

# Eclipse II

Cold Cathode X-Ray Source –Laboratory Version

OXFORD  
INSTRUMENTS



Reflection Target  
p/n 80002

Transmission Target  
p/n 80003

Eclipse represents a novel approach to x-ray generation with the utilization of our patent pending cold cathode x-ray tube.

By incorporating a cathode which liberates electrons at room temperature, we are able to offer a compact, high reliability source for radioisotope replacement.

Eclipse II can be operated as a stand alone system using this supplied controller. Accepting 80-240AC input, the controller provides the necessary low voltages to drive the high voltage power supply through the supplied connection cable.

Complete with X-ray On/Off switch, operation LEDs, and kV/ $\mu$ A monitor control displays, this controller provides the necessary functions to operate the Eclipse II x-ray source.



Supplied controller

## Specifications

	Reflection Target	Transmission Target
Anode current	0.1 mA Max (3W max)	0.1 mA Max (3W max)
Anode (target) voltage	5-30 kV at .1mA	10-30 kV at .1mA
Power	Requires 15V DC input	Requires 15V DC input
kV control	0-2.5 V DC	0-2.5 V DC
mA control	0-2.5 V DC	0-2.5 V DC
Target	Rh	Ag
Focal spot size	>1mm typical	>1mm typical
Cone Angle	28 degrees	130 degrees
Cathode type	Cold cathode	Cold cathode
Dimensions	6.6" x 1.5"	6.6" x 1.5"
Weight	0.64 lbs (300 grams)	0.64 lbs (300 grams)

## 9-Pin Monitor

Pin	Function
1	Temp Fault
2	Press. Monitor
3	kV prog 0-2.5V
4	uA prog 0-2.5V
5	kV mon 0-2.5V
6	Grid Mon 0-12V
7	Vref 2.5V
8	uA mon 0-2.5V
9	Enable 5V active low

Warning: This tube produces x-rays through the output port and must only be used in a suitable radiation shielded enclosure or test chamber.

Maximum temperature not to exceed 40 degrees Celsius.



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