



High Voltage Module, HVPS3

Introduction

The High Voltage Module, HVPS3 is an integrated high voltage power supply featuring a high voltage isolated output capable of producing up to 6kV. When loaded, these units will typically produce a maximum output voltage of approximately 6kV at up to 1.66mA output current (10 Watts). They accept input voltages in the range of 0-15VDC making them perfect for battery powered applications. These units are unregulated.

Typical Applications:

- Capacitor charging
- Marx generators
- Jacob's ladders
- General high voltage applications

Electrical Specifications

The following table summarizes the electrical specifications of the power supply:

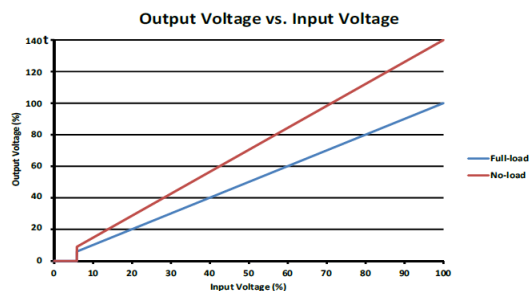
Specifications	
Input Voltage Range	0.0V to 15.0VDC Do not exceed 15.0VDC!
Input Current	<500mA (no load) <1.5A (full load)
Output Voltage Range	0-6kV (+/- 3kV)
Max. Output Power	10 W

Short Circuit Operation

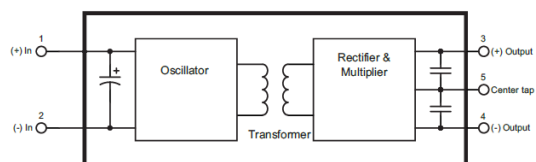
We do not recommend operating these units into a short circuit. We recommend using current limiting resistors to limit the charge current to less than 1mA.

Output Voltages

The following graph summarizes the approximate output voltage vs. input voltage.

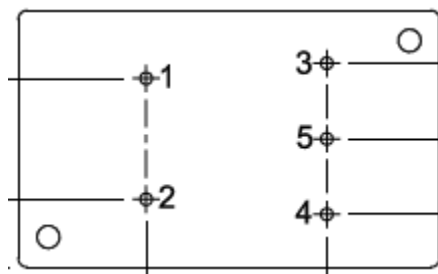


Block Diagram



Internal Block Diagram

PIN-OUT



This diagram shows the pin out of the device when looking at it from the BOTTOM!

Pin	Function
1	Input, Positive
2	Input, Negative
3	Output +
4	Output -
5	Center tap



SAFETY WARNING

High voltage power supplies present a serious risk of personal injury if not used in accordance with design and / or use specifications, if used in applications on products which they are not intended or designed, or if they are used by untrained or unqualified personnel. These high voltage power supplies should only be operated by trained and experience professionals and never by anyone under the age of 18. We reserve the right to refuse sale of these high voltage modules to anyone.

ENERGY STORAGE WARNING

These devices have internal energy storage capacitors at the output. Be sure to properly discharge the output of these devices by shorting them together prior to handling as they will continue to hold a charge after power is removed from the input.