

○ — APPLICATION NOTE

INPUT BYPASS CAPACITOR

This Application Note applies to all XP Power Product Series and describes the optional use of an input bypass capacitor for improved performance.

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 for which they are not intended or designed, or if they are used by untrained or unqualified personnel.

For more information, please refer to the XP Power Safety Warning and Disclaimer at the end of this document.

General Information

Internal to all XP Power units is a small input capacitor. Adding an additional capacitor externally across the input pins can provide performance enhancements. This external capacitor reduces the reflected ripple on the input supply lines and decreases the amount of work being done by the small capacitor inside the unit. A slight increase in efficiency and decrease in output ripple might also be observed.

Capacitor Selection

Select a low impedance electrolytic capacitor and place close to the input leads of the converter. The value should be between 10uF and 100uF. See Figure 1.

See the product series Data Sheets for more information.

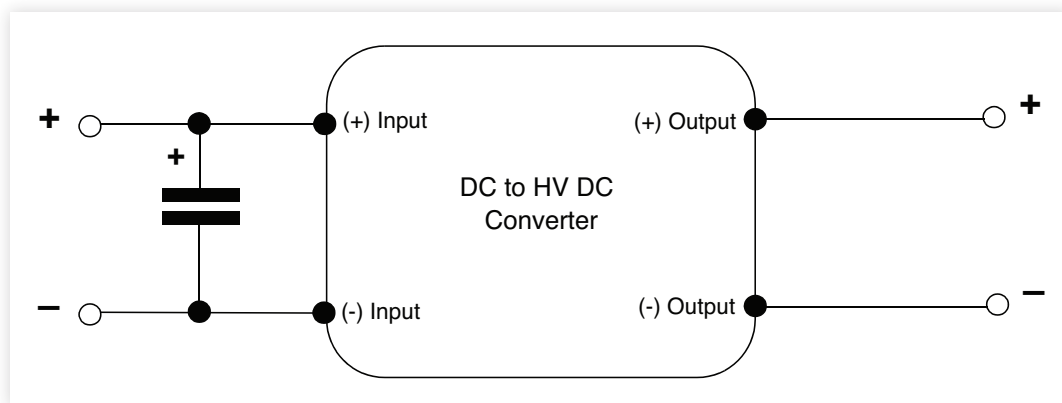


Figure 1

Safety Information

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 for which they are not intended or designed, or if they are used by untrained or unqualified personnel. Before testing, incorporating or using XP Power's products, read, understand and thereafter adhere to all instructions, protocol, cautions and safety procedures applicable not only to XP Power's products but to each product and/or application into which XP Power's products are incorporated or assembled, as well as industry standard safe practices and rules and regulations regarding the use of high voltage.