



NOVA ELECTRIC



FEATURES

- Power Factor Corrected Input
- Ultra Light Weight Design
- Built To Meet MIL-STD-810 and MIL-STD-461

APPLICATIONS

- Military Shelters
- Ground Support
- Mobile Systems
- Tactical Systems
- Shipboard Applications
- Airborne Applications
- Military Ground Vehicles
- Communications Systems

CONTACT

100 School Street,
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GRSLPFC-Series Rugged True Online UPS

Compact 500 Watt UPS with Internal LiFePO4 Battery Pack



GENERAL OVERVIEW

Nova Electric's Model GRSLPFC11-5060-120-120-HR2U Rugged True Online UPS Systems are intended for harsh environment and military applications wherever pure sinewave utility-like power is required. These units are specifically designed for compliance to MIL-STD-810 for shock, vibration, and humidity, as well as MIL-STD-461 for EMI, offering maximum field-proven reliability. The GRSLPFC's Standard Freestanding Chassis measures only 3.5" High x 10" Wide x 13" Deep, with an overall weight of just 14 pounds total including the internal LiFePO4 Battery Pack.

The Leader In Rugged Power Conversion Technology Since 1966

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

Rev B-June-26-2020



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Front Panel View



Rear Panel View

SPECIFICATIONS

AC Input

VOLTAGE RANGE (UNIVERSAL)	120 +/-10% (108-132) VAC
FREQUENCY RANGE	47 - 63 Hz
NOMINAL CURRENT	5A @, 120Vac
INRUSH CURRENT (TYPICAL)	20A
EFFICIENCY (TYPICAL)	86%
POWER FACTOR (TYPICAL)	0.99
LEAKAGE CURRENT	<3mA @ 120VAC

AC Output

RATED VOLTAGE	120 VAC ($\pm 5\%$) 1Ø
FREQUENCY	60 (± 0.5 Hz)
RATED MAX. CURRENT	4A
MAX. RATED CURRENT	500 Watts
TOTAL HARMONIC DISTORTION	<5% (With Resistive Load)
RUN TIME ON BATTERY	~8 Minutes @ 25°C, 80% Load

Indicators

AC INPUT	Green
BATTERY STATUS	Green
BATTERY CHARGED	Green
BATTERY CHARGING	Yellow
BATTERY DISCHARGING	Red
ALARM ACTIVE	Red

Protective Features

OVERLOAD
OUTPUT SHORT CIRCUIT
OVER TEMPERATURE
AC INPUT PROTECTION
LIGHTNING PROTECTION
AUDIBLE ALARM WITH SILENCE SWITCH

Internal Battery Module

RATING	28 VDC
AMPACITY	2.5 Ah
TYPE	Lithium Iron Phosphate
RECHARGE TIME	3-4 Hours to 95% After Full Discharge

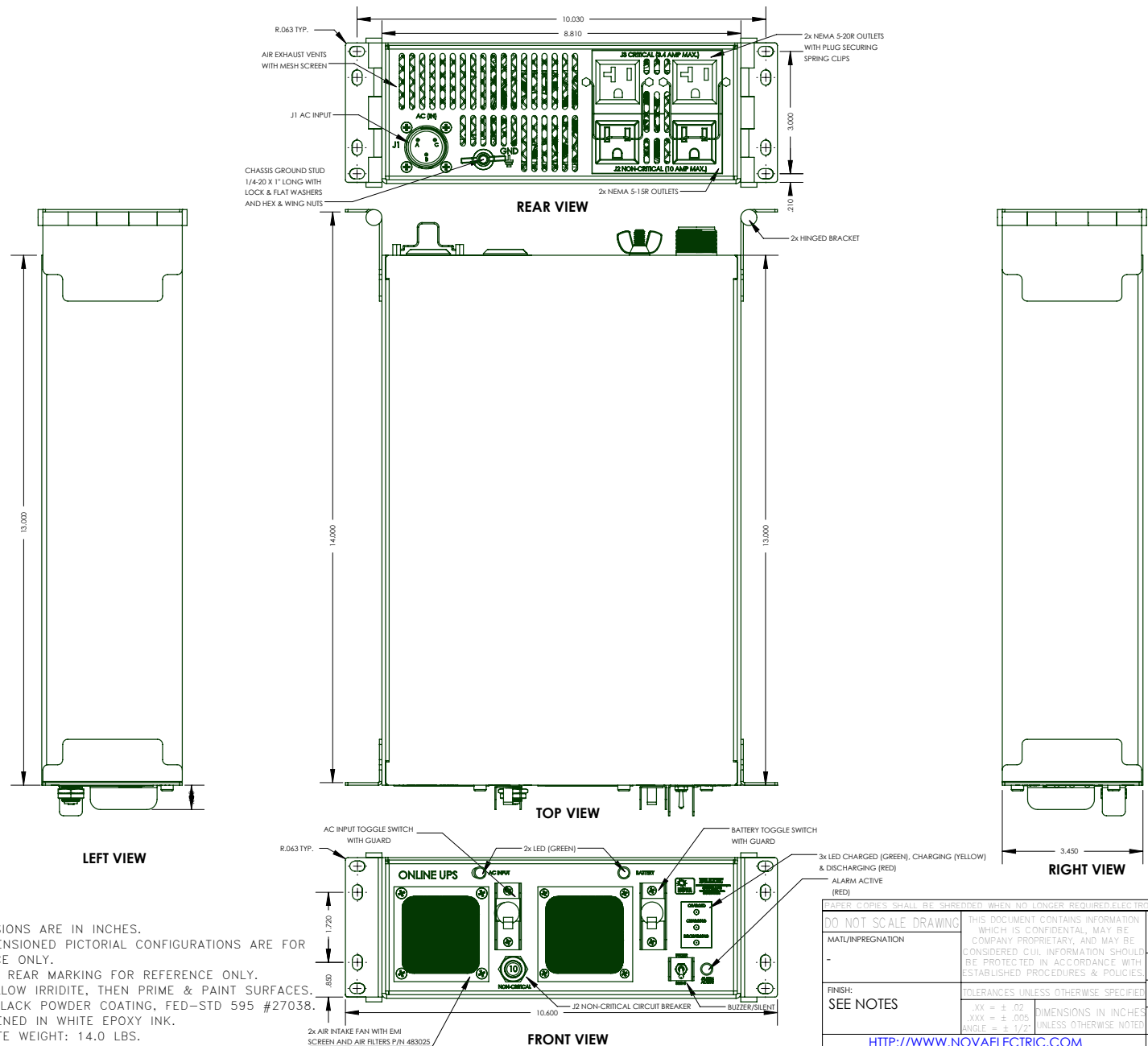
Environmental

UPS OPERATING TEMP.	-20° to +50°C (Extended Ranges Optional)
UPS STORAGE TEMPERATURE RANGE	-40° to +71°C (Electronics Only - Extended Ranges Optional)
HUMIDITY	to 95% RH Non-Condensing (All Boards Conformal Coated With Acrylic MIL-I-46058 Type R.)
ELEVATION	Operating: 15,000 Ft. (4,572 m) Non-Operating: 40,000 Ft. (12,192 m)
SHOCK	20 g, 11 mS Half Sinewave
AUDIBLE NOISE	Less Than 55 dbA at 5 ft.
MTBF	100,000+ Hours Per Field Data @ +25°C Ambient Ground-Fixed
MTTR	30 Minutes By Qualified Personnel



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GRSLPFC-SERIES OUTLINE DRAWING



- NOTES:
- 1. ALL DIMENSIONS ARE IN INCHES.
 - 2. ALL UNDIMENSIONED PICTORIAL CONFIGURATIONS ARE FOR REFERENCE ONLY.
 - 3. FRONT AND REAR MARKING FOR REFERENCE ONLY.
 - 4. FINISH: YELLOW IRRIDITE, THEN PRIME & PAINT SURFACES. COLOR: BLACK POWDER COATING, FED-STD 595 #27038.
 - 5. SILK-SCREENED IN WHITE EPOXY INK.
 - 6. APPROXIMATE WEIGHT: 14.0 LBS.

CONNECTOR PIN DESIGNATIONS

J1 AC INPUT	
MS3102E16-10P	
TERM	DESCRIPTION
A	LINE
B	NEUTRAL
C	GROUND

PAPER COPIES SHALL BE SHREDDED WHEN NO LONGER REQUIRED. ELECTRONIC COPIES SHALL NOT BE DISCLOSED OUTSIDE OF THE INTENDED RECIPIENTS.

DO NOT SCALE DRAWING

MATL/IMPREGNATION: -

FINISH: SEE NOTES

THIS DOCUMENT CONTAINS INFORMATION WHICH IS CONFIDENTIAL, MAY BE COMPANY PROPRIETARY, AND MAY BE CONSIDERED CUI. INFORMATION SHOULD BE PROTECTED IN ACCORDANCE WITH ESTABLISHED PROCEDURES & POLICIES.

TOLERANCES UNLESS OTHERWISE SPECIFIED:
XX = ± .02
XXX = ± .005
ANGLE = ± 1/2° UNLESS OTHERWISE NOTED

THIRD ANGLE PROJECTION

DRAWN	DATE
S.G.	5/28/19
CHECKED	DATE
S.G.	5/28/19
APPROVED	DATE
A.L.	5/28/19

SCALE: 1:2.5

[HTTP://WWW.NOVAELECTRIC.COM](http://www.novaelectric.com)

NOVA ELECTRIC
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OUTLINE DRAWING,
GRSLPFC11-5060-120-120-HR2U

B	9812519	C
SIZE	CAGE: 29019	SHEET: 1
REV.		





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

