

# LUXBRIGHT

AFFORDABLE MICROFOCUS



## LUXBRIGHT IX1



# LUXBRIGHT IX1

The IX1-160001 is a complete, fully integrated X-ray source with X-ray tube, high voltage power supply, control electronics and heat radiator in one compact unit. Applications include battery development and inspection, as well as additively manufactured or cast parts.

## Key features:

- 160 kV, 100 W allowing quick acquisition in e.g. industrial CT.
- 50  $\mu\text{m}$  resolution to detect small defects in mechanical parts, for example.



## Affordable Microfocus

Inside the IX1-160001, there is a Luxbright microfocus tube. Proprietary design of the cathode side enables microfocus resolution, using a fixed anode, bi-polar X-ray tube.

The result is what we call affordable microfocus, expanding the use of microfocus today and tomorrow.

# Luxbright IX1-160001

## General

Input Line Range	24 VDC $\pm$ 2%, 7.3 A
Output kV	80 kV – 160 kV
Output mA	0.05 mA – 0.625 mA
Output Power	Max. 100 W
Radiation shield	Less than 0.5 mR/hr at 5 cm from the surface of the chassis as per FDA 21 CFR 1020.40
Safety and Regulatory Compliances	Designed to meet CE, IEC/EN61010-1 and EN61326-1.
Dimensions	Generator: 453 mm x 385 mm x 143 mm
Weight	23.4 kg

## X-Ray Tube

X-ray Tube Type	Borosilicate glass, Bi-polar, Fixed anode
Anode material	Tungsten
Anode angle	20°
X-ray Focal Spot Size	100 $\mu$ m nominal

## Imaging

Spatial Resolution	50 $\mu$ m (D13) spatial according to ISO 19232-5 & ASTM E2002
Focus to Object Distance (FOD)	60.1 mm
Beam Port	Cone beam: 40°

## Operating Environment

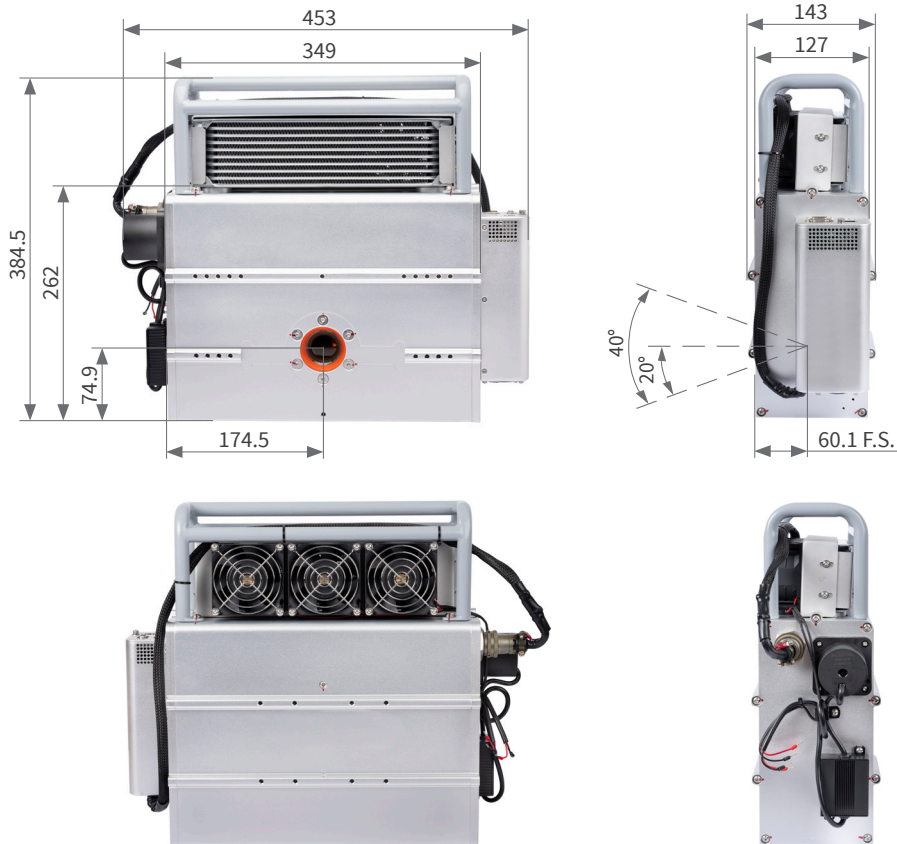
Operating Temperature	5°C to 40°C
Storage Temperature	-20°C to 85°C
Thermal Cut Off	60°C $\pm$ 3°C of oil temperature
Humidity	98% non-condensing

## Connections

PC Interface	RS-232 Serial or Ethernet RJ45
Interlock	9-pin Male Connector
Pump and Fans	Open-ended wires for 24 VDC 3.0 A

## Software

Direct control	PC software with GUI panel to set kV, mA etc.
Integration with external software	RS-232 Digital Communication Protocol



Luxbright helps customers to see what cannot be seen. Luxbright X-ray products and solutions enhance customers' X-ray applications in, for example, industrial CT. With advanced manufacturing technology, high-quality X-ray tubes are produced based on extensive experience and excellence. Development, production, and verification are all gathered under the same roof in Gothenburg, Sweden.

# LUXBRIGHT

www.luxbright.com | info@luxbright.com | +46 (31) 796 06 97  
 Hulda Lindgrens gata 6b, 421 31 Västra Frölunda, Sweden

