



- 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..

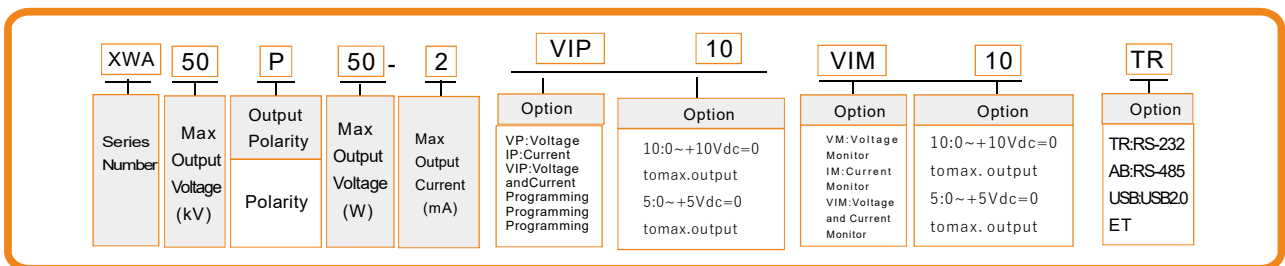
## TYPICAL APPLICATIONS

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	XWA50P50
	2.00	60	XWA30P60		2.00	50	XWA50P50-2

## XWA SELECTION EXAMPLE





**SPECIFICATIONS**

PARAMETER		DESCRIBE		
Input Voltage		+24Vdc±10% , 5.0A MAX.		
Output Voltage		30kVto 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.		
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 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	2.0kg
	60~70kV	4.00" H x 2.87" W x 8.96" D (100.00mm x 73.00mm x 228.00mm)		2.5kg

X-RAY GENERATOR

**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]

