



- 30kV TO 50kV, 2mA . 50 WATT MAX
- ADJUSTABLE INTEGRATED FILAMENT SUPPLY
- OVER VOLTAGE, ARC & SHORT CIRCUIT PROTECTION
- VOLTAGE & CURRENT PROGRAMMING
- LOCAL AND REMOTE CONTROL
- SAFETY INTERLOCK
- OEM CUSTOMIZATION AVAILABLE

INTRODUCTION

Wisman's XWA Series of regulated X-ray power supplies offer output voltages 30kV~50kV and incorporate a filament supply which provides regulated dc current adjustable between 0.3A~3.5A at 0~5.5V. The XWA incorporates local and remote programming, safety interlock..

TYPICAL APPLICATIONS

Grounded cathode X-ray tubes from KeveX, Oxford, RTW, Superior, Varian and Trufocus. ESD, Sulfur-detector X-ray fluorescence instrument, X-ray imaging, X-ray diffractometer, Non-destructive testing, Portable X-ray machine, Rohs detector, Precious metal detector, Life Science, Medical industry, Science experiment and so on.

XWA SELECTION TABLE

kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL
30	1.00	30	XWA30P30	50	1.00	50	XWA50P50
	2.00	50	XWA30P50-2		2.00	50	XWA50P50-2

SPECIFICATIONS

PARAMETER	DESCRIBE
Input Voltage	+24Vdc ± 10% , 5.0A MAX.
Output Voltage	30kV, 50kV
Stability	0.02% per 8 hours after 1/2 hour warm-up.
Temperature Coefficient	≤ 25ppm/°C.
Ripple	0.1% p-p of output voltage.
Voltage/Current Monitor	0~+10Vdc , Accuracy: ± 1%. Zout=1KΩ
Local Voltage programming	Internal multi-turn potentiometer to set voltage from 0 to full output voltage.
Local Current programming	Internal potentiometer to set beam current between 0 to full output current.
Remote Voltage programming	0 ~ +10Vdc proportional from 0 to full output voltage. Zin=10MΩ
Remote Current Programming	0 ~ +10Vdc proportional from 0 to full output current. Zin=10MΩ
Voltage Load Regulation	0.01% of output voltage no load to full load.
Voltage Line Regulation	± 0.01% for ± 10% change in input voltage.
Current Load Regulation	0.01% of output current from 0 to rated voltage.
Current Line Regulation	± 0.01% for ± 10% change in input voltage.



DC Filament Supply	Current: 0.3~3.5A, adjustable, Voltage: 0~5.5V,Preheat.		
Operating Temperature	0°C~+50°C.		
Storage Temperature	-40°C~+85°C.		
Cooling	Free convection for the 50W unit .		
Humidity	20%~85% RH, non-condensing.		
Dimensions	4.00" H x 2.87" W x 8.00" D (100.00mm x 73.00mm x 203.00mm)	Weight	2.0kg

XWA POWER INPUT/ FILAMENT OUTPUT CONNECTOR

SIGNAL		
1	+24Vdc Input	GND
2	GND	GND
3	Filament current output	+5.5V @ 3.5A, MAX
4	GND	GND

XWA ANALOG INTERFACE CONNECTION

J2	SIGNAL	PARAMETER
1	Ground	Ground
2	Voltage Monitor	0~+10Vdc=0 to full scale, Zout=1kW
3	Current Monitor	0~+10Vdc=0 to full scale, Zout=1kW
4	External Interlock	Connect with Pin1, Interlock closed
5	+10Vdc Reference	+10Vdc @ 1mA, maximum
6	Filament current Monitor	1Vdc=1A, Zout=10kΩ
7	Remote Voltage Program In	0~+10Vdc = 0 to full scale, Zin=10MW
8	Local Voltage Program Out	0~+10Vdc, screwdriver adjust
9	Filament Limit Set point	1Vdc=1A, Screwdriver adjust
10	Remote Current Program In	0~+10Vdc = 0 to full scale, Zin=10MW
11	Local Current Program Out	0~+10Vdc, screwdriver adjust
12	Used for (Out for Interlock)	+24Vdc Outfor Interlock
13	Interlock Coil	Connect with pin12, Interlock closed
14	Filament Preheat Set point	1Vdc=1A, Screwdriver Adjust
15	Ground	Ground

XWA DIMENSION

Unit: In. [mm]

