

## 800-V Input DC-DC Converters Deliver 2000 W

[ABSOPULSE Electronics'](#) HVI 2K-F6W series of high-input voltage dc-dc converters employ a field-proven HVI2500 topology to deliver up to 2000 W of output power. The converters are suitable for a broad range of industrial applications that require a rugged, reliable, dc power supply capable of accepting high input voltage and where size and weight are constraining factors (see the figure).

The HVI 2K-F6W units operate over a 700-V to 900-V input range, 800 V nominal. Regulated output voltage options include 24 V, 28 V, 36 V, 48 V, 110 V or custom value. An optional built-in redundancy diode allows for parallel and N+1 operation, or back-up battery connection. An output-fail alarm (Form C) and remote shutdown or enable are available on request. Efficiency is a minimum of 80% at full load depending on input/output configuration.

The units are filtered on the input and output for low noise. The input meets EN 55032 Class A with wide margins (Class B option). This ensures that the unit can be used in EMI-sensitive environments without additional filtering. The converters comply with the requirements of EN/IEC 61010-1 and related standards.

The HVI 2K-F6W design is verified for 5600-Vdc input-to-output isolation and production-level testing is 4300 Vdc input-to-output. The units are equipped with reverse-polarity protection, inrush current limiting, output current limiting, short-circuit protection and self-resetting thermal shutdown in the case of insufficient airflow. Low component count, large design headroom, and the exclusive use of components with established reliability also contribute to ensuring that the unit delivers many years of trouble-free operation.

Cooling is by high-quality built-in fans with additional cooling provided by conduction via the baseplate. This ensures operation over a 0°C to +50°C temperature range for full specification without the need for derating. Wider temperature ranges are available on request.

Heavy ruggedizing ensures immunity to shock and vibration (IEC 61373 Cat 1 A&B), which makes the units suitable for operation in extreme environments. The internal boards are conformal coated for protection from moisture, humidity and airborne contaminants. The units measure 254 x 65 x 349 mm, W x H x D. Contact the [company](#) for pricing and delivery.



*Figure. Operating over a 700-V to 900-V input range, the HVI 2K-F6W series dc-dc converters generate up to 2000 W of output power at 24 V, 28 V, 36 V, 48 V, 110 V or a custom value. Especially suitable for space- and weight-constrained applications, the converters measure 254 x 65 x 349 mm and weigh approx. 3.4 kg (7.5 lbs).*