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THE POWER TO PERFORM

# Scimitar 5000

## 5000 Watt Rack-Mount Inverters with Static Transfer Switch

## Overview

The SCIMITAR 5000 Series are 5000W sine-wave inverters which are 19" rack-mountable and only 3RU high. Different models operate from a 24 or 48 VDC source and produce a 115 or 230 VAC output.

The tightly regulated low distortion 50 or 60Hz sine wave is produced by DSP controlled power circuits using an advanced high frequency, pulse-width modulation technique which achieves up to 92% efficiency.

A built-in Static Transfer Switch allows connection of a utility or other AC power source which can be switched to the load automatically in the event that the inverter switches off.

In normal operation these inverters isolate the load from wide voltage swings , transients and noise usually present in the AC utility and which can cause equipment reliability problems.

Output voltage and frequency are programmable from the front panel, as well as Baud Rate for the RS232 communications interface which can be used for remote monitoring.

## Features

- 19-Inch x 3RU Rack Mounting
- 5000W Output Capacity
- 115VAC or 230VAC Output
- 50 or 60Hz Low Distortion Sine Wave
- 24 or 48 VDC Input
- -20 to +50°C Operating Temperature
- Static Transfer Switch Built-in
- Adjustable Output Voltage
- Programmable Frequency (DIP switch)
- Powers Reactive Loads
- LED Status Display
- Relay Alarm Output

## Standard Models

| Model | Output Power | Output Voltage [1,2] | Input Voltage | SNMP [3] |
|---|---|---|---|---|
| INV2450R-B | 5kW - Continuous<br>10kW - Surge | 115VAC | 24VDC | Option |
| INV4850R-B | | | 48VDC | Option |
| INV2450RH-B | | 230VAC | 24VDC | Option |
| INV4850RH-B | | | 48VDC | Option |

Notes:
1. 115VAC models are shipped pre-programmed to 60Hz.
   230VAC models are shipped pre-programmed to 50Hz.
2. 115VAC models can be adjusted between 100 and 120VAC.
   230VAC models can be adjusted between 200 and 240VAC.
3. To specify the SNMP option add 'S' to the end of the model number, e.g. INV4850R-BS.

## Front Cover Kit

| Description | Order Code |
|---|---|
| Hinged Front Cover Panel | INV-ADD-3U-CVR |

### Safety Compliance

EN60950-1

# Specifications

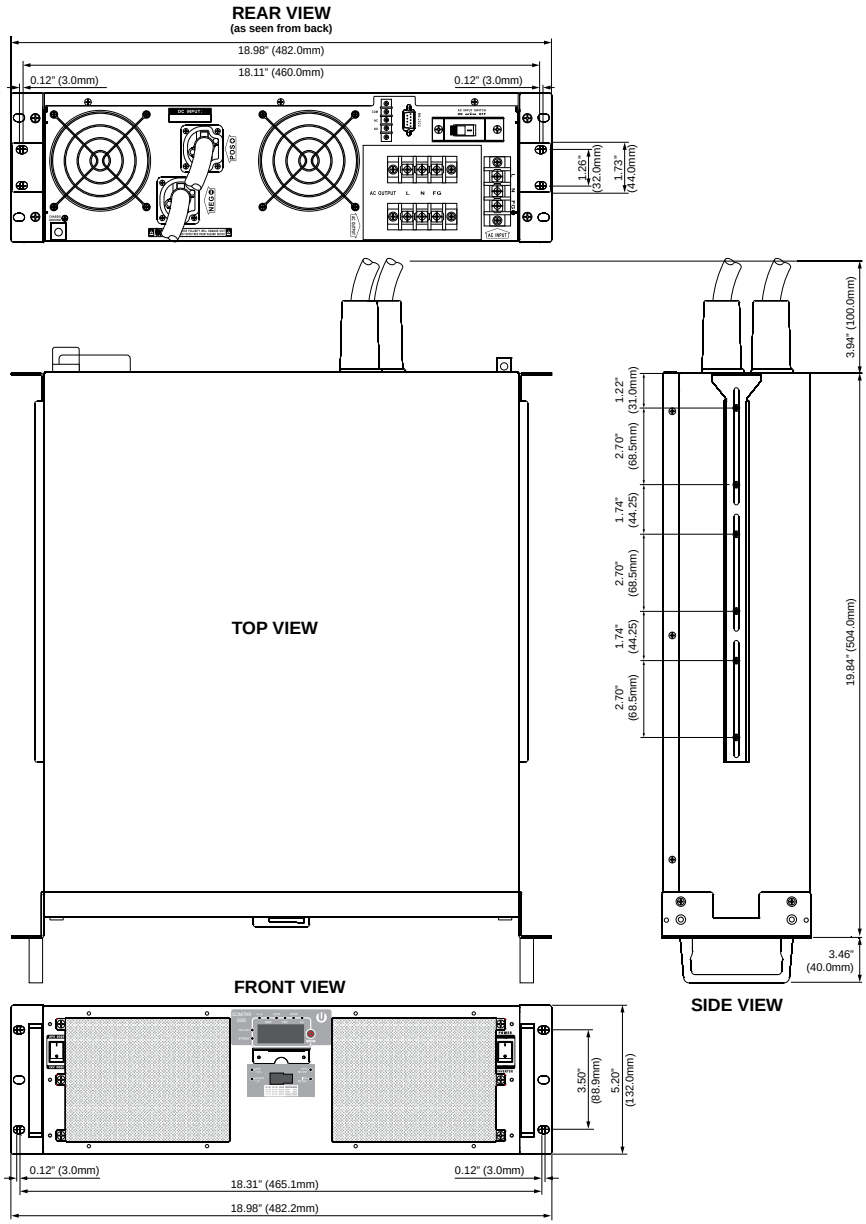
| Model Number | INV2430R-B | INV4830R-B | INV2430RH-B | INV4830RH-B |
|---|---|---|---|---|
| Inverter Section | 100-120VAC Models | | 200-240VAC Models | |
| Input Voltage Range | 20-32VDC | 42-62VDC | 20-32VDC | 42-62VDC |
| Input Current (Max.) | 295A | 137A | 278A | 130A |
| Input Current (NL) | 1.64A | 0.82A | 1.30A | 0.68A |
| Output Power | 5000W | | | |
| Surge Rating | 5200W for 3 minutes | | | |
| Efficiency @ FL | 85% | 87% | 90% | 92% |
| Output Voltage | 100-120VAC (adjustable) | | 200-240VAC (adjustable) | |
| Output Frequency | 50Hz or 60Hz ±0.05% (switch selectable) | | | |
| Peak Output Power | 10000W | | | |
| Output Waveform | Pure Sine Wave <3% THD (R Load) | | | |
| Protection | Output Overload - Output Short Circuit<br>Input Reverse Polarity (fuse) - Input Undervoltage - Input Overvoltage<br>Over Temperature | | | |
| Digital Display | OVP - UVP - OTP - OLP - VAC<br>AMP - WATT - VDC - TEMP - Hz | | | |
| Control Port | RS232C<br>Baud Rates - 2400, 4800, 9600, 19200 (switch selectable) | | | |
| SNMP (Option) | Operates in conjunction with NetAgent UPS SNMP Agent | | | |

| STS Section | (By-Pass) | |
|---|---|---|
| AC Input Range | 90 - 130VAC (110VAC nominal) | 180-260VAC (230VAC nominal) |
| Frequency | 47 - 63Hz | |
| Transfer Time | 4 - 6ms | |
| Alarm Relay | Form-C dry contacts, indicates presence of AC Utility supply<br>(NOTE: Not suitable for direct connection to SELV circuits) | |

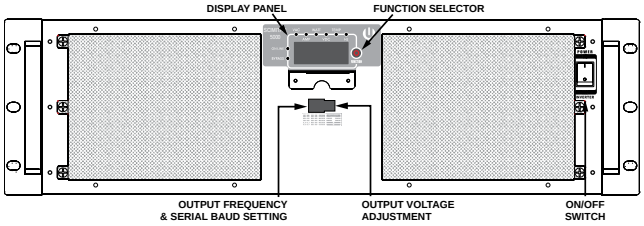
THE STS BY-PASS SECTION IS ONLY ACTIVE WHEN A UTILITY OR OTHER AC SOURCE IS CONNECTED. NORMAL OPERATION , WITH OR WITHOUT A UTILITY OR OTHER AC SOURCE IS 'ON-LINE' , WITH THE INVERTER DELIVERING REGULATED AC TO THE OUTLETS.

| General | | |
|---|---|---|
| Temperature Range | -20°C to +60°C Operating<br>-30°C to +70°C Storage | |
| MTBF | > 98,000 hrs @ 25°C ambient, nominal output voltage & full load | |
| Safety | EN60950-1 | |
| EMC | FCC CFR Title 47 Part 15 Subpart B: 2008 Class A<br>CISPR 22: 2005<br>ANSI C63.4: 2003 | EN55022:2006+A1: 2007, Class A<br>EN55024: 1998+A1: 2001+A2: 2003<br>EN61000-3-2: 2006<br>EN61000-3-3: 1995+A1: 2001+A2: 2005<br>IEC61000-4-2 Ed. 1.2: 2001-04<br>IEC61000-4-3 Ed. 3.0: 2006<br>IEC61000-4-4: 2004<br>IEC61000-4-5 Ed. 2.0: 2005<br>IEC61000-4-6 Ed. 2.2: 2006<br>IEC61000-4-8 Ed. 1.1: 2001-03<br>IEC61000-4-11 2nd Ed.: 2004-03 |
| Dimensions | 17.5" (d) x 16.7" (w) x 5.2" (h)<br>504mm (d) x 425mm (w) x 132mm (h) | |
| Mounting | 19" rack-mount, 3RU high | |
| Weight | 41.8lbs / 19.0Kg | |

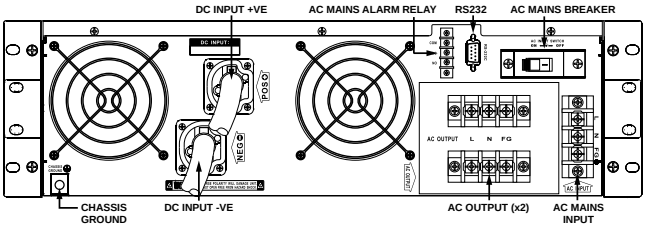
# Mechanical Drawing




# Front Panel Detail




# Rear Panel Detail




## ABOUT GREEN CUBES TECHNOLOGY

Green Cubes Technology harnesses over 30 years of industry experience to ensure we design, develop and deliver solutions for the most challenging energy needs. We offer battery technology innovation, application design and performance management to drive productivity, scalability and sustainability.

Green Cubes provides complete power systems to the stationary power industry. With the addition of the Guardian and Aspiro Product lines offered under the UNIPOWER brand, these industry proven DC plant systems serve critical applications all around the world. Green Cubes offers complete power solutions including energy storage, power conversion, and seamless integration.

For more information, email **contact@greencubes.com** or visit **greencubes.com**

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