NUCLEAR MEDICINE GAMMA CAMERA

QuantumCam



QuantumCam features a small footprint and the patient-focused design provides comfort and ease-of-use.

QuantumCam is a general-purpose nuclear medicine camera with minimal room size requirements. In fact, no other SPECT system in the market has such a small footprint and still full flexibility in detector positioning, offering versatile use for whole-body, SPECT, Cardiac SPECT, and planar imaging procedures.

Flexible

The system offers full flexibility in detector positioning and six collimator options.

Easy-to-Use

Includes the easy and intuitive ClearSight™ acquisition software.

Reliable

Superior imaging for whole-body, SPECT, Cardiac SPECT, and planar imaging procedures.

Patient Friendly

Open gantry design for patient comfort, especially those with claustrophobia.

QUANTUMCAM

Technical Specifications

DETECTOR PERFORMANCE

Crystal thickness	9.5 mm
UFOV	54×30 cm (54×31 cm imaged FOV)
Energy Range	55–400 keV
Intrinsic Spatial Resolution (UFOV)	< 3.9 mm (FWHM), < 7.8 mm (FWTM)
Intrinsic Spatial Linearity (UFOV)	<0.5 mm (Absolute), < 0.2 mm (Differential)
Intrinsic Energy Resolution (UFOV)	< 9.7 %
Intrinsic Flood Field Uniformity (UFOV)	< 3.5 % (Absolute), < 2.5 % (Differential)
Maximum Count Rate wo. Scatter	> 300 kcps
Collimators	LEGP, LEHR, MEGP, HEGP, LEUHR, Pinhole

DETECTOR PERFORMANCE

System Spatial Resolution wo. Scatter (LEHR)	< 7.7 mm (FWHM), < 15 mm (FWTM)
System Planar Sensitivity (LEGP)	270 cpm / uCi
SPECT reconstructed spatial resolution without scatter @ 15 cm radius (LEHR)	<12 mm
Total Body system spatial resolution @ 10 cm wo. scatter, 10 cm/min scan speed	< 9.0 mm
Volume sensitivity per axial centimeter (LEHR)	> 10,000 cps / Mbq / cm^2

GANTRY

Foot print	(W) 234 cm × (L) 290 cm × (H) 214 cm
Room Size Requirement (Min)	2.8 m × 3 m (9.2' × 9.8')
SPECT rotation	+ /– 180°
Angular sampling	0.7°–5.6°
Speed of rotation	< 1 RPM
Scan diameter	16–68 cm
SPECT manual rotation speeds	0.2–0.9 RPM
Detector relative positions	90° and 180°
Total Scan length + UFOV	174 cm + 31 cm
Total Body Scan speed	1–180 cm / min
Brain reach	9cm (3.5”)
VORR (Vertical Outer Room Reach)	200 cm (Max)
HORR (Horizontal Outer Room Reach)	100 cm (Max)

PATIENT TABLE

Dimensions	
(Patient Pallet Support)	(L) 248 cm × (W) 52 cm
Pallet type	Aluminum
Thickness	3.0 mm
Attenuation	10 % @ 140 keV
Pallet dimensions (SPECT)	(L) 125 cm × (W) 38 cm
Height (from floor = loading height)	72 cm
Weight capacity	200 kg (441 lbs.)





Multi-purpose nuclear imaging system designed by gamma camera experts

- Full flexibility in detector positioning
- Superior imaging for whole-body, SPECT, Cardiac SPECT, and planar imaging procedures
- Features a small footprint and patient-focused design
- Open gantry design is free of obstructions, enabling easy positioning of ambulatory patients and those in wheelchairs or stretchers

6 Collimator Options:

- LEHR (standard)
- LEGP
- MEGP
- HEGP
- LEUHR
- HEPH (Pinhole)