



- **Digital X-Ray High Voltage Power**
- **10KV, 10W**
- **Controllable Voltage & Current**
- **Controllable filament Current**
- **Filament current limiting Protection**
- **Overvoltage & Overcurrent Protection**
- **Overheat protection**

HVP10P10BN-DS is an ultra-compact X-Ray generator module with high voltage packaging and surface mount fabrication techniques and coupled with proprietary encapsulation technology producing. It uses a closed-loop filament control circuitry to provide a highly regulated beam current, offering tight regulation, high stability and low ripple, HVP10P10BN-DS can provides users local and remote analog control to set beam voltage, emission current and filament current limit, and also has intelligent surge suppression protection circuit, which can suppress the start current spike effectively.

Typical Applications

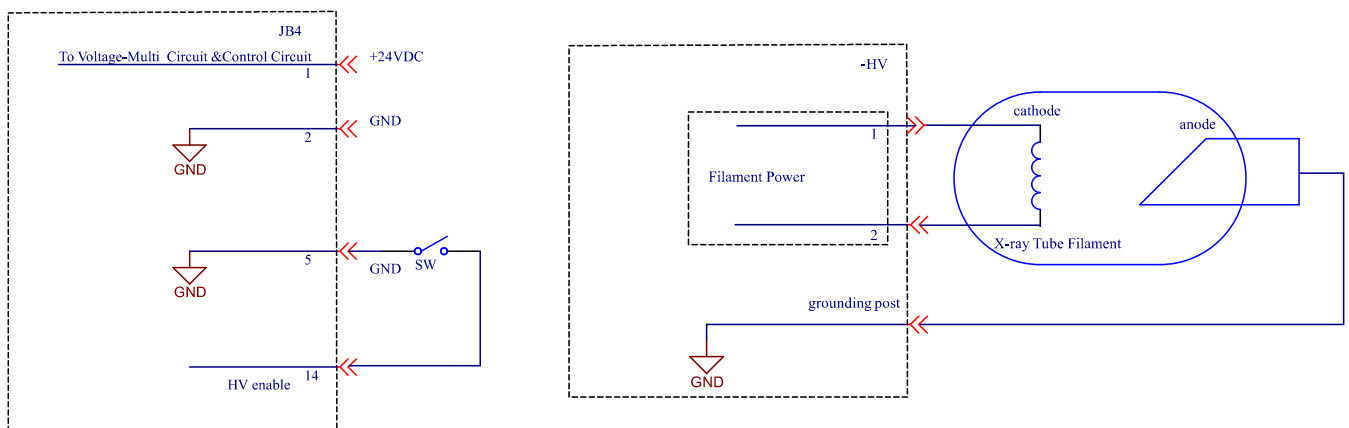
Powering grounded cathode X-ray tubes from Kevex, Oxford, RTW, Superior, Varex, Petrick, Trufocus and the other global brands.

Specifications

Input	24V VDC±10% , MAX 2.0A
Output	0-10KV, 0 -2mA , MAX 10 W
DC Supply	0-4VDC, 0-2A , adjustable limit
Voltage Control	0.01% (load)
Current Control	0.01% (load)
Stability	0.05% per 8 hours after 1/2 hour warm -up.
Ripple Voltage	0.3% p -p of maximum rated output voltage
Voltage & Current Monitors	0-10VDC ~ 0-Vmax & 0 -Imax, Zout=1K Ω Accuracy ±1%
Temperature Coefficient	0.01%/ °C
Surge Current at Turn-on	0.5A Max ≤1A @25°C (Typical)
Environmental	Operational: 0°C - 50°C , Storage: -40°C - 85°C
Weight	0.4kg
Size	See the Size Drawing

DB15 Input & Output Connector (JB4)		
1	Positive Input	24V
2	Negative Input (GND)	GND
3	TX	TX(RS232)
4	RX	RX(RS232)
5	GND	Signal Return GND
6	HV On/Off status output	NPN Collector Output (Pull-up Resistor 1KΩ)
7	Local voltage control Output	0-10V Adjustable (Potentiometer)
8	Voltage Control Input	0-10 V=0 to full scale, Zin=10MQ
9	Voltage Output Monitor	0-10V ~ 0-Vmax, Zout=1KΩ
10	Current Output Monitor	0-10V ~ 0-Imax, Zout=1KΩ
11	Filament current Monitor	1V=1A, Zout=1KΩ
12	Local Current control Output	0-10V Adjustable (Potentiometer)
13	Current Control input	0-10V ~ Imax, Zin=10MQ
14	HV Enable Input	Active Low
15	Local filament current limiting Monitor	1V=1A

Operating Setup:



- Note:**
- 1 HV Output is Negative HV, HV Output connect the cathode of the X-ray tube the anode of the X-ray tube must be grounded.
 - 2 Pin14 is an external interlock, it can be connected to ground with Pin5 , or connected to ground with an external control circuit to implement interlock.
 - 3 In order to an ensure safety, the external interlock still needs to be closed when using the digital interface to control the high-voltage power supply.

SIZE [mm] :

