

Technical Specifications of γ -eye



Technical

Outer dimensions	39cm (L) x 35cm (W) x 35cm (H)
Weight	28 kgr
Outer shielding	Metal
Power Supply	AC/DC Adapter 12V/450W
AC input range	100-240 VAC
PC Connectivity	USB 2.0 Type A Ethernet RJ45 Cat 5e
Data acquisition system	Analog-to-Digital Converter at 50MHz sampling rate FPGA for data handling & transmission to PC
Detector head	Tungsten shielding 2 x Position Sensitive Photomultiplier

Pixellated scintillator CsI(Na),
 1.5x1.5x5 mm³ pixel size
 29x58 crystal pixels
 Parallel hole lead collimator

Performance

Field of view 50mm x 100mm

Useful field of view 48mm x 98mm

Bore size 60mm

Axial length 100mm

Spatial Resolution 1.9mm, 0cm distance from surface

Normalized Energy Resolution 13% for the 140keV

Sensitivity 0.03%

341 cps/MBq for Tc-99m

Uniformity 10%

Photon Sensitivity 81%

Acquisition time 1min (or higher) for 10cm long animal.

10sec frames are possible

Software

Database Raw data, DICOM storage

Imaging Photo of the mouse as anatomical map

Real-time viewer

Selectable frame duration down to 10sec

Pre-defined and user's defined protocols

Post Processing

ROI manager, ROI plots

Kinetic time activity curves at real time

View

Zoom, Pan, Data Cursor,

Brightness/contrast

Export

Reporting tool, Graph plots

Animal handling

Mouse bed

Custom bed for repeatable positioning of the mouse

2 beds per system are supplied to protect from contaminations

Heating

Thermal pad

Anesthesia

Standard inputs for gas anesthesia

ECG

Add-on per user request

Respiration Rate

Add-on per user request

Temperature

Add-on per user request

Contact Information

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