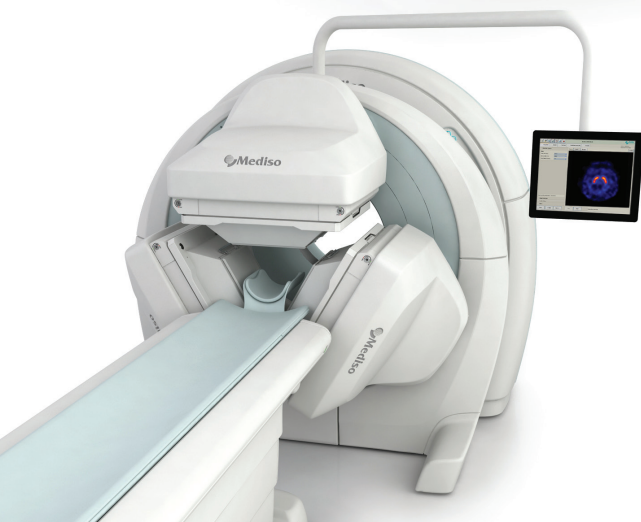
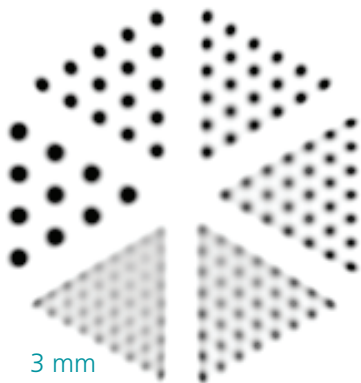


AnyScan[®] TRIO SPECT/CT

Integrated Triple Detector Imaging System

Better than 3 mm resolution



- **3 detector heads** for 50% higher sensitivity than 2 detector systems
- X-UHP 94 PMT detector for excellent resolution ($\text{FWHM} \leq 2,7 \text{ mm}$)
- New Multi PinHole technic improves the object sampling in the space
- Stationary imaging for dynamic SPECT
- Absolute Quantitative results for precise diagnoses less than 5% error
- **Tera-Tomo™** Iterativ SPECT/CT reconstruction Suite
- Special Multi Pinhole applications for cardiac and brain examinations
- General purpose MPH for small organs ($\varnothing 22 \text{ cm} \times 18\text{-}200 \text{ cm}$)

Best tool for
research & diagnosis



Mediso
Medical Imaging Systems

AnyScan[®] ^{TRIO} SPECT/CT

Integrated Triple Detector Imaging System

PROGRESS TO NEW TECHNOLOGIES

The new Multi PinHole imaging capacity and the excellent detector performance combined with high sensitivity open new perspective in the SPECT/CT imaging. Stationary and quantitative results improve the precision and reproducibility of the patient scans. Fast image acquisition supply comfortable examination for the patients and motion free imaging. The **Tera-tomo™** recon engine for all type of scan - Planar, SPECT and CT maximizing the performance of the system.

SPECT DETECTOR

Three rectangular X-UHP ultra high resolution, high stability detectors with high optical performance

- NaI(Tl) scintillation crystal size:
585 (558) x 470 (418) mm
standard thickness: 9.5 mm
- Photomultipliers: 60/94/123 pcs of high quantum efficiency PMT improved energy resolution, magnetic shielding and long-term stability

SPECT DETECTOR ELECTRONICS

A compact, highly integrated, one box easily serviceable construction with remote diagnostic

- High precision preamplifier electronics
- Fast PMT gain stabilization and adjustment
- 12 bit / 80 MHz ultrafast 1 ADC/PMT electronics
- Digital electronics assembled from components of the latest technology
- Temperature control high voltage module

SPECT GANTRY

- Triple head open design gantry
- Variable angle head positions with high precision positioning
- Small footprint robust mechanical design with improved safety factor
- Pre-programmed robotic gantry motions
- Full automatic motion calibrations
- Maintenance-free mechanical design
- Dual infrared line auto body contour facility

SPECT COLLIMATORS

Multi PinHole and Parallel hole collimator sets

- General purpose applications:
- LEGP, LEHR, LEUHR, MEGP, HEGP
- Multi PinHole Brain applications - HR/HS - MPH
- Cardiac applications - HR/HS - MPH

NEMA SPECIFICATIONS**

- FOV: 540 mm x 406 mm
- Energy range: 40–600 keV
- Intrinsic energy resolution for 99mTc: 9.0%
- Intrinsic Flood Field Uniformity
- differential CFOV: 1.3% integral CFOV: 1.7%
- differential UFOV: 1.5% integral UFOV: 1.9%
- Intrinsic Spatial Resolution: CFOV 2.7 mm
- Intrinsic Spatial Linearity
- differential CFOV: 0.09 mm absolute CFOV: 0.19 mm
- differential UFOV: 0.10 mm absolute CFOV: 0.20 mm
- Max. count rate with full correction: >0.55 Mcps

ACQUISITION CONSOLE

- Integrated, ultracompact acquisition WS for SPECT/CT modalities.
 - Intel® Core™ i7 3.2 GHz 6 core processor
 - 6 GB RAM
 - 4 TB hard disk drive
 - full DICOM 3.0 compatibility (send/ receive, print, query/retrieve)
 - 27" high resolution (2560x1440) LCD monitor
 - integrated Gigabit Ethernet controller
- SPECT digital corrections:
 - Direct addressing TS® simulation linearity correction with FOV increasing technology
 - Improved energy correction
 - Uniformity correction without count rate loss
 - Automatic real time uniformity crosscorrection for the different collimators
- CT acquisitions:
 - Full integrated control and user interface for both modalities

CLINICAL PROCESSING WORKSTATION

Dedicated Nuclear Medicine and CT workstation with InterView™ FUSION software package running on Win 7 64bit Ultimate OEM operating system with dual monitor

- Intel® Core™ i7 3.4 GHz 6 core processor
- 32 GB RAM
- 12 TB hard disk drive
- full DICOM 3.0 compatibility (send/ receive, print, query/retrieve)
- 27" high resolution (2560x1440) LCD monitor
- integrated Gigabit Ethernet controller

MULTI MODALITY IMAGING TABLE

Universal imaging table for SPECT/CT examinations

- Intelligent CAN connected industry standard interface to gantry
- Low attenuation (<8%) carbon fiber pallet
- Horizontal moving range is up to 360 cm
- Height of the patient pallet is variable between 45-85 cm, optionally 95 cm
- Max. 229 kg patient weight
- Accessories: arm-holder for WB-, arm-head holder for heart-, head-holder for brain examinations

CT GANTRY

- New vibration free integrated gantry design
- Patient aperture: 700 mm
- Scan Field of View: 500 mm
- Acquisition Times (360°): 0.5, 0.7, 1, 1.5 and 2 sec. (0.4 sec. optional)

X-RAY TUBE

- Highest X-Ray Tube Voltage: 140 kVp
- Highest X-Ray Tube Current: 500 mA
- Anode Heat Capacity: 7,5 MHU
- Max scan time: 120 sec
- Focal spot size: 0.7 x 0.8 mm
- Generator power: 60 kW

CT DETECTOR

- High performance and ultra high performance ceramic detectors
- Number of detector elements: 24 x 896
- Maximum number of slices per rotation: 16
- Detector with (Z dimension): 20 mm

SCAN PARAMETERS

- Acquired Slice widths: 0.625, 1.25, 2.5, 3.75, 5, 7.5, 10 mm
- 360° scan time: 0.4 (optional), 0.5, 0.7, 1, 1.5, 2 sec
- Spiral scan length: 2000mm
- Reconstruction matrix: 512 x 512
- Reconstruction time: <1 sec

OPTIONAL ACCESSORIES

- SPECT-only Imaging Table
- Processing workstation
- Collimators and carts
- ECG triggering device for cardiac gated studies
- Colour laser printer
- CODONICS colour film and photo paper printer
- Head holder for brain examinations
- Mammography palette
- Radiation therapy package
- Special SW packages for CT
- One Click CD/DVD burner, printer and publisher
- Tuning and test phantoms

*work in progress
**for 94 PMT model