

# New Generation X-Ray Monoblock for FLUORO & RAD



**Laurus-R** is an innovative, high performance rotating 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 100 W.

## Applications

*Laurus-R* X-ray monoblock can be assembled onto C-arms, lithotripters and portable units (according to X-ray tube features).

## Main Features

*Heat dissipation: 100 W*  
*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*

<b>TECHNICAL DATA</b>	
<b>HF Generator</b>	40 KHz
Aluminium casting housing	
Maximum power (100 kV – 50 mA)	5 kW - 6 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
<b>Sheath features</b>	
Minimum inherent filtration @ 80 kV (in compliance with USA N.C.P.R. – part 33)	1.8 mm Al
Dimensions	See picture
Weight	19,3 kg
<b>Thermal features</b>	
Thermal capacity	1000 kJ
Thermal safety	60 °C ± 5°C
Continuous thermal dissipation	100 W
Max sheath temperature	60 °C (with cover); 48° C (without cover)
<b>H.V. transformer power supply</b>	Compatible with dedicated inverter and filament board
<b>Filament power supply</b>	
Power supply	Either 400 Hz or 17 kHz
<b>Stator power supply</b>	
Time to reach full rotation speed (230 Vac ± 10% 50 Hz)	< 0.8 s
Main to common	25 Ω
Auxiliary to common	50 Ω
<b>HV transformer power supply</b>	
Operating frequency	20 kHz
<b>Leakage radiation</b>	Less than 0,3 mGy per hour, in compliance with applicable standard IEC 601-1-3 (par. 12.4).
<b>X-ray tube data</b>	
Anode type	Rotating
Focal spots (small & large)	Either 0,3-0,6 or 0,6-1,3 (according to tube features)
Anode disk target angle	Either 10° or 16° (according to tube features)

