

D-SPECT

A dedicated, digital Cadmium Zinc Telluride (CZT)-based SPECT system for high-speed, low-dose nuclear cardiac imaging.

<https://example.com/1762583716453>

Overview

The D-SPECT is a revolutionary dedicated cardiac Single Photon Emission Computed Tomography (SPECT) system developed by Spectrum Dynamics Medical. It utilizes proprietary Cadmium Zinc Telluride (CZT) solid-state detectors, which offer significantly improved energy resolution and sensitivity—up to 10 times greater than conventional Sodium Iodide (NaI) Anger-based gamma cameras.

This technological leap allows for ultra-fast Gated SPECT acquisitions, often completed in as little as two minutes, dramatically enhancing clinical workflow and patient throughput. The system's open gantry design and flexible patient chair accommodate supine, upright, or semi-upright imaging positions, eliminating claustrophobia and allowing for the imaging of technically challenging or morbidly obese patients (up to 1000 lbs/454 kg). The high sensitivity also enables ultra-low radiation dose protocols, benefiting both patients and staff.

Key applications include Myocardial Perfusion Imaging (MPI) and advanced quantitative studies like Dynamic SPECT for Coronary Flow Reserve (CFR) analysis. The system is also capable of Simultaneous Multi-Isotope Imaging (SDI). The D-SPECT series includes models like D-SPECT Cardio and D-SPECT VISTA, with options like TruCorr, a deep learning-based attenuation correction methodology. The D-SPECT system is an essential tool for nuclear medicine departments, cardiology centers, and clinics for the diagnosis and monitoring of cardiac diseases.

Key Features

- CZT Solid-State Detector Technology
- Ultra-Fast Gated SPECT (as fast as 2 minutes)
- Flexible Patient Positioning (Upright, Supine, Semi-Upright)
- Open Gantry Design for Patient Comfort
- Simultaneous Multi-Isotope Imaging (SDI)
- Quantitative Myocardial Blood Flow (Coronary Flow Reserve - CFR)

- Ultra-Low Dose Protocols
- RFID Patient Identification and Dose Checking

Pricing

Model: enterprise

A capital equipment system with a cost range of \$325,000 – \$500,000, plus an average annual service cost of \$32,000 – \$36,000. Pricing is not publicly disclosed and requires a direct quote.

Starting at: USD \$325000

Target Company Size: medium, enterprise

Integrations

DICOM, Cedars-Sinai QGS + QPS, INVIA 4DM, Syntermed Emory Toolbox

Compliance & Certifications

FDA 510(k) Clearance

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