

## ISO9001:2015



- OUTPUT VOLTAGE FROM 10kV ~ 50 kV
- ADJUSTABLE INTEGRATED FILAMENT SUPPLY
- OVERVOLTAGE ,ARC& SHORT CIRCUIT PROTECTION
- LOW RIPPLE, HIGH STABILITY
- VOLTAGE & CURRENT PROGRAMMING
- LOCAL AND REMOTE CONTROL
- SAFETY INTERLOCK
- OEM CUSTOMIZATION AVAILABLE

D X-RAY GENERATOR

### INTRODUCTION

The XEL Series is portable X-ray high voltage power supply. It features a 0 to 50kV high voltage output and 1.5W to 50W power. It is mainly applied to scientific research and Industry. It can actualized output voltage and current remote control by External potentiometer. The XEL is provided with External voltage monitor and current monitor safety interlock, short-circuit ,arc, and over voltage protection.

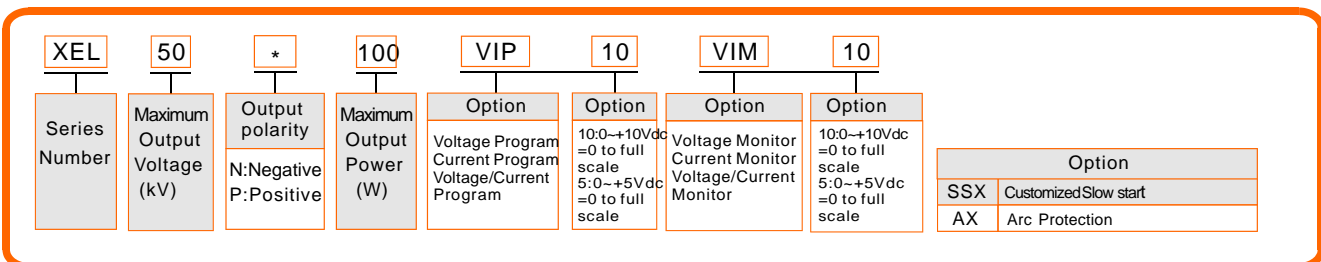
### TYPICAL APPLICATIONS

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.

### XEL SELECTION TABLE

kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL
10	0.5	5	XEL10*5	20	2.5	5	XEL20*5	30	0.17	5	XEL30*5	40	0.13	5	XEL40P5	50	0.1	5	XEL50P5
	1	10	XEL10*10		0.5	10	XEL20*10		0.33	10	XEL30*10		0.25	10	XEL40P10		0.2	10	XEL50P10
	1.5	15	XEL10*15		0.75	15	XEL20*15		0.5	15	XEL30*15		0.38	15	XEL40P15		0.3	15	XEL50P15
	2	20	XEL10*20		1	20	XEL20*20		0.67	20	XEL30*20		0.5	20	XEL40P20		0.4	20	XEL50P20
	3	30	XEL10*30		1.5	30	XEL20*30		1	30	XEL30*30		0.75	30	XEL40P30		0.6	30	XEL50P30
	4	40	XEL10*40		2	40	XEL20*40		1.33	40	XEL30*40		1	40	XEL40P40		0.8	40	XEL50P40
	5	50	XEL10*50		2.5	50	XEL20*50		1.66	50	XEL30*50		1.25	50	XEL40P50		1	50	XEL50P50
	6	60	XEL10*60		3.0	60	XEL20*60		2	60	XEL30*60		1.5	60	XEL40P60		1.2	60	XEL50P60
	7.5	75	XEL10*75		3.75	75	XEL20*75		2.5	75	XEL30*75		1.88	75	XEL40P75		1.5	75	XEL50P75
	10	100	XEL10*100		5.0	100	XEL20*100		3.34	100	XEL30*100		2.5	100	XEL40P100		2	100	XEL50P100

### XEL SELECTION EXAMPLE





**XEL SPECIFICATIONS**

PARAMETER	DESCRIBE
Input	86Vac ~256Vac, Maximum 3.0A.
Output	10~50kV Maximum output Voltage option, 5W ~100W power option.
Stability	0.05% per 8 hours after 1/2 hour warm-up.
Temperature Coefficient	≤25ppm/°C.
Ripple	0.1% p-p of maximum rated output voltage.
Voltage Programming	Front panel: voltage are continuously adjustable from 0 to maximum voltage by internal potentiometers, accuracy: ±1%. External remote: voltage are continuously adjustable from 0 to maximum voltage by 0 ~ +10Vdc External voltage, accuracy: ±1%.
Current Programming	Front panel: current are continuously adjustable from 0 to maximum current by internal potentiometers, accuracy: ±1%. External remote: current are continuously adjustable from 0 to maximum current by 0 ~ +10Vdc External voltage, accuracy: ±1%.
Voltage/Current Monitor	0 ~ +10Vdc corresponds to 0 to maximum output, Zout=10kΩ, 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.
HV Connector	HV output connector: series output option (1m); input connector: DB15 connector, contain control and monitor signal
Operating Temperature	0°C ~ +50°C
Storage Temperature	-40°C ~ +85°C
Dimensions	5.51" H x 5.11" W x 9.45" D (140.00mm x 130.00mm x 240.00mm).
Weight	4.65kg

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**XEL ANALOG INTERFACE**

I/O	SIGNAL	PARAMETER
1	Monitor Return	Ground
2	Voltage Monitor	0~+10Vdc=0 to maximum output, Zout=11kΩ
3	Current Monitor	0~+10Vdc=0 to maximum output, Zout=11kΩ
4	Interlock Output	Alternate Interlock Configurations
5	+10Vdc Reference	+10Vdc @ 1mA, maximum
6	Filament Monitor	1Vdc=1A, Zout=10kΩ
7	Voltage Program Input	0~+10Vdc=0 to maximum output
8	Local Voltage Program	10 turn pot, screwdriver adjust
9	Filament Limit Setpoint	1Vdc=1A, screwdriver adjust
10	Current Program Input	0~+10Vdc=0 to maximum output
11	Local Current Program	10 turn pot, screwdriver adjust
12	N/C(+24Vdc Out for Interlock)	Optional Interlock Configuration
13	N/C(Interlock Coil)	Optional Interlock Configuration
14	Filament Preheat Setpoint	1Vdc=1A, screwdriver Adjust
15	Interlock Return	Ground

**DIMENSIONS**

