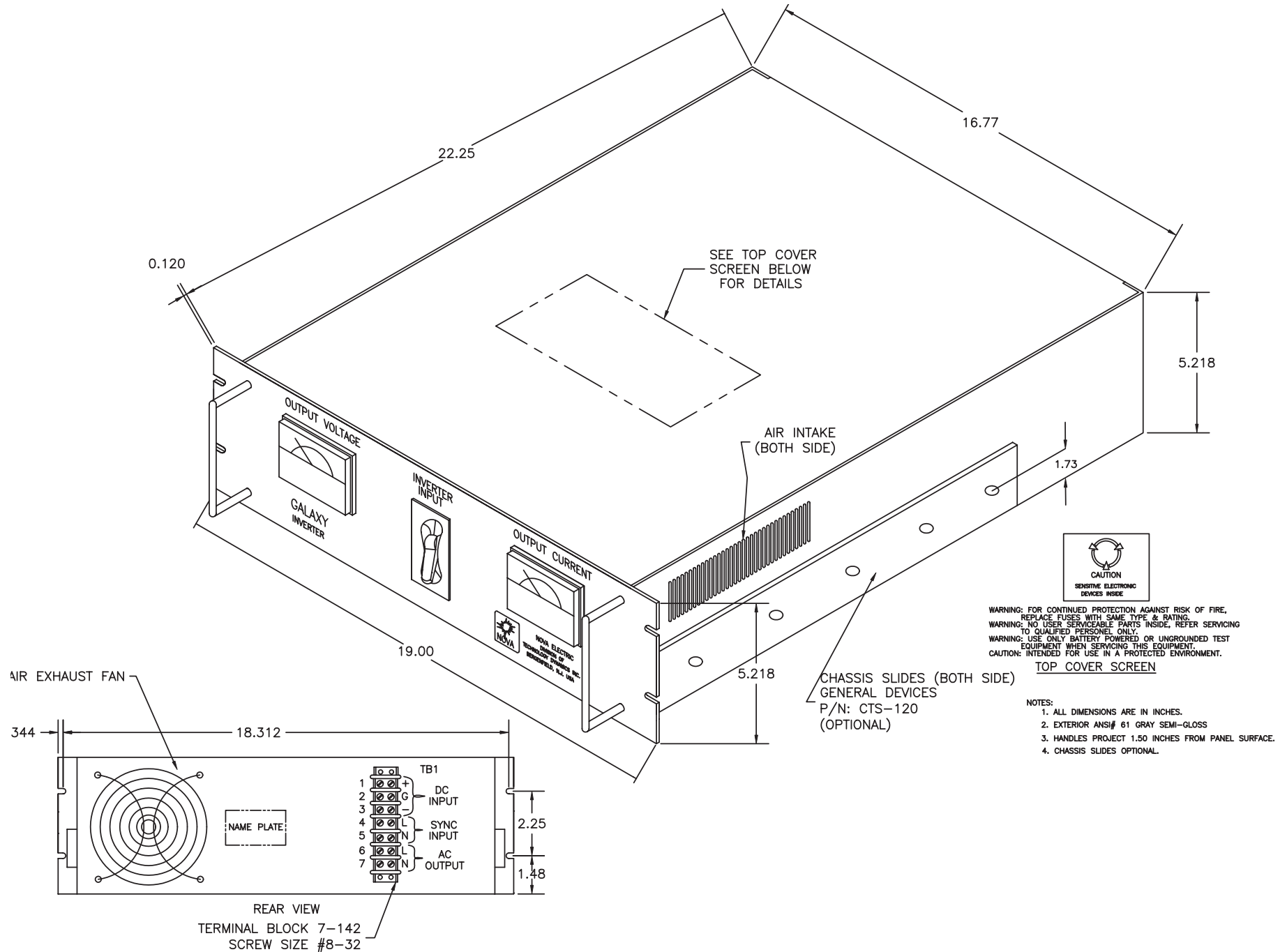
MODEL	OUTPUT VAC	OUTPUT FREQ. (Hz)	CONT. OUTPUT POWER	APPROX. WEIGHT (LB)	SIZE (HxWxL)	RACK PANEL HEIGHT
GS1K50-120(220)	220	50	1 KVA	87	5.25" x 19" x 22"	3U
GS1.5K60-120(220)	220	50	1.5 KVA	105	5.25" x 19" x 22"	3U
GS2K50-120(220)	220	50	2 KVA	120	5.25" x 19" x 22"	3U
GS2.5K50-120(220)	220	50	2.5 KVA	125	8.75" x 19" x 21.25"	5U
GS3K50-120(220)	220	50	3 KVA	130	8.75" x 19" x 21.25"	5U
GS5K50-120(220)	220	50	5 KVA	140	8.75" x 19" x 21.25"	5U

PARTIAL 400 Hz MODEL SELECTION – SPECIALTY VOLTAGES AND FREQUENCIES AVAILABLE UPON REQUEST

MODEL	OUTPUT VAC	OUTPUT FREQ. (Hz)	CONT. OUTPUT POWER	APPROX. WEIGHT (LB)	SIZE (HxWxL)	RACK PANEL HEIGHT
GS1K400-115	115	400	1.5 KVA	87	5.25" x 19" x 22"	3U
GS2K400-115	115	400	2 KVA	120	5.25" x 19" x 22"	3U
GS2.5K400-115	115	400	2.5 KVA	125	8.75" x 19" x 21.25"	5U
GS3K400-115	115	400	3 KVA	130	8.75" x 19" x 21.25"	5U
GS5K400-115	115	400	5 KVA	140	8.75" x 19" x 21.25"	5U

The Leader In Rugged Power Conversion Technology Since 1966

GS SERIES 3U CHASSIS

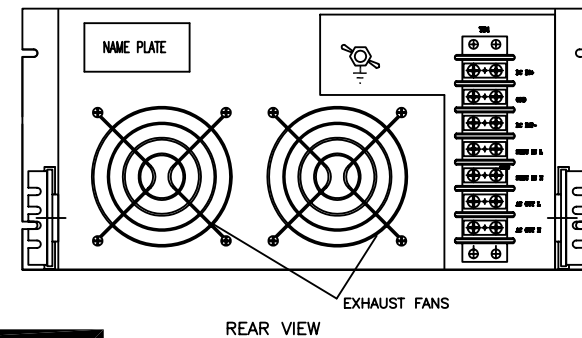
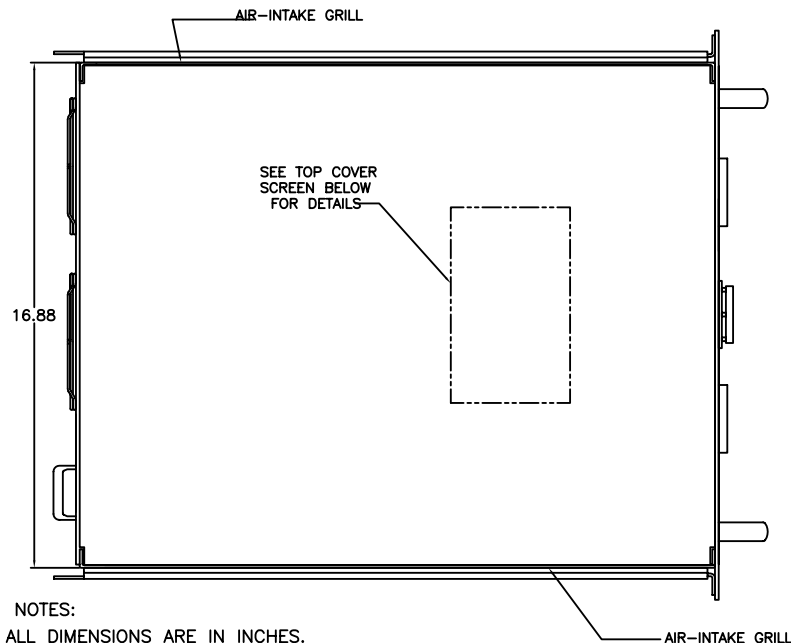
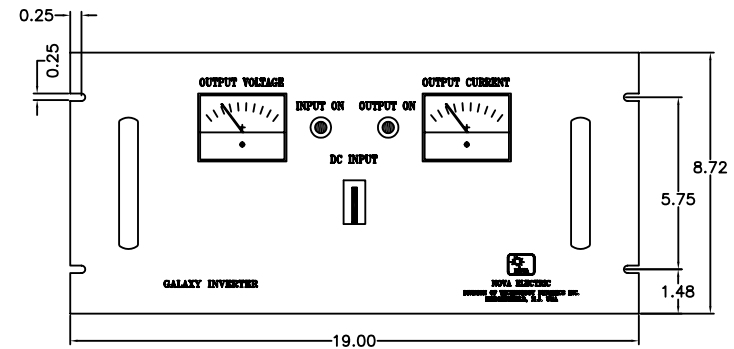
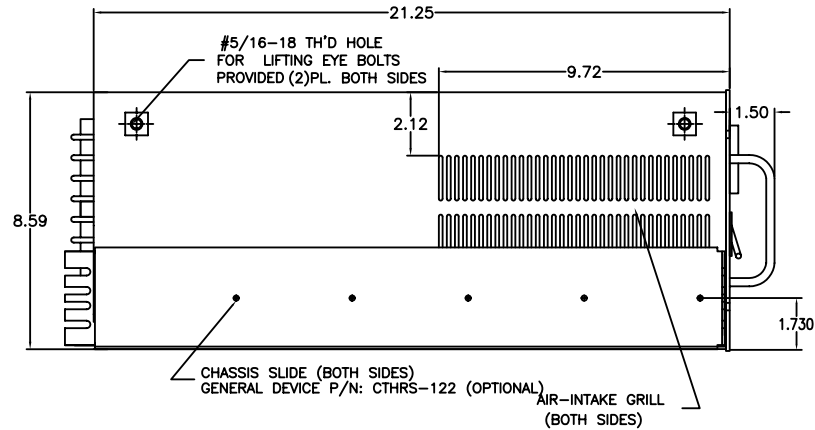


100 School Street, Bergenfield, NJ 07621 USA • (201) 385-0500 • novaelectric.com • info@novaelectric.com

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



GS SERIES 5U CHASSIS

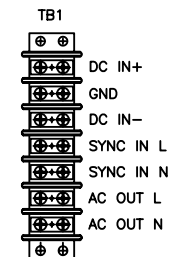


WARNING: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE FUSES WITH SAME TYPE AND RATING.

WARNING: NO USER SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

WARNING: USE ONLY BATTERY POWERED OR UNGROUNDED TEST EQUIPMENT WHEN SERVICING THIS EQUIPMENT.

CAUTION: INTENDED FOR USE IN A PROTECTED ENVIRONMENT. SEE MANUAL FOR DETAILS



TOP COVER SCREEN

NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. EXTERIOR COLOR ANSI #61 GRAY SEMI-GLOSS.
3. RUGGEDIZED



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

