Eclipse III

X-Ray Source - Laboratory Version





Transmission Taraet p/n

Eclipse represents a novel approach to x-ray generation with the utilization of a combination of technologies which afford high performance in a compact package. From metal-ceramic x-ray tube design, to surface mount electronic boards, typically found in cellular telephones, Eclipse III represents the third generation in this product family. Designed for continuous operation, Eclipse III is well suited for a number of applications including spectroscopy, thickness gauging and detector calibration

Eclipse III can be operated as a stand alone system using this supplied controller. Accepting 80-240AC input, the controller provides the necessary signals to drive the integrated high voltage power supply through the supplied connection cable. Complete with X-ray On/Off switch, operation LEDs, and kV/µA monitor control displays, this controller provides the necessary functions to operate the Eclipse III x-ray source.

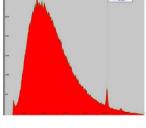


Supplied control-

Specifications

	Transmission Target
Anode current	0.1 mA Max (3W max)
Anode (target) voltage	4-30 kV at .1mA
Power	80-240V AC
kV control	4—30 Kv
mA control	0—100 uA
Target	Ag
Focal spot size	~1 mm typical
Cone Angle	130 degrees
Cathode type	Low power thermionic
Dimensions	6.6" x 1.5"
Weight	0.64 lbs (300 grams)
Stability	<0.05% CV @ 10 Hz .1Hr <0.10% CV @10 Hz 8 Hr

Spectrum output using PiN diode de-



9-Pin Monitor Out

Pin	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	Not Used	
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