HIGH VOLTAGE POWER SUPPLY MODULE



HV2000P

The HV2000P module is a very small and ultra low power consuming DC/DC converter, designed to be used on printed circuit boards. It is intended to supply detectors with low power consumption, such as CdZnTe-, He3- or HPGe detectors with high voltage up to 2000V. But it may be also usable for other applications where low weight and small dimensions are very important. The technical design of the HV2000P is based on non-inductor technology, which guarantees lowest magnetic fields. The module can be already operated with input voltages down to 3.0 Volts.





Technical Specifications	
Output voltage	+5V to +2000V
Output current	3μA @2000V
Input voltage range	3.0 - 5.5V
Output short circuit current	<34μΑ
Power consumption for $600M\Omega$ load HV=2000V	~50mW @3V ~75mW @5V
Quiescent current (V _{ctrl} =0V)	~1.5mA @3V ~0.9mA @5V
Internal output capacity	~3.3nF
Reference voltage	2.048V
Control voltage range	0 - 2.048V
Control voltage transfer factor	1000 (± 3%)
Output ripple and noise voltage [0.1Hz – 10kHz]	<50mVpp
Output series resistor for V _{mon}	10kΩ
Temperature stability	± 200 ppm /°C
Operating temperature	0°C - 60°C
Dimensions (mm)	35 x 17.5 x 7
Weight	~8g

