



D-SPECT® Cardiac Imaging System

TECHNICAL SPECIFICATIONS

Detector Specifications

Intrinsic Spatial Resolution

FWHM in UFOV	NA
FWTM in UFOV	NA

D-SPECT uses Integral Collimators

Intrinsic Spatial Linearity

Differential in UFOV	NA
Integral in UFOV	NA

Linearity defined by pixilated structure with NO drifts

Extrinsic Energy Resolution

FWHM at 140 keV	≤7%
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Intrinsic Energy Resolution

FWHM at 140 keV	N/A
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Extrinsic Uniformity

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

Intrinsic Uniformity

Differential in UFOV	N/A
Integral in UFOV	N/A

D-SPECT uses Integral Collimators

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	5.0mm
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Dimensions and Weight

Height	190 cm (74.8 in)
Depth	216 cm (85.04 in)
Width	172.4 cm (67.87 in)
Weight	670 kg (1477 lb)
Floor Loading- No Patient	610 kg/m ² (125 lb./ft ²)

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
Field-of-View (FOV)	15.74 cm x patient adjustable
Useful Field-of-View (UFOV)	15.74x3.94 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	2.26 mm x 2.26 mm
Energy Range	40-170keV
Lead Shielding	175keV

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

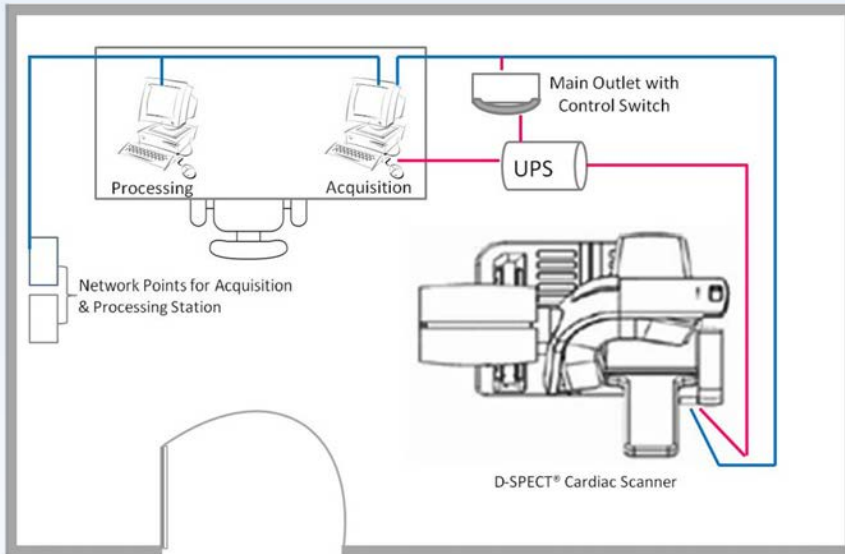
Max Patient Weight (Static)	246kg (542 lb)
Max Patient Weight (Dynamic)	171kg (377 lb)
Lowest chair position from floor	63cm (24.8 in)
Highest chair position from floor	93cm (36.6 in)



PHYSICAL, ENVIRONMENTAL, AND POWER DATA

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
Without UPS	1000 VA	100/120/220/240/VAC	Nominal + 10%	50-60 Hz
With 120V UPS	1440 VA	120 VAC	96-151 VAC	60 Hz
With 230V UPS	1440 VA	230 VAC	181-290 VAC	50 Hz



The D-SPECT system has a small footprint that easily fits into compact spaces

Minimum room requirements for upright imaging are 8'8" x 9'5" *

Minimum room requirements for supine imaging are 9'5" x 11' *

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SPECTRUM
 DYNAMICS MEDICAL
 A Biosensors International Group Company

Spectrum Dynamics Medical, Inc
 2275 East Bayshore Rd. Suite 140
 Palo Alto, CA 94303, USA
 Tel. (650) 800 7030 - Fax (650) 800 7010
www.spectrum-dynamics.com
info@spectrum-dynamics.com