

New Generation X-Ray Monoblock for FLUORO & RAD



Laurus-F is an innovative, high performance stationary anode X-ray monoblock, specifically designed for application in medical diagnostic field. Solid, reliable and compact, it satisfies the most critical requirements, reaching an higher radiation quality whilst reducing leakage emission. This result has been obtained with high frequency control of filament heating and H.V. transformer. Monoblock heat dissipation power, thanks to the new housing material (pressure casted aluminium), has been increased to 85 W and 100 W (small and large tank, respectively).

Applications

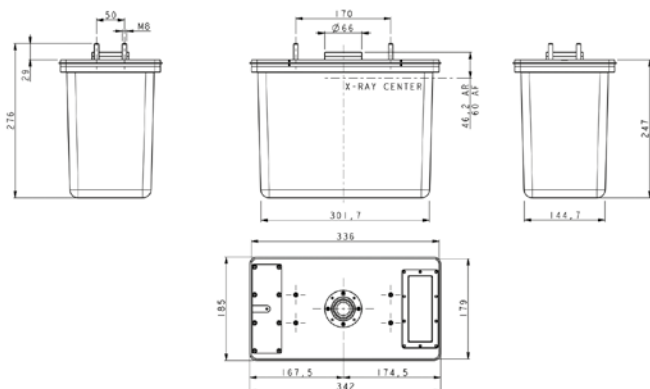
Laurus-F X-ray monoblock can be assembled onto C-arms, portable units, lithotripters and bone densitometry* diagnostic X-ray equipment.

Main Features

Heat dissipation: 85 W and 100 W (small and large tank, respectively)
Compact, reduced weight and sizes
Leakage radiation < 0,3 mGy/h
Painted housing for "naked" application (without covers)
Quick kV rising time
Low residual ripple
High frequency filament power supply
 Compatible with E-9040-5 inverter
 (*) For bone densitometry, additional shielding for X-ray leakage radiation reduction available on request.

TECHNICAL DATA	
HF Generator	40 KHz
Aluminium casting housing	
Maximum power (according to X-ray tube)	4.2 kW
Maximum voltage to the X-ray tube	120 kV
Maximum current to the X-ray tube	100 mA
Residual ripple at maximum power	< 1%
Max kV rising time	< 1 ms
Sheath features	
Minimum inherent filtration @ 80 kV (in compliance with USA N.C.P.R. – part 33)	2.0 mm Al
Dimensions	See picture
Weight	15,1 kg (small tank version) - 17,6 kg (large tank version)
Thermal features	
Thermal capacity	820 kJ (small tank version) - 1000 kJ (large tank version)
Thermal safety	60 °C ± 5°C
Continuous thermal dissipation	85 W (small tank version) - 100 W (large tank version)
Max sheath temperature	60 °C (with cover); 48° C (without cover)
H.V. transformer power supply	Compatible with dedicated inverter and filament board
Filament power supply	
Power supply	Either 400 Hz or 17 kHz
HV transformer power supply	
Operating frequency	20 kHz
Leakage radiation	Less than 0,3 mGy per hour, in compliance with applicable standard IEC 601-1-3 (par. 12.4). For bone densitometry, additional shielding for X-ray leakage radiation reduction available on request.
X-ray tube data	
Anode type	Stationary
Focal spots (small & large)	0,5 – 1,5 mm
Anode disk target angle	12°

Large tank version



Small tank version

