

D-SPECT® Cardiac Imaging System

TECHNICAL SPECIFICATIONS

Detector Specifications

Intrinsic Spatial Resolution	
FWHM in UFOV	NA
FWTM in UFOV	NA
<i>*D-SPECT uses Integrated Collimators*</i>	

Intrinsic Spatial Linearity

Differential in UFOV	NA
Integral in UFOV	NA
<i>*Linearity defined by pixelated structure with NO drifts</i>	

Extrinsic Energy Resolution

FWHM at 140keV	≤6.2%
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Intrinsic Energy Resolution

FWHM at 140keV	NA
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Extrinsic Uniformity

Differential in UFOV	<3%
Integral in UFOV	<4%

Intrinsic Uniformity

Differential in UFOV	NA
Integral in UFOV	NA
<i>*D-SPECT uses Integrated Collimators*</i>	

Max Count Rate with Scatter

(Per camera with <5% count Loss)	>1,350,000 cps
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Reconstructed Spatial Resolution

FWHM with Scatter at 15cm	5.0 mm
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ECG Gating

Number of Frames per R-R	8 or 16
Automatic Beat Centering	Yes
Integrated ECG	Yes

Detector Properties

Detector Technology	Solid State
Detector Type	Pixelated Crystals
Collimator Type	Tungsten
Number of Detectors	9
Camera Field-of-View(FOV)	15.74 cm x patient adjustable
Detector Field-of-View(UFOV)	15.74 x 3.94 cm (6.2 x 1.6 in)
Number of Pixels per Detector	1024
Total Number of Pixels	9216
Detector Range of Motion	>110°
Pixel Size	2.26mm x 2.26 mm
Energy Range	40 - 170 keV
Lead Shielding	175 keV

Crystal Properties

Crystal Material	CZT (Cadmium Zinc Telluride)
Crystal Type	Semi-Conductor
Decay Time	300ns
Detection Efficiency	80% @140keV
Crystal Thickness	5.0 mm (0.2 in)

Patient Chair

Max Patient Weight (Static)	246kg (542 lb)
Max Patient Weight (Dynamic)	171kg (377 lb)
Lowest chair position from floor	63cm (24.8 in)
Highest chair position from floor	93cm (36.6 in)

Footprint and Weight

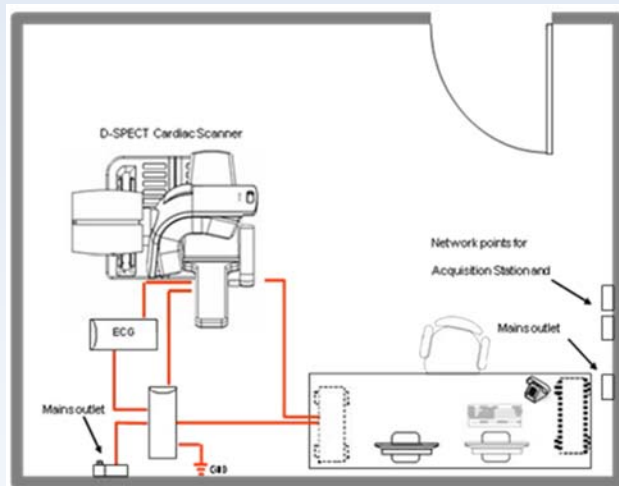
Height	190 cm (74.8 in)
Depth	216 cm (85.04 in)
Width	173 cm (68.11 in)
Weight	670 kg (1477 lb)
Flood Loading (No Patient)	610 kg/m ² (125 lb/ft ²)



PHYSICAL, ENVIRONMENTAL, AND POWER SPECIFICATIONS

System Component	Condition	Ambient Temperature	Relative Humidity (Non-Condensing)
D-SPECT Cardiac Scanner	Operation	15 -24° C	30 -65 %
		59 -75° F	
	Max Temp Change Rate	3° C per hour	
		5.4° F per hour	
Storage and Transportation		0 - 30° C	30 -65 %
		32 -86° F	
	Heat Dissipation Handling	6800 BTU/Hr	

D-SPECT System Configuration	Power (VA)	Nominal Input Voltage (VAC)	Allowed Input Voltage (VAC)	Frequency
With 120V UPS	1440 VA	120VAC	95-151 VAC	60Hz
With 230V UPS	1440 VA	230 VAC	181-290 VAC	50-60 Hz



The D-SPECT has a small footprint that easily fits into compact spaces
 Minimum room requirements for upright imaging – 9'5" x 8'8"
 Minimum room requirements for supine imaging – 9'5" x 11'

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