

**TECHNICAL SPECIFICATIONS
CARDIAC DEDICATED GAMMA CAMERA SYSTEM**

1. SUBJECT:

The SPECT camera shall be used for static, dynamic, planar and SPECT and gated SPECT operations in our institution.

2. TECHNICAL GENERAL CHARACTERISTICS OF THE SPECT CAMERA:

- a) The equipment is a cardiac dedicated gamma camera system for data collection and processing in static, dynamic and gated operations in nuclear medicine.
- b) Detector shall rotate around the longer axis of the patient and be capable of performing computerized tomographic operations (SPECT) with single photon emission.
- c) There should be an additional operator console apart from the acquisition terminal where processing operations will be performed.
- d) Gamma camera shall have minimum two rectangular detectors in fix 90 degree configuration.
- e) It is required that system shall have fixed table with rotating gantry in order to save operating space.
- f) The patient bed should carry patients weigh up to 180 kg or more.
- g) The system should be able to perform both supine and prone imaging.

3. PERFORMANCE SPECIFICATIONS

- a) The system should fulfill the NEMA 2001 or 2007 standards, and these values should be stated for the offered system.
- b) The system shall have the following collimators and shall easily be replaced by hand that shall have cart:
 - i. Low Energy High Resolution
 - ii. Low Energy General Purpose
- c) System should have the reconstruction software that provides low dose / half time imaging.

4. ACQUISITION TERMINAL

- a) It should be able to define data collecting parameters.
- b) It should be capable of controlling all gamma camera functions.
- c) Provides pre-programmed camera motions for gantry and detectors.
- d) Acquisition protocols should be able to be predefined and user-defined.
- e) Contains automated storage of acquired data with automatic DICOM transfer to network connected Processing & Review workstation.
- f) May be placed on an office desk or optionally on a mobile cart.
- g) There should be one high resolution monitor of 15.6" HD+ (1600 x 900).
- h) System should be complaint with DICOM 3.0.
- i) A cardiac trigger unit should be provided for gated cardiac studies.

5. PROCESSING TERMINAL

- a) There will be one processing unit in addition to the acquisition unit. These two systems will be connected to one another and they should be able to work integrally.
- b) Capable half time acquisition SPECT studies.
- c) Reconstruction of SPECT studies with FBP or 3D-Iterative.
- d) There should be dual high resolution flat panel LCD monitor of at least 24" available.
- e) Image output format should include JPEG and in DICOM format.
- f) Processing Terminal should have the following hardware specifications:
 - i. Minimum RAM of 16 GB
 - ii. Minimum hard disk capacity of 250 GB
 - iii. Powerful graphic card that supports Full-HD resolution
 - iv. CD/DVD-RW and at least 2 USB input
 - v. At least 1 high resolution medical monitor with minimum of 19".

The following study types shall be possible to process at the processing terminal:

- Display and analysis of Static & Dynamic
- Reorientation or/and reformatting
- SPECT reconstruction and display
- Gated SPECT
- Cardiac Perfusion SPECT
- Cedars Cardiac Program (QGS, QPS) or 4DMSPECT or EMORY with Motion Correction features (depends on the customer's choice)

Country of Origin, Shipment and Manufacturing must be same and: Uk, USA, GERMANY, JAPAN, FRANCE, DENMARK

IT Department

SERVER Changes;

1. Dual intel XEON scalabe processor upto 28 core per processor will be acceptable.
2. Front drive base: upto 16x3.5'' SAS 10 K H DD
3. Upto 8x3.5'' SAS 10K HDD
4. Power supply 500 watts or higher will be acceptable.
5. Hard drive 2TBX6 SAS 10 K will be acceptable

PRINTER;

1. Printer 38 PPM will be prefferd.