

## High Voltage DC Generator

Techimp High Voltage DC generator has been designed and optimized to power Techimp PEA sensors. It can be however used in principle for powering any equipment compatible with its electrical specs. Techimp HV DC generator offers the advantage of dual voltage generation up to  $\pm 30\text{kV}$ , with high stability of the voltage outputs and flexibility with respect accepted power inputs, 85-265 VAC 47-400Hz 15VA.

The DC generator is provided with numeric display, presetting preview and a knob for precise settings of DC power feeding.

A button for polarity selection of the DC voltage is also present



### Panel Layout



Front panel views of Techimp HVDC Generator



Rear panel views of Techimp HVDC Generator.

### Short usage description:

Connect High Voltage Output to PEA (or to other equipment) with the enclosed cable.  
 Connect GND HV Generator to GND Pea.  
 Feed the HVDC Generator with a power supply of 85-265 VAC @ 47-400Hz, 15VA max.  
 Check Leds polarity status, Leds activity indicate whether the polarity with respect to ground is positive or negative.  
 Voltage setting preview, is activated at button pressure. Display indicates which voltage is set with the knob Voltage set.  
 Rotate the knob to set the output voltage.  
 ON/OFF output is activated by pushing button switch which enables the output voltage.  
 Press the switch button to select negative polarity; release switch to select polarity positive.

## HVDC Generator Specifications

Property	Value
Voltage Output :	±30kV DC
Polarity Reversion :	<1 sec at no load
Output current :	300µA max
Ripple :	0.1% Vp-p
Stability :	0.02% (within 8 hours)
Operating temperature :	0-40°C
Humidity :	10%-85% non condensing
Input Voltage :	85-264 VAC
Max Power :	15 VA
Weight :	770 g
Overall Dimensions:	425mm x 350mm x142mm

## Warning

This equipment generates dangerous voltage that may be fatal. Proper grounding of all high voltage equipment is essential. Before connecting the power supply to AC line press the **ON/OFF Output** button to the off position. The voltage monitor display on the front panel does not read the output voltage when the power is turned off, even if a charge still exists on the load. After turnoff, do not handle the load until the capacitance has been discharged. Load capacitance may be discharged by shorting to ground.