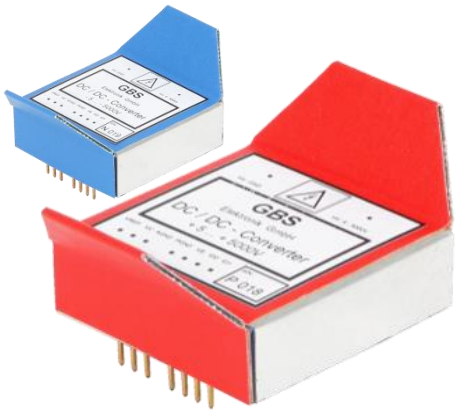
HIGH VOLTAGE POWER SUPPLY MODULE

HV5000

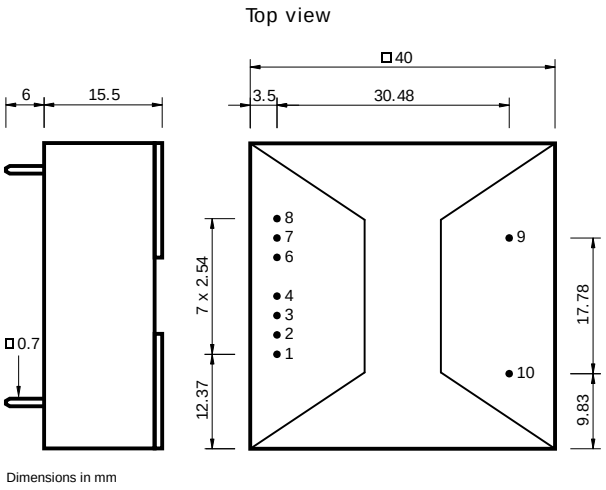
The HV5000 module is a compact and low power consuming DC/DC converter, designed to be used on printed circuit boards. It is intended to supply large HPGe- or CdZnTe detectors, with high voltage up to 5000V. The Module is also usable for PMT applications. The HV5000 is available in both polarities.



Technical Specifications

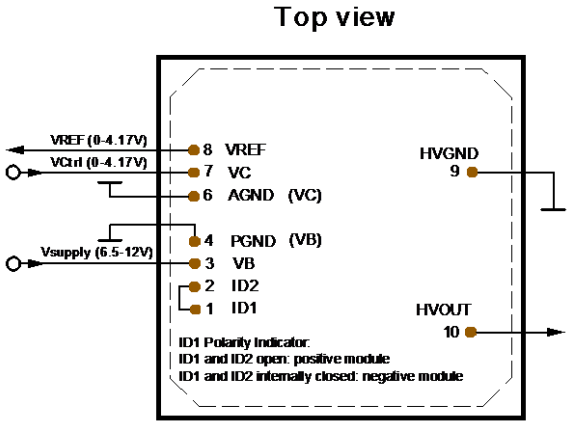
Output voltage (depends on module version)	+5V to +5000V -5V to -5000V
Output current	20µA @5000V 400µA @500V
Input voltage range	6.5 – 12V; 7.5V nominal
Output short circuit current	<600µA
Power consumption for 250MΩ load | HV=5000V	~100mW @6.5V ~100mW @8V
Quiescent current (V_{ctrl}=0V)	~3.7mA @8V
Internal output capacity	~4nF
Reference voltage (VRef)	0 - 4.17V
Control voltage range (VC)	0 - 4.17V
Control voltage transfer factor	1200 (± 3%)
Output ripple and noise voltage [0.1Hz – 10kHz]	<40mVpp
Output series resistor for V_{Ref}	1kΩ
Temperature stability	± 200ppm /°C
Operating temperature	0°C - 60°C
Dimensions (mm)	40 x 40 x 15.5
Weight	~45g

Mechanical Dimensions



Dimensions in mm

Pin Description



Ordering

HV5000-	(HV-Modul -5 to -5000V)
HV5000+	(HV-Modul +5 to +5000V)

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