

### 1) e.cam Single

- The e.cam single detector system offers general purpose scanning flexibility with unrestricted access for gurneys and wheelchairs. This cost-effective system features a clinically versatile open gantry, caudal/cephalic detector tilt capability, automatic body contouring for SPECT and whole body scans, as well as upgrade paths to dual-head configurations. Included detector has a 3/8" Crystal. 90 day warranty not to include damage to, or hydration of the Crystal. NCI has full service capabilities for said system.

### 2) Collimator

- e.cam offers a comprehensive selection of collimators for general and specialized applications. Siemens automated fabrication process assures high uniformity and precise angulations. The collimator included with this system is the LEAP Low-Energy All-Purpose to be utilized with 99mTC isotope.

1. Hole shape: HEX
2. Number of Holes (x1000): 148
3. Hole Length (mm): 24.05
4. Septal Thickness (mm): 0.16
5. Hole Diameter (mm across the flats): 1.11
6. Sensitivity @ 10cm (cpm/ $\mu$ Ci): 202
7. Geometric Resolution @ 10cm (mm): 6.4
8. System Resolution @ 10cm (mm): 7.4
9. Septal Penetration (%): 1.5
10. Weight in Pounds: 45
11. Weight in Kilograms: 20.4

### 3) Semi-Automatic Collimator Server

- A wide variety of optional collimators are available for all energies. The unique collimator exchange combines fully automated collimator installation with rapid (manual) insertion. The collimator server supports up to four collimator cores, providing the operator with the ability to remove and install two sets of collimators from the same cart, eliminating one trip to and from the collimator storage area. The collimators are vertically mounted to conserve department space.

### 4) Patient Handling System (Bed)

- The e.cam's motorized patient bed supports a variety of patient weights and sizes – up to 180 KG (400 pounds), meeting the needs of a wide range of clinical applications. The low attenuation characteristics of the ultra thin pallets and the close proximity of the detector to the patient optimize study resolution. The patient bed lowers to a convenient 48.3 cm (19 inches) for easy patient access. Both the bed and the optional pallets, along with such features as easy field of view indicators, a built in patient bed ruler, reconfigurable arm supports, brain SPECT head holder, and cardiac armrests provide patient comfort during the scan.
- The patient bed can be configured with right- or left-side patient access to accommodate site-specific installation requirements. The bed is easily removed for rail-free access to imaging patients on gurneys or wheelchairs. It comes equipped with a head holder, a cardiac arm rest, a built-in patient bed ruler, and a contoured patient pad. Also, the ECG connector and power outlet are located at the base of the patient bed where an external ECG monitor can be connected.
- The cardiac arm rest provides a comfortable resting area for the patient's elbows when positioned over the head, thus reducing patient movement during acquisition. The head holder, which mounts to the top of the patient bed pallet's front end, supports the patient's head and reduces head movement during brain scanning. Optional dedicated pallets for pediatric and scintimammography applications are also available.

1. Width: 88.9 cm (35.4 in.)
2. Length: 251.5 cm (99 in.)
3. Weight: 253 kg (562 pounds)
4. Height: 109.2 cm (43 in.)
5. Vertical Motion Range: 48.3-110.5 cm (19.0-43.5 in.)
6. Maximum Vertical Speed: 120 cm/min. (47.2 in. /min.)
7. Pallet Material: Aluminum
8. Pallet Thickness: 2.54 mm (0.10 in.)
9. Pallet Width SPECT: 35.6 cm (14 in.)
10. Pallet Width Whole Body: 64.8 cm (25.5 in.)
11. Attenuation @ 140 KeV: <7%
12. Max. Patient Weight: 180kg (400 pounds)
13. Max. Deflection of Patient Pallet: <3.2 mm (<.125 in.)
14. Max. Scan Length in Whole Body Mode: 202 cm (79.5 in.)
15. Horizontal Motion Range: 164.5 cm (5 ft. 4.75 in.)
16. Horizontal Motion Accuracy: 0.4 mm (0.016 in.)
17. Maximum Horizontal Speed: 240 cm/min. (94.5 in. /min.)
18. Minimum Horizontal Speed: 0.1 cm/min. (0.040 in. /min.)

#### 5) ECG Input

- TTL Signal Input
- 0 to +5 Volt
- Negative and Positive Trigger

#### 6) ECG Gating

- Forward or Forward/Backward by Thirds Framing in Planar Mode
- Forward or Forward/Backward by Thirds Framing in SPECT Mode
- Buffered Beat Window
- Bad Beat Rejection
- Number of Frames per R-R Interval or Milliseconds per Frame
- Automatic or Manual Selection of Beats Acceptance Window
- Integrated ECG Port Conveniently Plugs into Bed, Eliminating Any Cable Obstruction

#### 7) Integrated Source Holder

At the back of the e.cam gantry is the rear pallet support which is used to support the patient bed pallet as it travels through the gantry. This rear pallet support can be flipped up and out of the way when the patient bed is at its lowest position and the detector is at 0 degree rotation. The rear bed also contains the safety rail, which is used to keep personnel from moving behind the gantry where possible contact could occur with the pallet. A source holder was specifically designed to perform intrinsic quality control procedures.

8) 3.0 GHz ESOFTE computer, running Version 3.5 (newest software version)

9) 2.0 GHz SNAC (Siemens Nuclear Acquisition Computer)

10) 21" Color Viewsonic Monitor

11) Phaser 860 Color LaserJet by Xerox

12) IVY 101 Patient Monitor