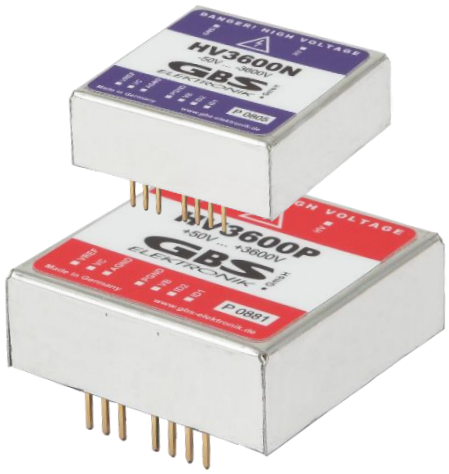
HIGH VOLTAGE POWER SUPPLY MODULE

HV3600

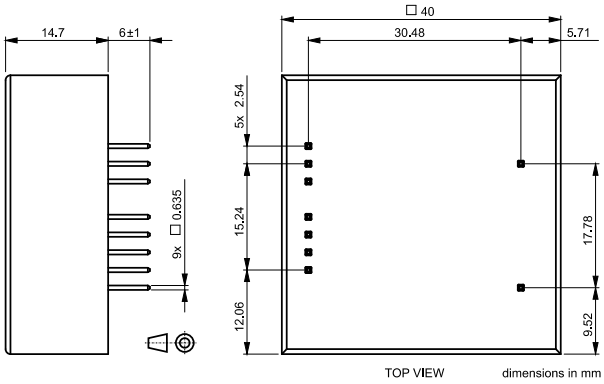


The HV3600 module is a compact and low power consuming DC/DC converter, designed to be used on printed circuit boards. It is intended to supply HPGe- or CdZnTe detectors, with high voltage up to 3600V. The Module is also very suitable for PMT applications. The HV3600 is available in both polarities.

Technical Specifications

Output voltage (depends on module version)	+50V to +3600V -50V to -3600V
Output current	65µA @3600V 500µA @500V
Output Power	≤250 mW
Input voltage range	6.5 – 12V; 7.5V nominal
Output short circuit current	~1mA
Power consumption for 55MΩ load | HV=3600V	~500mW @8V
Quiescent current (V_{ctrl}=0V)	~3.0mA @8V
Internal output capacity	~8nF
Reference voltage (monitor)	0 – 3V
Control voltage range	0 – 3V
Control voltage transfer factor	1200 (± 3%)
Output ripple and noise voltage [0.1Hz – 10kHz]	<70mVpp
Output series resistor for V_{Ref}	1kΩ
Temperature stability	± 200ppm /°C
Operating temperature	0°C - 60°C
Dimensions (mm)	40 x 40 x 20.7
Weight	~45g

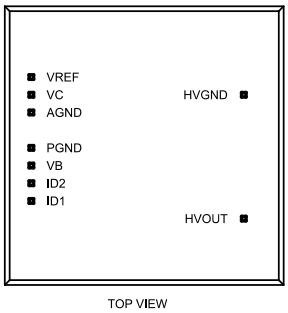
Mechanical Dimensions



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

HV3600-	(HV-Module -50 to -3600V)
HV3600+	(HV-Module +50 to +3600V)

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