

ZERO NOISE GENERATORS

XLF600W

Sortech supplies the XLF Series of X-ray generators. They are well regulated high voltage power supplies with output voltages to 40kV and very low ripple achieved through the use of advanced resonant conversion techniques. Extremely stable voltage and emission current outputs result in significant.

Performance improved from previously available technology. The XLF Series provides power, control and support functions required for X-ray applications including a regulated ac filament supply referenced to the cathode. These units also incorporate local and remote programming, monitoring, and safety interlock, short-circuit and overload protection.

TYPICAL APPLICATIONS

Plastics Sorting
Crystal Inspection
Diamond Inspection



XLF600W SPECIFICATIONS

Input Voltage:	220Vac±10%, 50-60Hz single phase.
Voltage and Current Control:	Local: continuously adjustable from zero to maximum rating via a ten-turn potentiometer. Remote: 0 to +10Vdc proportional from 0 to full output. Accuracy: ±1%. Input Impedance: 10MΩ.
Filament:	12 volts @ 5 amps, preheat level is 0.45 amps in standby.
Voltage Regulation:	Load: 0.005% of full output voltage no load to full load. Line: 0.005% for input voltage range change.
Current Regulation:	Load: 0.05% of full current ±100µA from 0 to full voltage. Line: 0.05% of rated current over specified input range.
Ripple:	0.03% rms below 1kHz. 0.75% rms above 1kHz.
Temperature Coefficient:	100ppm/°C.
Stability:	0.01%/8 hrs after 1/2 hour warm-up. 0.02% per 8 hours (typical).
Cooling:	Fan cooled.
Metering:	Digital voltage and current meters (3.5 digits), 1% accuracy.
Voltage and Current Monitors:	0 to +10Vdc proportional to rated output.
HV Output:	75kV, 3 conductor Federal Standard X-ray connector.
I/O Connectors:	25 pin D-type for control interface with mating connector provided.
Dimensions:	8.9cm x 48.3cm x 50.8cm.

FRONT PANEL STATUS INDICATORS:

Overvoltage Voltage Control Mode
 Overtemperature Current Control Mode
 Regulation Error Interlock Open
 Arc Interlock Closed
 HV ON: Red HV OFF: Green

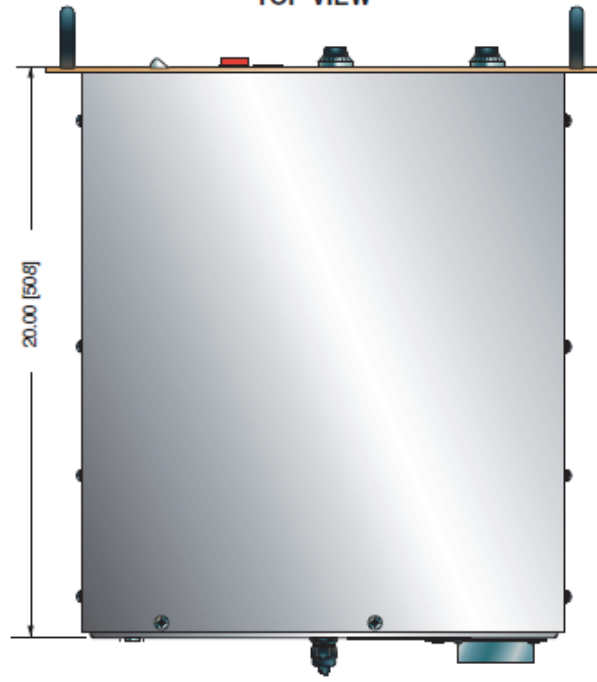




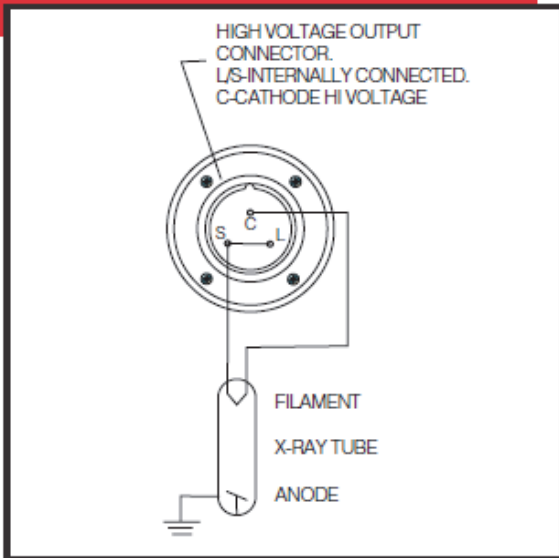
XLF CONNECTOR 25 PIN

JB1	SIGNAL	SIGNAL PARAMETERS
1	Power Supply Common	Signal Ground
2	External Inhibit	Ground=Inhibit, Open=HV On
3	External Interlock	+15V at Open, <15mA at Closed
4	External Interlock Return	Return for Interlock
5	Current Monitor	0 to 10V=0 to 100% Rated Output
6	kV Test Point	0 to 10V=0 to 100% Rated Output
7	+10V Reference	+10Vdc @ 1mA Max
8	Remote Current Program In	0 to 10V=0 to 100% Rated Output
9	Local Current Program Out	Front Panel Program Voltage
10	Remote Voltage Program In	0 to 10V=0 to 100% Rated Output
11	Local Voltage Program Out	Front Panel Program Voltage
12	Power Monitor	0 to 10V=0 to 100% Rated Output
13	Remote Power Program In	(Optional)
14	Local HV Off Out	+15V at Open, <25mA at Closed
15	HV Off	Connect to HV OFF for Fp Operation
16	Remote HV On	+15V, 10mA Max=HV Off
17	Remote HV Off Indicator	0=HV On, +15V, 10mA Max=HV Off
18	Remote HV On Indicator	0=HV Off, +15V, 10mA Max=HV On
19	Remote Voltage Mode	Open Collector 50V Max, 10mA Max On=Active
20	Remote Current Mode	
21	Remote Power Mode	
22	Remote PS Fault	0=Fault, +15V, 0.1mA Max=No Fault
23	+15V Output	+15V, 100mA Max
24	Power Supply Common	Signal Ground
25	Shield Return	Shield Return

TOP VIEW



HIGH VOLTAGE CONNECTOR PINOUT



DIMENSIONS: in.[mm]

FRONT VIEW

