ΔΕΠΑΝΟΜ Α.Ε.
ΔΗΜΟΣΙΑ ΕΠΙΧΕΙΡΗΣΗ ΑΝΕΓΕΡΣΗΣ ΝΟΣΗΛΕΥΤΙΚΩΝ ΜΟΝΑΔΩΝ

ΓΕΝΙΚΟ ΝΟΣΟΚΟΜΕΙΟ ΣΥΡΟΥ

ΠΡΟΜΗΘΕΙΑ - ΕΓΚΑΤΑΣΤΑΣΗ ΑΞΟΝΙΚΟΥ ΤΟΜΟΓΡΑΦΟΥ (CT) 16 ΤΟΜΩΝ – ΤΥΠΟΥ Α

ΜΕΛΕΤΗ ΔΗΜΟΠΡΑΤΟΥΜΕΝΟΥ ΕΞΟΠΛΙΣΜΟΥ

1. **ΚΑΤΑΛΟΓΟΣ ΕΙΔΩΝ ΚΑΙ ΠΟΣΟΤΗΤΩΝ (με τιμές προυπολογισμού, μη συμπεριλαμβανομένου Φ.Π.Α.)**
2. **ΤΕΧΝΙΚΕΣ ΠΡΟΔΙΑΓΡΑΦΕΣ**

ΣΕΠΤΕΜΒΡΙΟΣ 2013

ΔΕΠΑΝΟΜ Α.Ε.
ΔΗΜΟΣΙΑ ΕΠΙΧΕΙΡΗΣΗ ΑΝΕΓΕΡΣΗΣ ΝΟΣΗΛΕΥΤΙΚΩΝ ΜΟΝΑΔΩΝ

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ΚΑΤΑΛΟΓΟΣ ΕΙΔΩΝ ΚΑΙ ΠΟΣΟΤΗΤΩΝ
(με τιμές προυπολογισμού, μη συμπεριλαμβανομένου Φ.Π.Α.)

ΣΕΠΤΕΜΒΡΙΟΣ 2013

ΔΕΠΑΝΟΜ / Γ.Ν. ΣΥΡΟΥ

ΑΞΟΝΙΚΟΣ ΤΟΜΟΓΡΑΦΟΣ (CT) 16 ΤΟΜΩΝ - ΤΥΠΟΥ Α

ΚΑΤΑΛΟΓΟΣ ΕΙΔΩΝ ΚΑΙ ΠΟΣΟΤΗΤΩΝ

ΚΩΔΙΚΟΣ	ΕΙΔΟΣ	ITEM	ΠΟΣ.	ΤΙΜΗ ΜΟΝΑΔΑΣ (ΕΥΡΩ)	ΣΥΝΟΛΙΚΟ ΤΙΜΗΜΑ (ΕΥΡΩ)
H0L05	ΑΞΟΝΙΚΟΣ ΤΟΜΟΓΡΑΦΟΣ, 16 ΤΟΜΩΝ, ΤΥΠΟΥ Α΄	CT SCANNER, 16 SLICES, TYPE A΄	1	284.552,85	284.552,85

ΔΕΠΑΝΟΜ Α.Ε.
ΔΗΜΟΣΙΑ ΕΠΙΧΕΙΡΗΣΗ ΑΝΕΓΕΡΣΗΣ ΝΟΣΗΛΕΥΤΙΚΩΝ ΜΟΝΑΔΩΝ

ΓΕΝΙΚΟ ΝΟΣΟΚΟΜΕΙΟ ΣΥΡΟΥ

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ΜΕΛΕΤΗ ΔΗΜΟΠΡΑΤΟΥΜΕΝΟΥ ΕΞΟΠΛΙΣΜΟΥ

ΤΕΧΝΙΚΕΣ ΠΡΟΔΙΑΓΡΑΦΕΣ

ΣΕΠΤΕΜΒΡΙΟΣ 2013

Item Description

H0Q08 CT SCANNER, MULTI SLICE –16

G/D
Complete CT scanner system, state of the art slip-ring technology (continuous rotation), suitable for head and whole body scanning using
volumetric techniques. It must produce and acquire from min sixteen simultaneous slices per rotation for every scan technique. To be offered
from the latest manufacturer line of production. It should consist of the following:

OF, OC
1. X-RAY GENERATOR
High voltage generator mounted on the rotating part on the gantry permitting low voltage power transmission via the slip rings. System to
perform in wide range of kV, in order to perform all necessary clinical examinations.
Continuous or pulsed high-frequency generator with power during scanning, at least 50 kW.
Maximum voltage around 135 kV, maximum load around 400 mA .
Specify max. values of mA and KV to access the maximum power.

2. X-RAY TUBE
General: It should have two focal spots, with small dimensions; a rotating anode and automatic system for overheat protection.
Characteristics of tube:
- The Focal spots must be as small as possible.
- The anode heat capacity at least 6 MHU and the anode cooling rate min 800 KHU/min.
- Capable of a large number of scans per minute during dynamic and volumetric mode. Specify values accordingly.
-Minimum requirements continuous exposure 80sec for 120 Kv at 200mA
-Fully Guaranteed number of scan seconds, per tube: 150.000.

3. PATIENT POSITIONING
Motorized patient support, computer controlled, with longitudinal travel and variable table height to be defined. Tabletop composed of
carbon fibres with low attenuation properties. The table speed, especially for volumetric examinations, must be with selectable pitch per
rotation user selectable. The Movements should enable whole head and body examinations with accuracy of positioning ± 0.25 mm.

4. SCAN SYSTEM - GANTRY - DETECTOR
Gantry aperture of at least 70 cm and gantry tilt of at least ± 30° with high tilting accuracy. The FOV must have maximum value about 500
mm. Specify values accordingly.
The slice thickness, during acquisition, must be selectable at least in the range of 16X0.7mm to 16X1.2mm. (define all possible slice thickness).

Minimum slice thickness less than 0.7 mm , range : 0.7 –5.0 mm
To incorporate at least a large amount of solid-state detector elements in arc configuration, resulting in a large amount of detectors density /1°.
Specify values accordingly. The total efficiency of the detectors should be as high as possible.
Scan speed should be with full rotation (360°) and at least three (3) acquisition speeds. Fastest rotation, max 0.5 sec (360°).
The reconstruction FOV (Field Of View) should be variable and the maximum value around 50 cm.

5. ACQUISTION MODES
To have at least four (4) scanning modes:
- Radiographic mode: Real time digital radiograph, scannable length around 150 cm, necessary for the exact positioning of the patient.
-Serial mode
- Dynamic mode with examination protocols to be programmed for table movement, position of scanning, interscan time
-Helical or Volumetric mode : Continuous radiation with continuous table movement.
-To be capable of performing at least 100 seconds continuous rotations in order to cover a large anatomic area.
-To have wide range of table speed movement per rotation.
-To have the ability to reconstruct raw data after acquisition with reconstruction index different from that one during acquisition.
-The reconstruction rate must be equal or more than 6 images/sec (in 512 x 512 matrix)

6. IMAGE RECONSTRUCTION & ANALYSIS
The CT-scanner should be able to reconstruct images in a multi-plane manner. This means that coronal, sagital, oblique and paraxial images
should be produced, by data acquired from the axial slices.
At least one Reconstruction matrix 512x512 and at least one image display matrix 1024x1024.
The processing facilities of CT scanner should include :
1.zoom.
2.Double window facility.
3.ROI analysis and Dynamic analysis
4.Profile, histogram, grid, HU, computation of angles, CT values density etc.
5.Standard processing including
- Real-time MPR (Multi Planner Reconstruction) with CINE display
- 3D display
- CT angiography,
- Virtual endoscopy
- Injection Bolus Timing
- Cone Beam Reconstruction algorithms, small organ evaluation
- Dynamic scan evaluation
- Volume rendering.

6b. Full DICOM images, communication, with all Dicom services (querry, retrieve, print ,etc.)

7. OPTIONAL PROCESSING (To be able to accept the following options:)
Dental, Bone mineral analysis and cardiac imaging for screening purpose with measurements.

8. IMAGE QUALITY
- Spatial resolution with a minimum value of 15 lp/cm @ cut off, as high as possible and to be specified.
- Low contrast resolution max 5mm at 3HU (0,3 %)

9. IMAGE STORAGE
Image should be stored in :
Should have integrated at least one hard disk for about 200.000 images and
a CD / DVD-R or MOD for images with 512x512 matrix, USB.

10. COMPUTER
CPU unit, multi-tasking, of at least 32 bit processor. It should consist of CPU, 8 GB RAM, 19 “TFT monitor, a mouse and a keyboard. Suitable desk.

11. MEDIA INJECTOR
Single channel, automatic type, with programmable control panel. To accommodate either contrast agent and normal saline syringes or
bottles. To include contrast heating or pre-heating mechanism. Console with digital panel, allowing programmable injection rates in ml/sec or equivalent

12. U.P.S.
UPS for the electrical line stabilization with adequate electrical power for the CT computer unit

13. INTERFACES
Dicom Interfaces for connection with existing PACS, Dry camera of Hospital