



- 30kV TO 5kV 2mA . 60 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~3.5 A 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	XWA50P30
	2.00	60	XWA30P60		2.00	50	XWA50P50

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=10KW
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=10MW
Remote Current Programming	0 ~ +10Vdc proportional from 0 to full output current. Zin=10MW
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° ~+50° .		
Storage Temperature	-40° ~+85° .		
Cooling	Free convection for the 50W unit and 70W unit, Fan (15CFM) assisted for 100W unit.		
Humidity	20%~85% RH, non-condensing.		
Dimensions	30~50kV	4.00 ~ H x 2.87 ~ W x 8.00 ~ D (100.00mm x 73.00mm x 203.00mm)	Weight
	60~70kV	4.00 ~ H x 2.87 ~ W x 8.96 ~ D (100.00mm x 73.00mm x 228.00mm)	

XWA POWER INPUT/ FILAMENT OUTPUT CONNECTOR

SIGNAL		
1	+24Vdc Input	GND
2	GND	GND
3	Filament power 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	Interlock Output	Alternate Interlock Configurations
5	+10Vdc Reference	+10Vdc @ 1mA, maximum
6	Filament Monitor	1Vdc=1A Zout=10kW
7	Voltage Program Input	0~+10Vdc = 0 to full scale, Zin=10MW
8	Local Voltage Program	10 turn pot, screwdriver adjust
9	Filament Limit Set point	1Vdc=1A, Screwdriver adjust
10	Current Program Input	0~+10Vdc = 0 to full scale Zin=10MW
11	Local Current Program	10 turn pot, screwdriver adjust
12	No Used(Out for Interlock)	+24Vdc Out for Interlock
13	No Used(Interlock Coil)	Interlock with 12 pin
14	Filament Preheat Setpoint	1Vdc=1A, Screwdriver Adjust
15	Ground	Ground

XWA DIMENSION

Unit: In. [mm]

