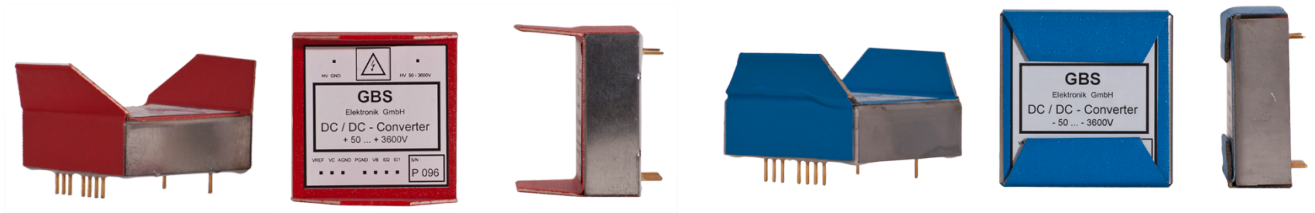


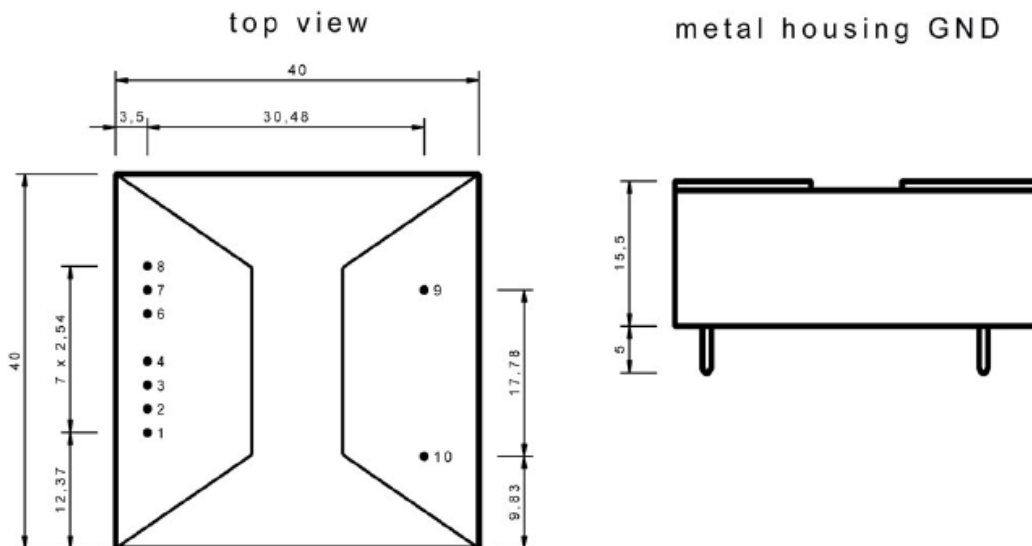
HV3600

High Voltage Modul fo the MCA



The high voltage module is designed to be plugged into the MCA and to supply common detectors (e.g. HPGe, NaI, CdZnTe) with high voltage. It is the successor of the 3 kV module used for the MCA166 and fully compatible to it in terms of mechanical construction and control. The difference is higher possible output voltage and lower standby power consumption. It can also be used for other purposes and in other devices. Its basic parameters are a voltage from 100 to 3600 V (positive or negative) and a maximum output power of 0.25 W.

Mechanical dimensions



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HV3600

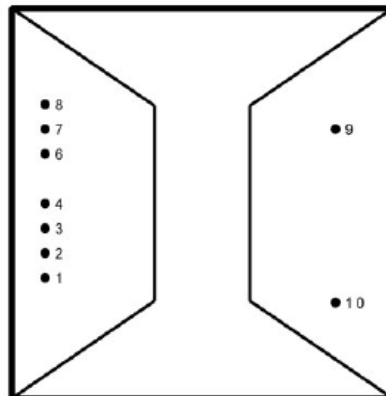
High Voltage Modul fo the MCA

Specifications:

output voltage:	+100V to +3600V (positive module)* -100V to -3600V (negative module)* *Module will supply also voltages < 100V, but accuracy and stability is not guranteed in this range
output power:	<=250 mW
output current:	depending on Voltage, >500µA for 500V, >=40µA for 3600V
input voltage range:	6.5 ...12 V, 7.5V nominal
efficiency: (for input voltage range 6 to 9V, full load and all output voltages)	up to 80%
power consumption for no load, no output voltage, 7.5V battery voltage:	<2.5mA
power consumption for no load; 7.5V battery voltage:	<6mA/ 1800V, <20mA / 3600V
max. power consumption for full load: (for all battery and output voltages)	750 mW
internal output capacity:	~8 nF
Control volgte range:	0 - 3V
control voltage transfer factor:	1200 +/- 1%
output ripple and noise voltage	< 70 mVpp
output offset voltage	+/- 5V
temperature stability	+/- 200 ppm/°C
output voltage stability (for all battery voltages)	100ppm/V
battery voltage transient rejection ratio	10 dB
operating temperature	0 °C to 60 °C
physical. dimensions	40*40*15.5 mm

Pin description

1	ID1	polarity indicator:
2	ID2	ID1 and ID2 open: positive module ID1 and ID2 internally connected: negative module
3	VB	supply voltage input 6.5 - 12V
4	PGND	supply voltage ground
6	AGND	control voltage ground
7	VC	control voltage input: 0-3V corresponds to 0-3600V output voltage
8	VREF	reference voltage output 0-3V
9	HVGND	High voltage ground
10	HV	High voltage output 100-3600V



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