

Power Supply



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General Warnings and Cautions

The following general warnings and cautions are applicable to this instrument.

WARNING

This instrument is intended for use by qualified personnel who recognize shock hazards or laser hazards and are familiar with safety precautions required to avoid possible injury. Read the instruction manual thoroughly before using to become familiar with the instrument's operations and capabilities.

CAUTION

There are no serviceable parts inside the instrument. Work performed by persons not authorized by Vescent Photonics may void the warranty.

CAUTION

Although ESD protection is designed into the instrument, operation in a static-free work area is recommended.

WARNING

To avoid electrical shock hazard, connect the instrument to properly earth-grounded, 3-prong receptacles only. Failure to observe this precaution can result in severe injury or death.

WARNING

Do not clean outside surfaces of any Vescent Photonics products with solvents such as acetone. Front panels on electronics modules may be cleaned with a mild soap and water solution. Do not clean optics modules.

Limited Warranty

Vescent Photonics warrants this product to be free from defects in materials and workmanship for a period of one year from the date of shipment. If this product proves defective during the applicable warranty period, Vescent Photonics, at its option, either will repair the defective product without charge or will provide a replacement in exchange for the defective product. The customer must notify Vescent of the defective product within the warranty period and prior to product return. The customer will be responsible for packaging and shipping the defective product back to Vescent Photonics, with shipping charges prepaid.

Vescent Photonics shall not be obligated to furnish service under this warranty from damage caused by service or repair attempts made without authorization by Vescent Photonics; from damage caused by operation of equipment outside of its specified range as stated in either the product specification or operators manual; from damage due to improper connection to other equipment or power supplies.

This warranty is in lieu of all other warranties including any implied warranty concerning the suitability or fitness of the product for a particular use. Vescent Photonics shall only be liable for cost of repairs or replacement of the defective product within the warranty period. Vescent Photonics shall not be liable for any damages to persons or property resulting from the use of the product or caused by the defect or failure of this product. Vescent Photonics' liability is expressly limited to the warranty set out above. By accepting delivery of this product, the purchaser expressly agrees to the terms of this limited warranty.

Vescent Photonics

Printed Jun 10, 2008

Absolute Maximum Ratings

Note: All modules designed to be operated in laboratory environment

Parameter	Rating
Environmental Temperature	>15°C and <30°C
Environmental Humidity	<60%
Environmental Dew Point	<15°C

1. Power Supply

Model No. D2-005



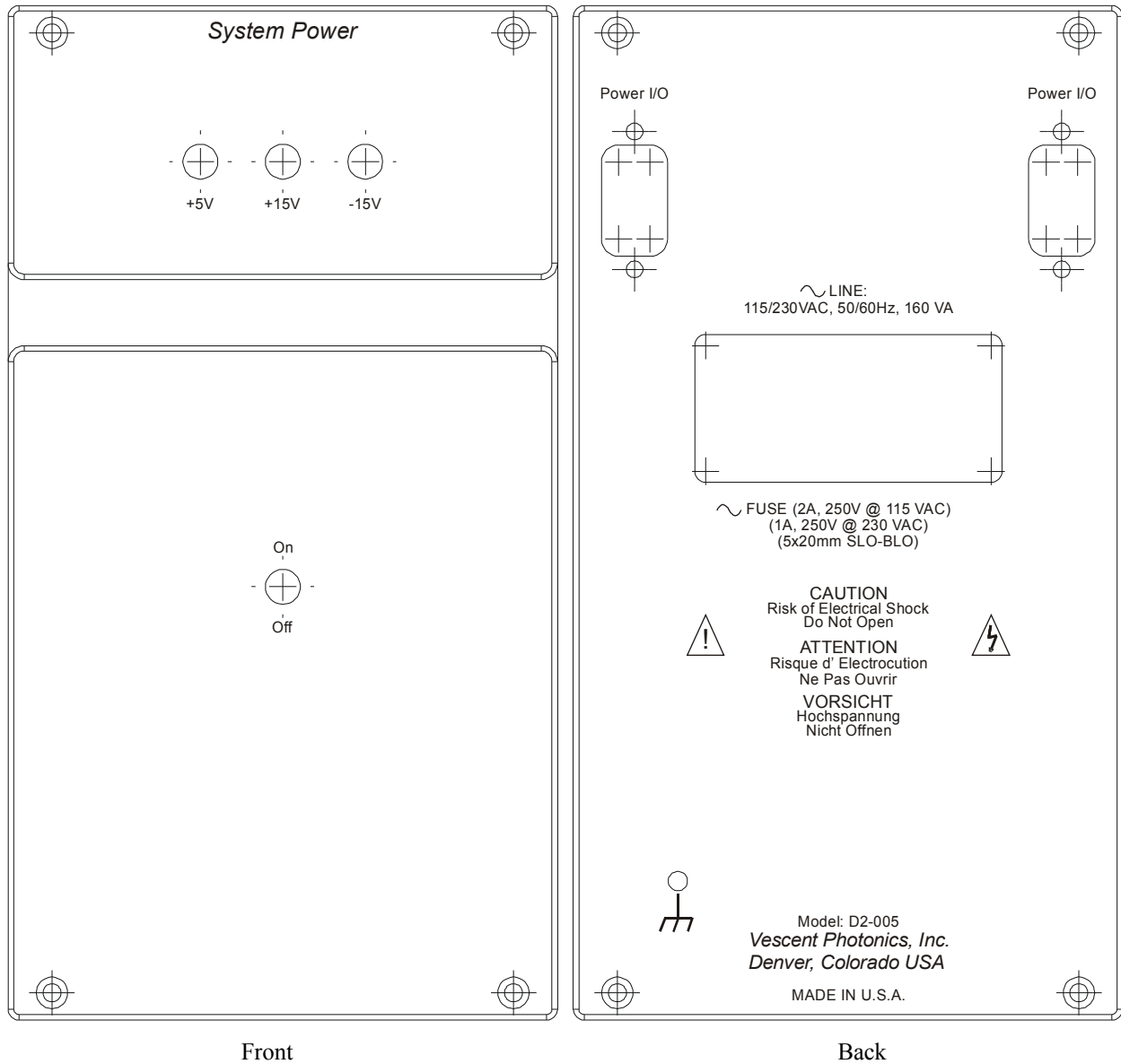
1.1. Description

The Power Supply is a quiet, linear power supply providing +/-15V and 5V. It is in a separate box to isolate 60 Hz and EM interference. One power supply can power two complete laser systems, or four electronics modules.

1.2. Specifications

		Units
Current Limit		
+15V	1.5	A
-15V	1.5	A
+5V	6	A
Output Regulation	0.05	%

1.3. Inputs, Outputs, and Controls



1.3.1. Monitor Section

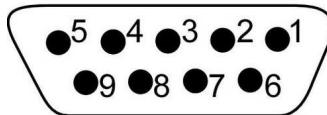
The monitor section contains three blue status LEDs indicating proper voltage on the +15,-15, and 5V power lines. In there is a voltage sag on any of the power lines, the blue status LED will turn off.

1.3.2. Back panel I/O

Power I/O (9-pin D-sub)

The power to each electronics module is through a 9-pin D-sub connector through a power bridge unit. The unit can also be powered through any serial cable with 9-pin D-sub connectors, which is convenient when the unit must be taken out of line for access to the side panels. The pin outs are shown in the following figure:

D-Sub Power Pin Out
(female connector drawn)



- 1 } 5 V return
- 2 } 5 V return
- 3 no connection
- 4 } +/- 15 V return
- 5 } +/- 15 V return
- 6 } 5 Volts
- 7 } 5 Volts
- 8 -15 Volts
- 9 +15 Volts