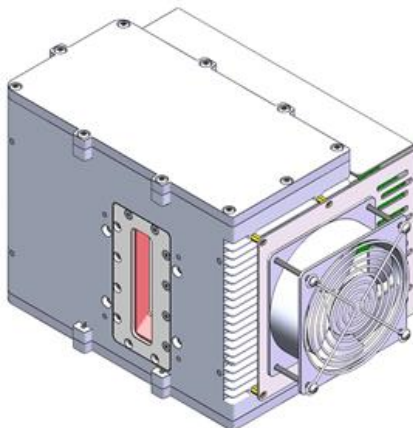


3.HVC802B0 X-Ray Source



Introduction:

The HVC802B0 X-Ray Source is an exceptionally compact, portable, and reliable line of high voltage X-ray generators. Using in allowable operating ambient temperature, it is capable to self-heat dissipate up to 100W continuous with no additional cooling. The X-ray generator integrates the high voltage inverter, filament supply, X-ray tube and X-ray housing into one unit. The High Voltage X-ray Unit is an 80kV/100W, High Frequency, self-cooled, self-protected & self-contained X-ray generator. It consists of an X-ray tank, and a control box. The Generator is controlled, programmed and monitored via a standard RS232 interface.

Features:

1. Integrated design with high electrical integration and a compact appearance
2. Capable of continuous, uninterrupted operation for extended periods
3. High stability
4. Can be installed in any orientation
5. Standard RS232 digital interface, easy to use
6. Optional passive or forced-air cooling.

Application:

Food testing, industrial non-destructive testing, dangerous goods testing and other fields, mostly used for simple X-ray machines or mobile X-ray testing equipment

Specification:

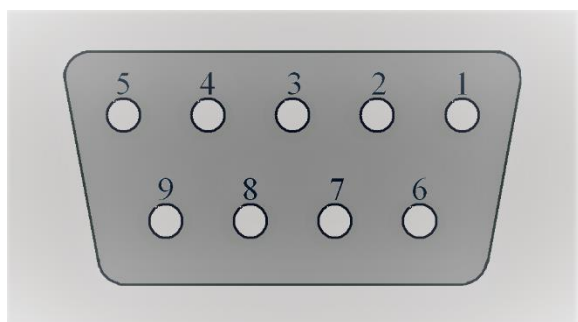
Item	Specification
Input voltage	230VAC $\pm$ 10%, 50/60Hz, 1.2Amps

Output power of X ray tube	Max continuous output power 100W (80kV/1.25mA, 50kV/2mA)
Output voltage	Rated output voltage: Continuously adjustable voltage range 20kV---80kV
	Output voltage ripple: $\pm 0.5\%$ (peak to peak)
	Output voltage accuracy: $\pm 2\%$ of voltage setting value
	line regulation: $\pm 0.1\%$
	load regulation: $\pm 0.1\%$
Tube current	Rated tube current: Continuously adjustable current range 0.5mA-2mA
	Tube current accuracy: $\pm 1\%$ mA of current setting value
	line regulation: $\pm 0.5\%$
	load regulation: $\pm 0.5\%$
kV Rise Time at maximum power:	At max power, voltage rise time is <0.6s; below 40kV, <0.1s.
Filament power supply:	input voltage: 24VDC
	filament voltage: 1 to 4Vac
	Filament current: 1.0 to 4.5 Amps RMS
	preheating time: 3sec
Tube feature	Tube type: fixed anode, glass envelope, tungsten target
	focus: 0.5mm
	inherent filtration: 0.8mm Be, 0.7mm Al
	radiation angle: $80^\circ \times 16^\circ$ fan beam
	target angle: 20°
Cooling	transformer oil, Air-cooled model
Working temperatures	$-10^\circ\text{C} \text{---} 40^\circ\text{C}$
Storing temperature	$-20^\circ\text{C} \text{---} 60^\circ\text{C}$
System temperature protection	$60^\circ\text{C} \pm 3^\circ\text{C}$ of Oil temperature:
Humidness	98%, Non-condensation
Weight	15kg
Installation direction	Installation in any direction
Radiation angle	$16^\circ \times 80^\circ$
X-ray leakage	Less than 0.5mR/hr at 5cm from the surface of the HVC802B0.

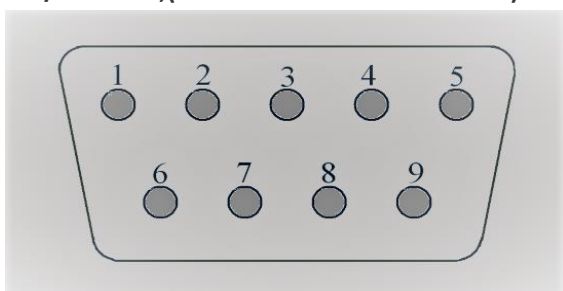
JB1/AC~(AC Input Power Connector)


Pin	Signal	Parameter
1	L	live wire
2	N	Neutral line
3	G	PE

JB2/COM (DMR-9S interface definitions)

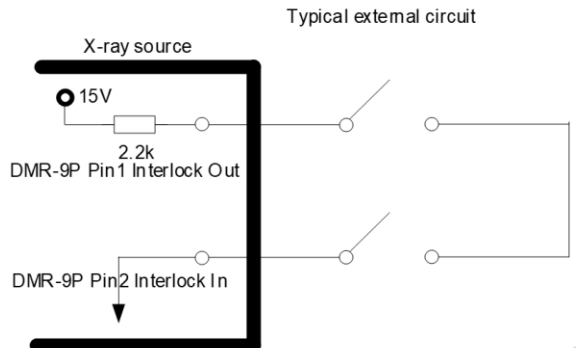


Pin	Signal	Parameter
1.4.6.7.8.9	N/C	No connect
2	TXD	Data transmit
3	RXD	Data receive
5	GND	Signal Gnd

JB3/Interlock,(DMR-9P interface definitions)


Pin	Signal	Parameter
3/4/5/6/7/8/9	N/C	No connect
1	Interlock Out	
2	Interlock In	

Short connect pin1 and pin2 make X ray source normal operation. Typical connection :



HVC802B0

Unit:mm

