

# XA

10kV~30kV  
1.5W~20W  
X-RAY GENERATOR



**wisman**®  
High voltage power supply  
威思曼高压电源

ISO9001:2015

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D  
X-RAY GENERATOR



- **RS-232,RS-485 CONTROL**
- **ADJUSTABLE INTEGRATED FILAMENT SUPPLY**
- **SIX-SIDES SHIELD**
- **OVERVOLTAGE ,ARC& SHORT CIRCUIT PROTECTION**
- **LOW RIPPLE AND NOISE, HIGH STABILITY**
- **VOLTAGE & CURRENT PROGRAMMING**
- **LOCAL AND REMOTE CONTROL**
- **SAFETY INTERLOCK**
- **OEM CUSTOMIZATION AVAILABLE**

## INTRODUCTION

Wisman's AC input XA Series are compact high voltage power supply with high stability and low noise features, which is dedicated for X-ray tube. It adopted Wisman's unique high voltage encapsulated techniques. XA Series of regulated X-ray power supplies offer output voltages ranges from 10kV to 30kV, maximum output power is 5W,10W and 20W optional. and incorporate a filament supply which provides regulated DC current adjustable between 0.3A and 3.5A at 0~5.5Vdc. XA series is with the function of high voltage programming ,emission current setting and preheating internal providing high voltage, current monitor and signal HV enable. The XA incorporates local and remote programming, with RS-232,RS-485 optional. XA series is the ideal choice of OEM customers needing ultra-low noises.

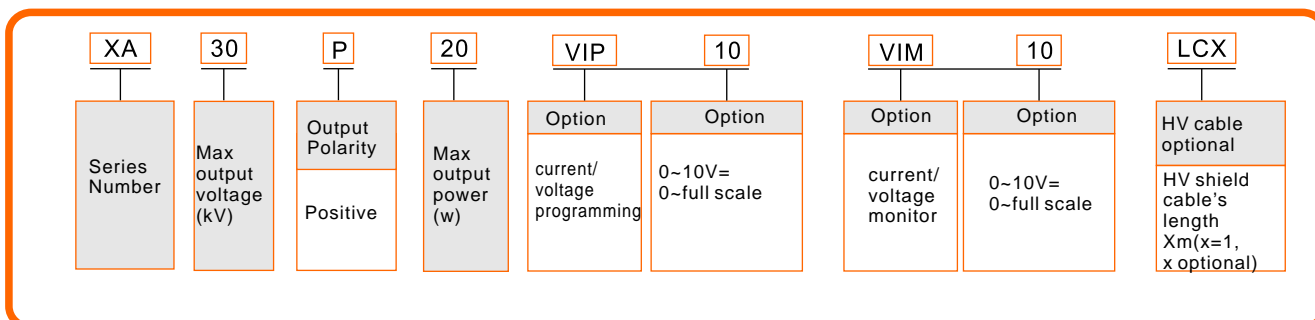
## APPLICATIONS

X-ray tubes ,Capacitor Charging, Industrial applications, Electronic component aging, Insulation Test, Electrophoresis, Electrostatics Applications, Laser, Science, Laboratory Applications. 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.

## SELECTION TABLE

kV	mA	P(W)	MODEL
10	0.5	5	XA10P5
	1.0	10	XA10P10
	2.0	20	XA10P20
20	0.25	5	XA20P5
	0.5	10	XA20P10
	1.0	20	XA20P20
30	0.17	5	XA30P5
	0.33	10	XA30P10
	0.67	20	XA30P20

## SELECTION EXAMPLE





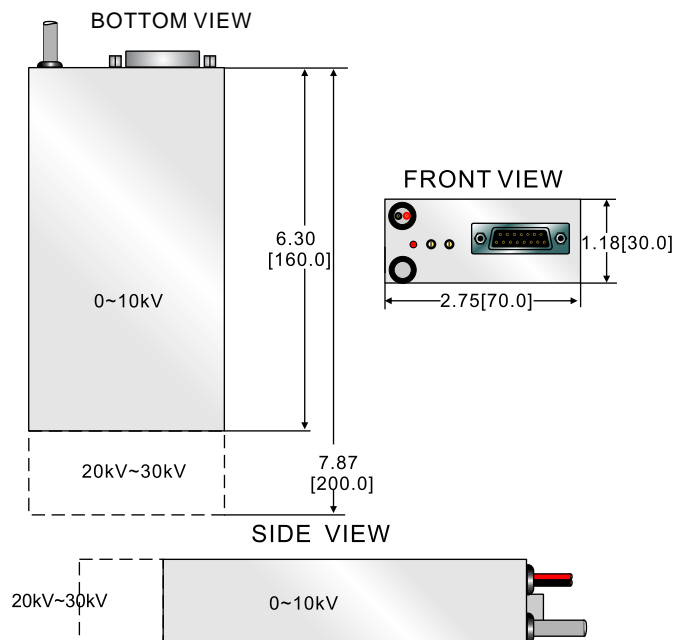
**FEATURES**

**ISO9001:2015**

PARAMETER	DESCRIBE	
Input	Input voltage +24Vdc ± 10%; current 2A.	
Output	10~30kV Maximum output Voltage option	
Stability	< 0.007% per hour after 1/2 hour warm-up. 0.02% per 8 hours.	
Temperature Coefficient	25ppm/ .	
Ripple	< 0 .005% p-p.	
Voltage Programming	Voltage are continuously adjustable from 0 to maximum voltage by internal potentiometers	
Current Programming	Current are continuously adjustable from 0 to maximum current by 0 ~ +10Vdc External voltage	
Voltage/Current Monitor	0 ~ +10Vdc corresponds to 0 to maximum output, Zout=10kV/accuracy: ± 1%.	
Remote Voltage Monitor	JB2 contain a 0 ~ +10Vdc volt voltage signal, it can connect digital or index display.	
Output Voltage Remote Programming	Voltage is continuously adjustable from 0 to maximum voltage by External potentiometers.	
Output Current Remote Programming	Current is continuously adjustable from 0 to maximum voltage by External potentiometers.	
Voltage Load Regulation	0.01% ( no load to full load change).	
Voltage Line Regulation	± 0.01% (input voltage line change ± 10%).	
Current Load Regulation	0.01% ( no load to full load change).	
Current Line Regulation	± 0.01% (input voltage line change ± 10%).	
DC Filament Supply	Current: 0.3~3.5A, adjustable Voltage: 0 ~ 5.5Vdc, Provide filament preheat.	
Operation temperature	5 ~40	
Storage temperature	-40 ~+70	
Operation Humidity	20%~80% RH, no condensing	
Storage Humidity	5%~95%	
Dimensions	See the dimensions below	
	Weight	1.5kg

**D X-RAY GENERATOR**

**DIMENSIONS**



**XA INTERFACE INFORMATION**

J1	SIGNAL	PARAMETER
1	Signal Ground	Ground
2	Voltage Monitor	0~+10Vdc=0 to full scale, Zout=10kV
3	Current Monitor	0~+10Vdc=0 to full scale, Zout=10kV
4	HV enable	HV on:GND; HV off:closed
5	+10Vdc Reference	+10 Vdc @ 1mA , maximum
6	Filament Monitor	1Vdc=1A , Zout=10kV
7	Voltage remote program Input	0~+10Vdc = 0 to full scale
8	Local Voltage Program output	0~10Vdc , screwdriver adjust
9	Filament Limit Setpoint	1Vdc=1A, Screwdriver adjust
10	Current Program Input	0~+10Vdc = 0 to full scale,
11	Local Current Program output	0~10Vdc , screwdriver adjust
12	Analog Filament output monitor	No filament:high ; Filament:Low
	Digital 485B/Tout	485B/Tout transmit data
13	Analog Filament Preheat Setpoint	1Vdc=1A, Screwdriver Adjust
	Digital 485A/Rin	485A/Rin receive data
14	+24Vdc	+24Vdc input
15	Ground	Ground