

# Beam delivery system GeniX MO High Flux



The GeniX Mo High Flux system combines a high brilliance micro-focus X-ray source with a Xenocs industry-proven single reflection multilayer optic, thus achieving a very small focal spot with optimum convergence.

The use of the Xenocs optic leads to significant improvements over graphite solutions. The proprietary cooling technique and smart power management extend the source lifetime and lower the cost of ownership. The intuitive user interface of the command and control unit provides powerful functionality for either standalone or integrated use.

Due to its unprecedented stability and reliability, the GeniX Mo High Flux provides a significant performance increase over traditional sealed tubes, making it a reliable, cost-effective, and low maintenance alternative to high power rotating anode sources.

The GeniX Mo High Flux successfully replaces traditional systems and offers clear advantages for a number of applications such as small molecule or high pressure diffraction.

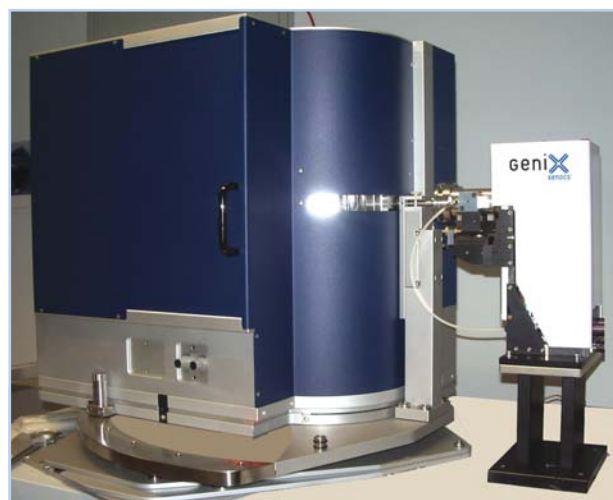


Fig. 2: Combination of a GeniX beam delivery system with a Stoe diffractometer.



Fig. 1: Control unit

## Applications

- small molecule diffraction
- powder diffraction
- high pressure diffraction

## Benefits

- high brightness
- extremely stable beam
- compact system for easy integration
- low power and low maintenance source
- intuitive user interface
- smart source power management

## Options

- manual filter wheel (3 positions)
- configurable collimator system
- software utility for remote operation

## Accessories

- alignment camera
- pin diode detector
- dry vacuum pump
- water to air chiller
- beam alignment system (3 points)

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## Technical Data

Subject to technical changes without notice

### Beam features

• Wavelength	0.71Å / 17.4keV (Mo K $\alpha$ )
• Spot size at focus	250 x 250 $\mu$ m <sup>2</sup> FWHM
• Typical flux (in vacuum)	30 x 10 <sup>6</sup> phs/s (source run at 50W—50 kV—1 mA)
• Divergence	< 3 mrad for the two dimensions
• K $\alpha$ spectral purity	Typically >95%
• Flux stability	< 1% within less than 15 min from standby mode

### Electronic

• Dimensions	3U — 19" - 600 mm in depth
• Total weight	13.6 Kg
• Power	110/220 V (AC) or 24 V (DC)

### Head

• Dimensions (L x W x H)	50 x 12 x 33 cm <sup>3</sup> with collimator 27 x 12 x 33 cm <sup>3</sup> without collimator
• Total weight	Maximum 14.5 Kg

### Integration

• System power consumption	150 Watts
• Remote control features	Ethernet port & software utility
• System shutters	Safety & measurement shutters
• Cooling flow rate (closed loop)	>1.2 l/min (set point 25°C)
• Dry vacuum pump	Working pressure : 3 mbar Pumping speed : 0.6 m <sup>3</sup> /h