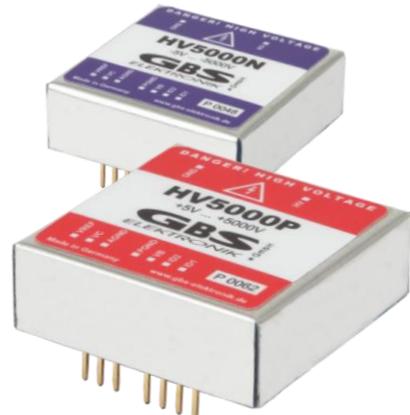


HIGH VOLTAGE POWER SUPPLY MODULE

HV5000

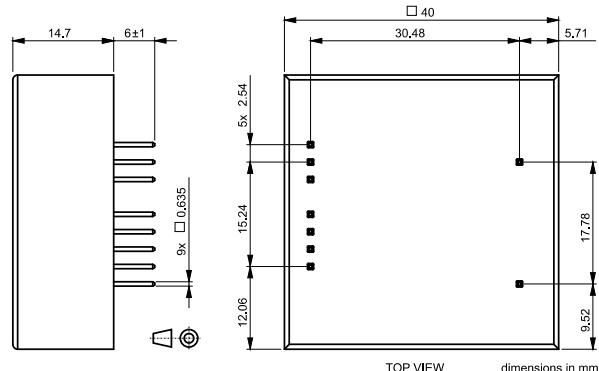
The HV5000 module is a compact and low power consuming DC/DC converter, designed to be used on printed circuit boards. It is intended to supply large HPGe- or CdZnTe detectors, with high voltage up to 5000V. The Module is also usable for PMT applications. The HV5000 is available in both polarities.



Technical Specifications

Output voltage (depends on module version)	+5V to +5000V -5V to -5000V
Output current	40µA @ 5000V 400µA @ 500V
Input voltage range	6.5 – 12V; 7.5V nominal
Output short circuit current	<600µA
Power consumption for 250MΩ load HV=5000V	~325mW @ 6.5V ~360mW @ 7.5V
Quiescent current (V _{ctrl} =0V)	~3mA @ 7.5V
Internal output capacity	~4nF
Reference voltage (V _{Ref})	0 - 4.17V
Control voltage range (VC)	0 - 4.17V
Control voltage transfer factor	1200 ($\pm 3\%$)
Output ripple and noise voltage [0.1Hz – 10kHz]	<40mVpp
Output series resistor for V _{Ref}	1kΩ
Temperature stability	$\pm 200\text{ppm } /^\circ\text{C}$
Operating temperature	0°C - 60°C
Dimensions (mm)	40 x 40 x 20.7
Weight	~45g

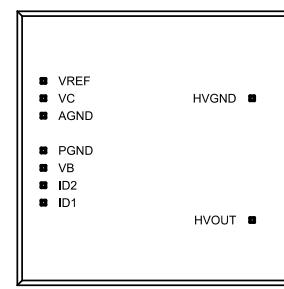
Mechanical Dimensions



Pin Description

Pin	Function
VREF	monitor voltage
VC	control voltage
AGND	ground
PGND	ground
VB	supply voltage
ID2	polarity indicator 1
ID1	polarity indicator 2
HVGND	ground
HVOUT	HV output

positive: ID1, ID2 open
negative: ID1, ID2 internally connected



Ordering

HV5000-
HV5000+

(HV-Module -5 to -5000V)
(HV-Module +5 to +5000V)