

PrOSPECT II

It's time to expand your capabilities in cardiac imaging
ProSPECT II: Dual Head Dedicated Cardiac SPECT
A Revolution in Nuclear Cardiology



Parto Negar Persia Co.

Pioneer in Healthcare Technology

ProSPECT II

ProSPECT II, our third generation, dedicated cardiac SPECT system powered with durable and strong mechanical parts. It combines improvements in durability and patient comfort. It can be easily upgraded to whole body general SPECT only with changing the detector configuration and size. The ProSPECT II system is equipped with two detectors with small FOV to minimize extra cardiac activity.



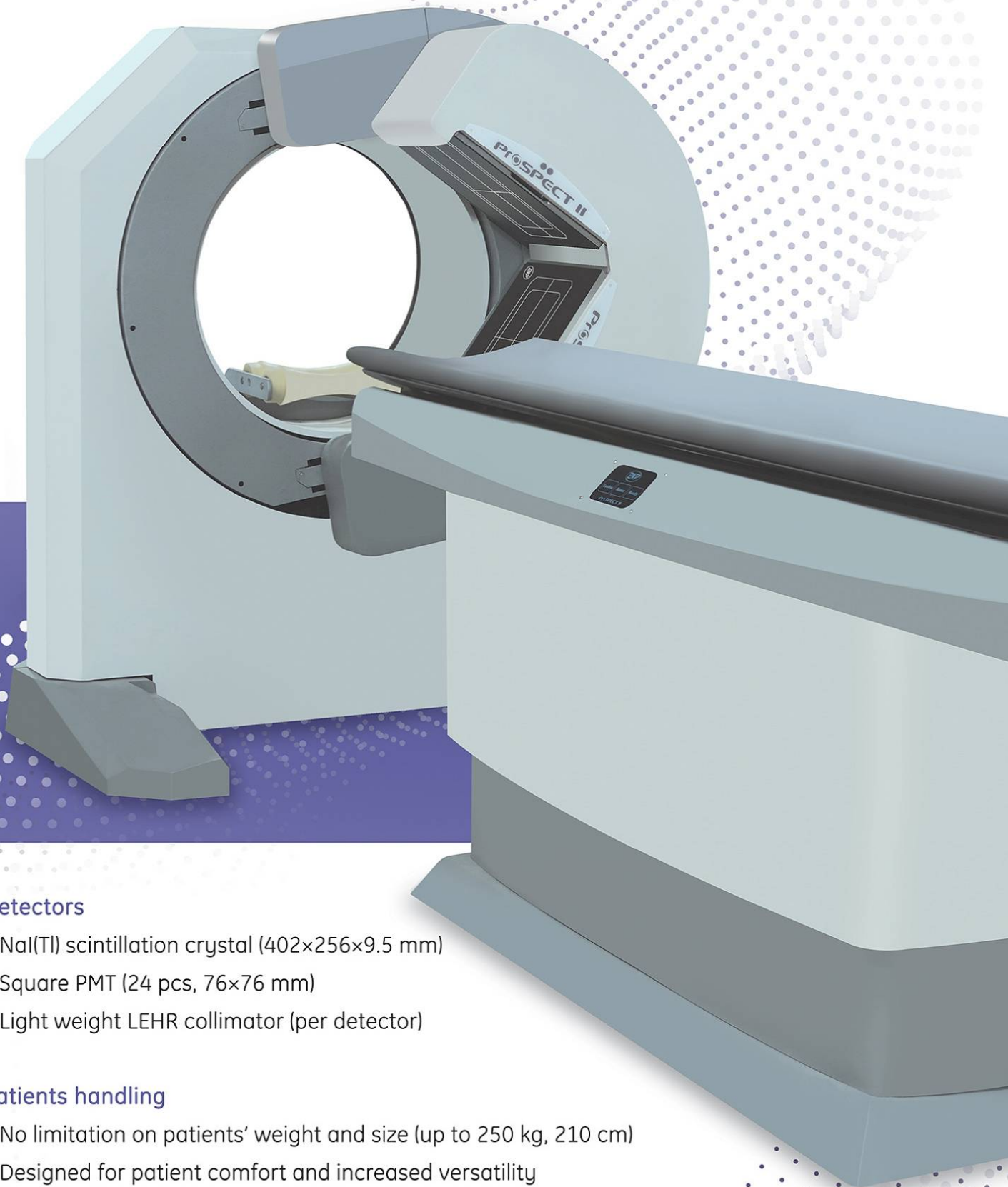


Designed for variety of patients in mind:

The lowest bed position guarantees easy access even for patients with limited mobility. ProSPECT II can comfortably accommodate large patients with a large 70-cm bore and heavy-duty table.



PROSPECT II



Detectors

- NaI(Tl) scintillation crystal (402×256×9.5 mm)
- Square PMT (24 pcs, 76×76 mm)
- Light weight LEHR collimator (per detector)

Patients handling

- No limitation on patients' weight and size (up to 250 kg, 210 cm)
- Designed for patient comfort and increased versatility
- Low table height to ride patients specially patients with limited mobility
- Suitable for patients with claustrophobia disorder
- Variety of patients positions including HFS, HFP, FFS and FFP

Acquisition Console

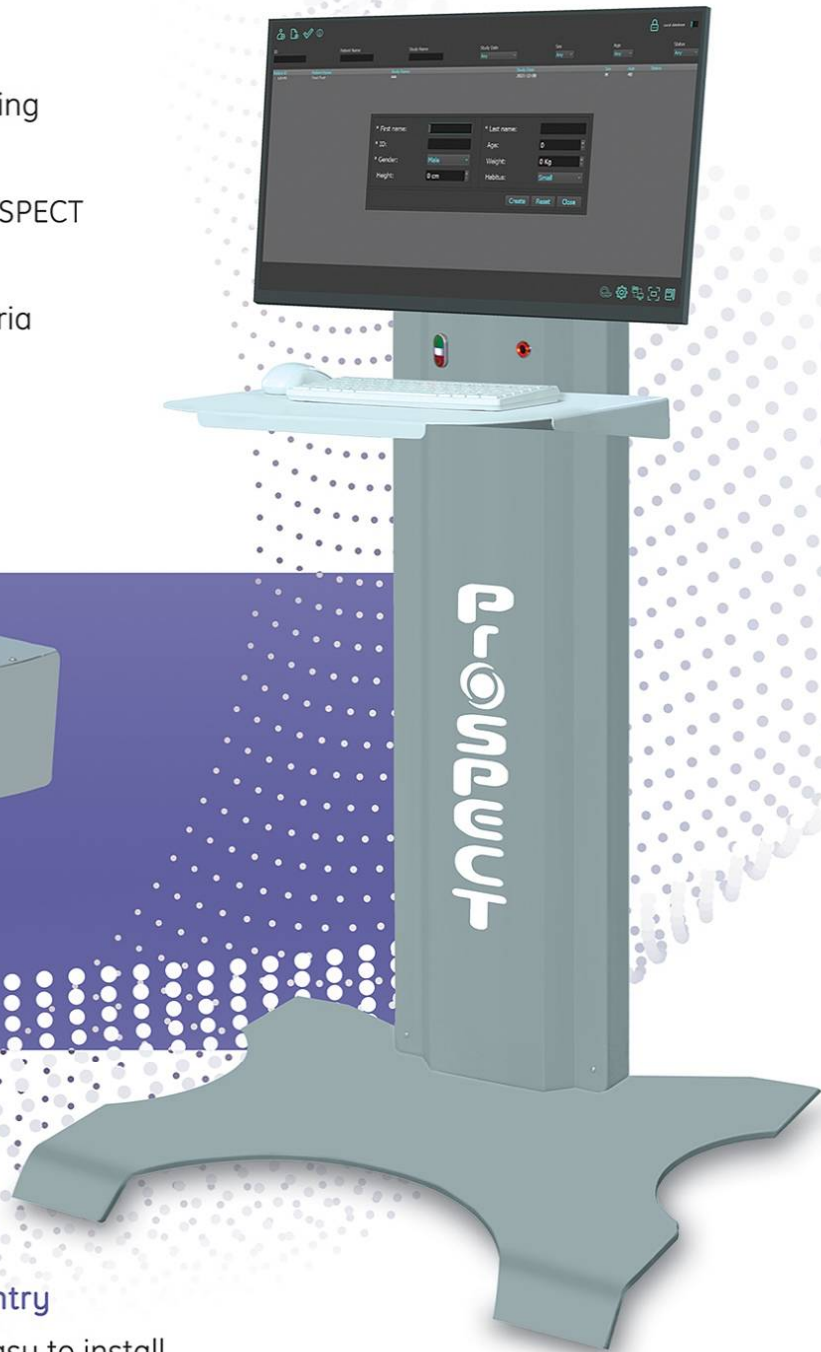
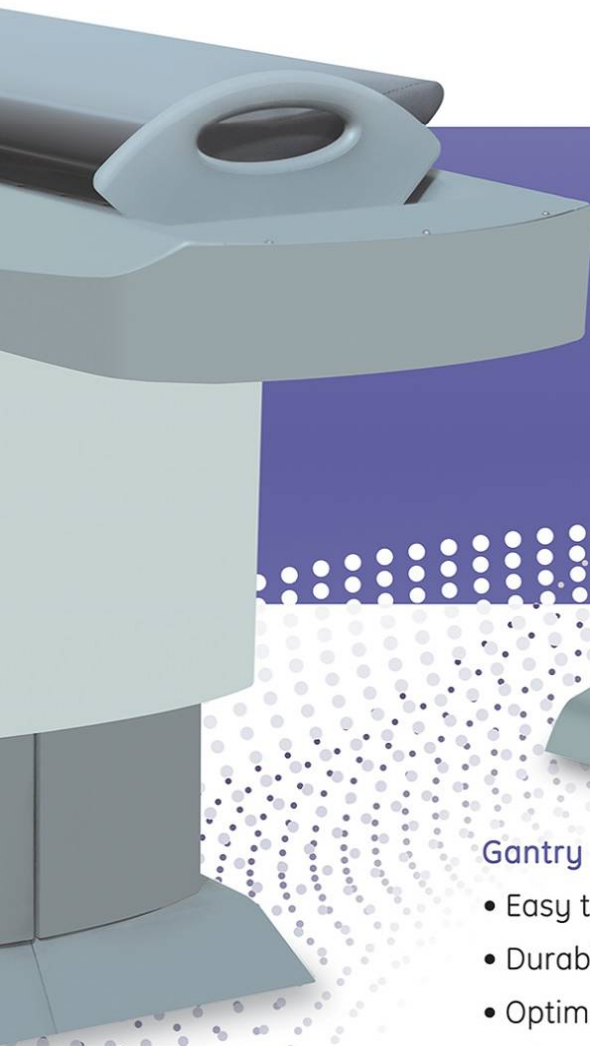
- Portable acquisition console
- Equipped with icon-driven hand controller

ECG

- A wireless ECG system using dry-contact electrodes
- Optional list-mode gated SPECT acquisition
- User selectable stop criteria (time, counts or beats)

Software

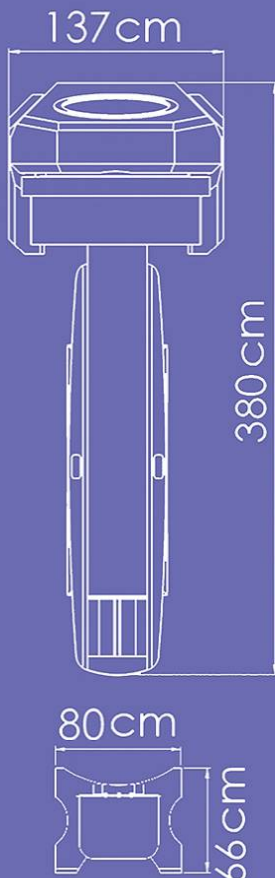
- Dedicated acquisition software
- Advanced Cedars-Sinai software for quantification



Gantry

- Easy to install
- Durable mechanical parts with low maintenance costs
- Optimal detector design for cardiology with minimum dead zone
- Adjustable radius of rotation (ROR) to minimize distance to patients
- High precision positioning
- Ultra-low collimator
- Investment protection; Upgradable to General purpose SPECT

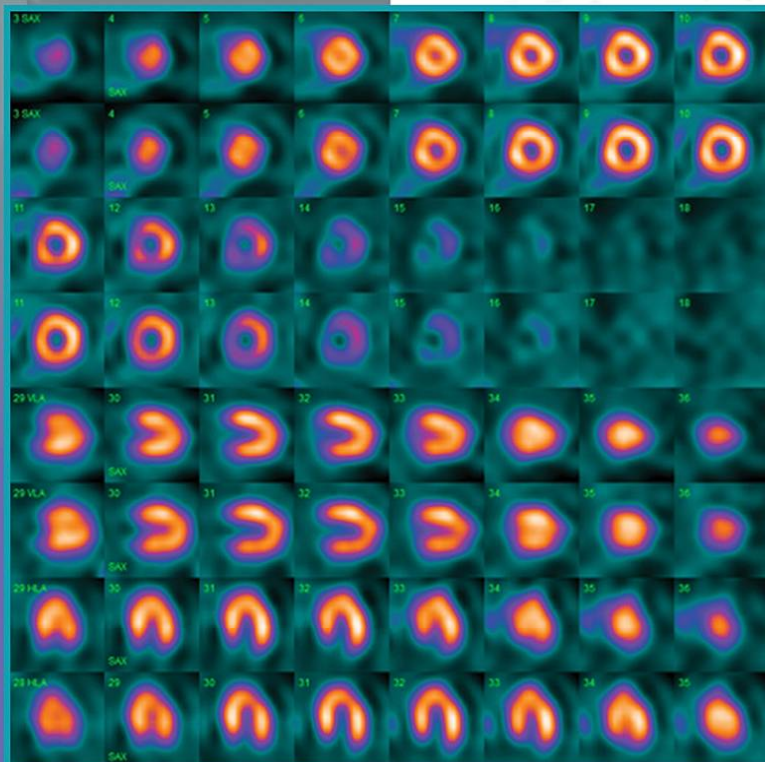
PROSPECT II



Detector Specification	
Intrinsic spatial resolution	
FWHM in UFOV	≤ 3.5 mm
FWTM in UFOV	≤ 7.4 mm
Intrinsic spatial linearity	
Absolute in UFOV	≤ 0.2mm
Differential in UFOV	≤ 0.1 mm
Intrinsic energy resolution	
in UFOV	9.3 %
Intrinsic flood field uniformity	
Integral in UFOV	≤ 2.0 %
Differential in UFOV	≤ 1.0 %
System spatial resolution w/o scatter at 10 cm	
LEHR	≤ 7.6 mm
LEAP	≤ 9.8 mm
Sensitivity	
LEHR	192 cpm/μCi
LEAP	295 cpm/μCi
ECG Gating	
Mode	List-mode
Max. number of frames per R-R interval	32
Gantry Physical Specifications	
Height	185 cm
Width	140 cm
Lenght	380 cm
Weight (with detectors and collimators)	1200 kg
System Specifications	
Filed of View (FOV)	37×22 cm ²
Useful Filed of View (UFOV)	36×21 cm ²
Detector respective angle	90 Degrees
Gantry rotation range	420 Degrees
Radius of Rotation (ROR)	19-35 cm
Range of in/out movement of bed	53-115 cm
Range of in/out movement of bed	220 cm
Maximum patient load capacity	Up to 250 kg



- Easy to scanning heavy patients (up to 250 kg)
- Supine and prone imaging
- Optional accessories include a head holder and arm support
- User-friendly acquisition station
- Intuitive hand controller
- Portable acquisition console
- Optimized FOV for cardiac imaging
- Minimal dead zone in detectors
- Using square PMT technology
- List mode gated SPECT acquisition
- Wireless ECG gating system
- Motion artifact reduction
- Advanced Cedars-Sinai software for quantification



New Design with New Technology

Conformance Statement

- Quality management system operated by Parto Negar Persia (PNP) Imaging Systems
- Product design, development, production and services comply with ISO 13485, ISO 9001, IEC 60601-1, IEC 60601-1-2, IEC 62304 and NEMA NU1
- Safety labels are attached to appropriate places on equipments and appeared in all operation manuals.
- The supplied software complies with DICOM standard.
- The technical information provided here is not a detailed specification.
- For more details and up to date information please contact PNP Medical Imaging Systems Company.



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