

XRG3500 / XRG3D High Voltage Generator



- High stability voltage and current
- Exact voltage measurement
- Automatic warm-up programme
- Integrable to existing systems
- CE conformity
- Fail safe circuit for «X-ray on» lamp

Fully integrable into any existing X-Ray diffraction equipment

XRG3500 / XRG3D High Voltage Generator

is available in manual or automatic regulation mode.

The INEL High voltage generators can be used for several applications:

X-Ray diffraction, fluorescence, irradiation,

and also other configurations as Laue, Debye Scherrer mountings...

They work with every X-Ray tubes of any wavelength (Cu, Co, Fe, W, Cr, Mo, Ar...) designed for standard international tubeshields.



Focus on parts

Basic configuration includes

- Basic equipment 19" chassis with integrated high voltage generator
- Cooling water flow control
- 2 water hoses (OD10) standard
- Computer interface RS 232 C

Extensions

- Tubeshield (up to 4 windows)
- High voltage cable
- Radiation protection cabinet
- Fail-safe warning "Power ON" and "X-Ray ON"
- Water cooling flow switch

Safety Devices

- Fail-safe circuit for X-ray push button ("High voltage ON" in front panel)
- External warning lamp with fail-safe circuit
- Cabinet contact connection
- Tubeshield connection
- Water cooling flow switch connection
- External warning lamp connection
- Emergency stop push button



High Voltage Generator

Max. output voltage	60 kV
Max. output current	60 mA
Max. output power	3,5 kW
Shunt & discharge resistance	600 MΩ ± 1% TC 25

Norms

NFC 74100	89/336/CEE directive
EN 50081-2	CEI 1000-4-4
EN 50082-2	CEI 1000-4-3
EN 55011 class A	

Tube Voltage

Preselection & setting	continuous from 8 to 60 kV
Set point value display	2 digits (PC)
Actual value display	2 digits (PC)
Absolute accuracy	± 1 digit (PC)
Stability	±0,01% at ± 10% main voltage fluctuations
Ripple	< 1%

Connected Loads and Mechanical Dimensions

Power connection	230 V 50/60 Hz 1/N
Max. main current	30 A at 60 kV 50 mA
Main fuse	32 A
Ground terminal	6 mm ² Cu
Type of protection	as per EN 60529, IP00 (rack mount), IP32 (desk-top)
Cooling water connection	10 mm
Cooling water consumption	min. 3,0 L/min and 3 bar max. 6,0 L/min and 6 bar
Cooling water T°	> dew point < 35°C
Dimensions overall	483 x 221 x 590 (mm), 19" rack mount
Weight	approx. 50 kg

Tube Current

Preselection & setting	continuous from 0 to 60 kV
Set point value display	2 digits (PC)
Actual value display	2 digits (PC)
Absolute accuracy	± 1 digit (PC)
Stability	±0,01% at ± 10% main voltage fluctuations
Ripple	< 1%