



Wisman' s XRA Series of regulated X-ray power supplies offer output voltages to 30KV and incorporate a filament supply which provides regulated dc current adjustable between 0A and 3.5 A AT 5.5V. High voltage and filament current can be linearly ramped up .An optional USB 2.0, RS-232 or RS-422 is available. The XRA incorporates local and remote programming, safety interlock, short-circuit and overload protection.

TYPICAL APPLICATIONS:

Grounded cathode X-ray tubes from Kevex, Oxford, RTW, Superior, Varian and Trufocus....

OPTIONS:

CA20N	WISMAN CA20N connector.
USB	USB Interface
RS232	RS-232 Interface
RS422	RS-422 Interface
NAT	ARC, does not shutdown
AT(X)	ARC, shutdown (option 1-8 arc)

SPECIFICATIONS:

Input:

24Vdc \pm 10% , 3.0A maximum .

Output:

6KV, 8KV, 10KV, 15KV, 20KV, 25KV, 30KV
7 models maximum output voltage is available.
1.5W, 6W, 10W, 20W, 30W, 40W
6 models maximum output power is available.

Voltage Control:

Local: Internal multi-turn potentiometer to set voltage from 0 to full output voltage.

Remote: 0 to +10Vdc proportional from 0 to full output voltage.

Emission Control:

- **OPTIONAL USB 2.0, RS-232 OR RS-422 IS AVAILABLE.**
- **OUTPUT VOLTAGE FROM 0KV TO 30KV**
- **ADJUSTABLE INTEGRATED FILAMENT SUPPLY**
- **OVERVOLTAGE & SHORT CIRCUIT PROTECTION**
- **VOLTAGE & CURRENT PROGRAMMING.**
- **LOCAL AND REMOTE CONTROL.**
- **SAFETY INTERLOCK.**
- **OEM CUSTOMIZATION AVAILABLE.**

Local: Internal potentiometer to set beam current between 0 and full output current.

Remote: 0 to +10Vdc proportional from 0 to full output current.

Filament Supply:

Current: 0-3.5A, adjustable limit.

Voltage: 5.5 volt limit.

Voltage Regulation:

Load: 0.001% of output voltage no load to full load.

Line: \pm 0.001% for \pm 10% change in input voltage.

Current Regulation:

Load: 0.001% of output current from 0 to rated voltage.

Line: \pm 0.001% for \pm 10% change in input voltage.

Ripple:

0.01% p-p of maximum rated output voltage.

Environmental:

Operational: 0° C to +50° C

Temperature Coefficient:

\leq 25ppm/° C , voltage and current.

Stability:

\leq 0.01%/hour, 0.02% per 8 hours after a 1/2 hour warm up.

Voltage and Current Monitors:

0 to +5Vdc proportional from 0 to rated output. Accuracy \pm 1%

Dimensions:

2.56" H x 4.53" W x 5.91" D

(65.00mm x 115.00mm x 150.00mm)

XRA SELECTION TABLE - 1.5W 6W 10W

KV	1.5W		6W		10W	
	mA	MODEL	mA	MODEL	mA	MODEL
6	0.25	XRA6*1.5	1.00	XRA6*6	1.67	XRA6*10
8	0.19	XRA8*1.5	0.75	XRA8*6	1.25	XRA8*10
10	0.15	XRA10*1.5	0.60	XRA10*6	1.00	XRA10*10
15	0.10	XRA15*1.5	0.40	XRA15*6	0.67	XRA15*10
20	0.08	XRA20*1.5	0.30	XRA20*6	0.50	XRA20*10
25	0.06	XRA25*1.5	0.24	XRA25*6	0.40	XRA25*10
30	0.05	XRA30*1.5	0.20	XRA30*6	0.33	XRA30*10

RS-232, RS-422 DIGITAL INTERFACE

J3		SIGNAL
1	N/C	No Connection
2	TXD	Transmit Data
3	RXD	Receive Data
4	N/C	No Connection
5	SGND	Signal Ground
6	RA+	Receive Data+
7	RB-	Receive Data-
8	TB-	Transmit Data-
9	TA+	Transmit Data+

XRA SELECTION TABLE - 20W 30W 40W

KV	20W		30W		40W	
	mA	MODEL	mA	MODEL	mA	MODEL
6	3.33	XRA6*20	5.00	XRA6*30	6.67	XRA6*40
8	2.50	XRA8*20	3.75	XRA8*30	5.00	XRA8*40
10	2.00	XRA10*20	3.00	XRA10*30	4.00	XRA10*40
15	1.33	XRA15*20	2.00	XRA15*30	2.67	XRA15*40
20	1.00	XRA20*20	1.50	XRA20*30	2.00	XRA20*40
25	0.80	XRA25*20	1.20	XRA25*30	1.60	XRA25*40
30	0.67	XRA30*20	1.00	XRA30*30	1.33	XRA30*40

USB DIGITAL INTERFACE

J2		SIGNAL
1	VBUS	+5Vdc
2	D-	Data-
3	D+	Data+
4	GND	Ground

*Specify "P" for positive polarity or "N" for negative polarity .

XRA POWER INPUT CONNECTOR

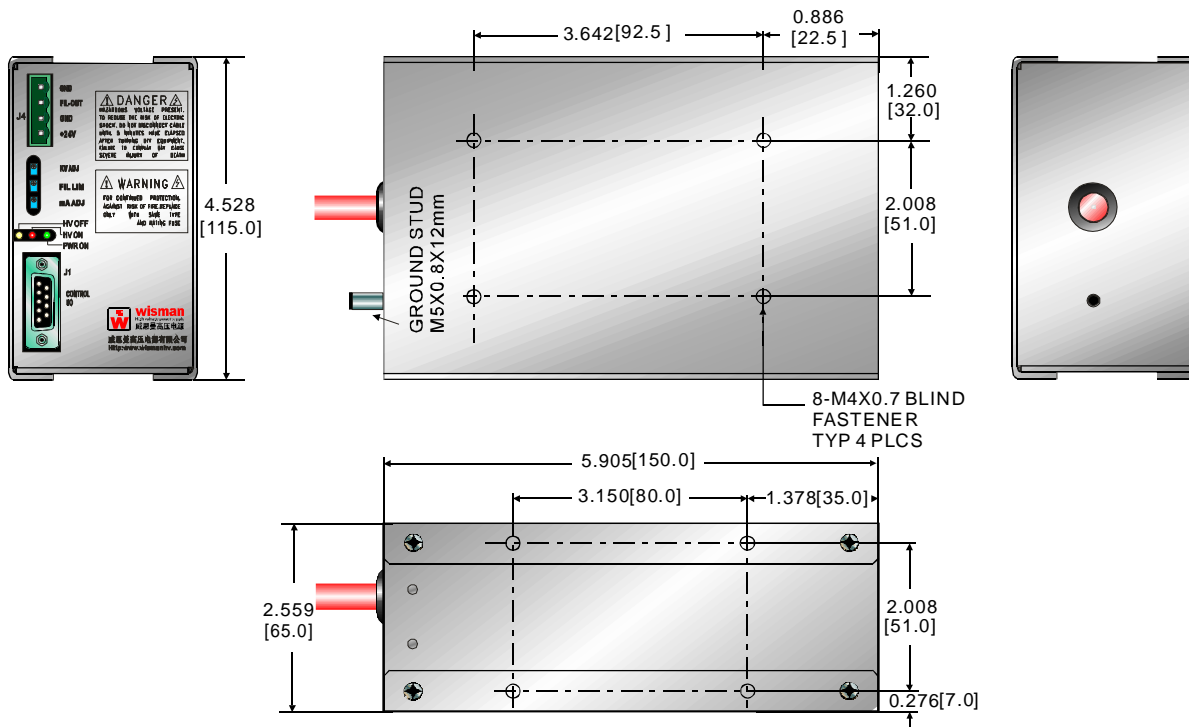
J4		SIGNAL
1	+24V Input	+24 Volts@ 3A, max
2	24V Return(Gnd)	Power Ground
3	Filament output	+5.5Volts@3.5A, max
4	Filament return	Ground

DB9-ANALOG INTERFACE CONNECTOR

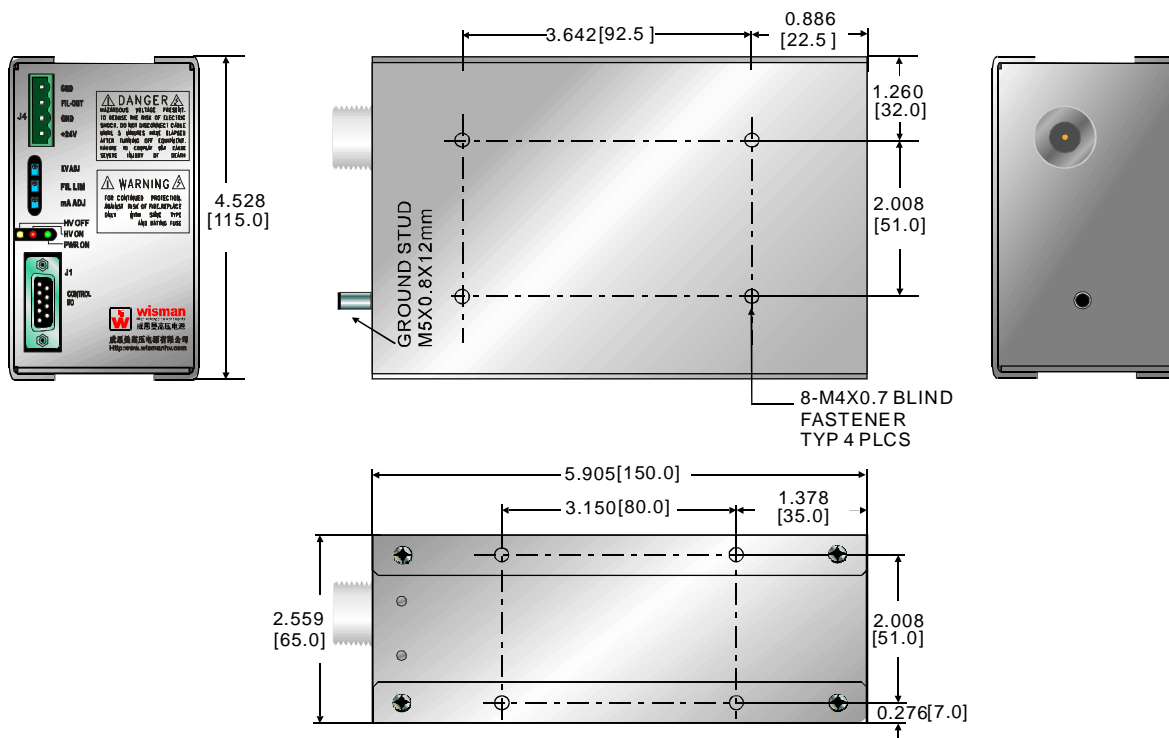
J1		SIGNAL
1	+10V Reference	+10 Volts @ 1mA
2	Voltage Monitor	0-5 volts=0 to full scale
3	Voltage Program Input	0-10 volts = 0 to full scale,
4	Local Voltage Program	10 turn pot , screwdriver adjust
5	Current Monitor	0-5 volts=0 to full scale
6	Current Program Input	0-10 volts = 0 to full scale
7	Local Current Program	10 turn pot , screwdriver adjust
8	Interlock Output	Ground=HV ON
9	Interlock Return	Ground

DIMENSIONS: in. 【mm】

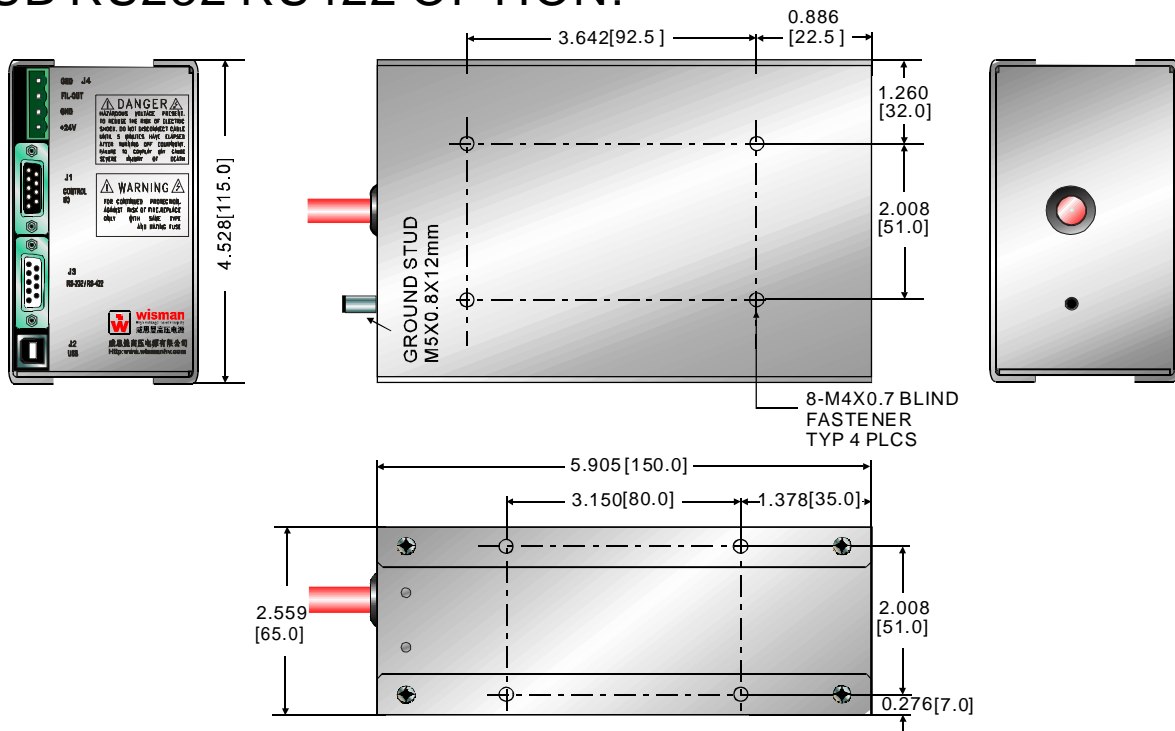
STANDARD:



CA20N OPTION:



USB RS232 RS422 OPTION:



USB RS232 RS422 CA20N OPTION:

