

購 買 (英 文) 規 格 書
COMMODITY DESCRIPTION

關稅分類番號 H.S. NO.	品目番號 ITEM NO.	品 目 및 規 格 DESCRIPTION	單 位 UNIT	數 量 QUANTITY
		전신전산화 단층촬영장치(CT)	Sys	1

A. FEATURES :

1. Volume CT technology is a revolution in medical imaging.
providing huge gains in productivity and growing clinical applications.
2. This system supplies exceptional computer and image processing power that significantly enhances clinical productivity, building upon the strength of the true interface CT technologies.
3. This system has the revolutionary detector technology, scalable data acquisition system, and a new high performance compact gantry.
4. This system provides large volume, thin slice coverage to improve diagnostic confidence, image quality and productivity.
5. Full 360 degree rotation speed of subsecond provides improved image quality.

B. SPECIFICATIONS:

1. MultiSlice Slip-Ring Gantry 1Set
 - 1) Acquisition Technology : Photon Counting Technology
 - 2) Gantry aperture size(cm) : 82cm
 - 3) Mininum rotation time(sec) : 0.25sec
2. Patient Table 1Set
 - 1) Horizontal Scanable Range (metal-free, cm) : 200cm
 - 2) Table load capacity with accuracy(kg) : 307kg
3. X-Ray Tube Unit 1Set
 - 1) Anode heat storage capacity (MHU): 30MHU
 - 2) Focal Spot size(mm) - Small 0.4 X 0.5mm, 0.6 x 0.7mm
 - 3) Focal Spot size(mm) - Large 0.8 x 1.1mm
4. High Frequency Generator 1Set
 - 1) Max output power: 120kW
 - 2) Min kVp range : 70kVp
 - 3) Max kVp range : 140kVp
 - 4) Max mA range : 1,300mA

5. Multi-slice Detector 1Set
- 1) Detector material : Cadmium Telluride
 - 2) High Pitch Scan Protocol : 1.5pitch
 - 3) Minimum slice thickness for high resolution imaging : 0.2mm
 - 4) Maximum scan speed for motion artifact reduction : 345mm/sec
 - 5) Maximum scan speed at Spectral imaging : 345mm/sec
6. Operation console & Host computer systems 1Set
- 1) Main computer : AWP
 - 2) CPU Intel : Xeon W-1290
 - 3) Memory : 128 GByte RAM
 - 4) Hard disk : 3.84 TB
 - 5) Image storage : 2,800 GB (5,734,400 images at 512 matrix)
 - 6) 2nd image storage device : External USB 3.0
 - 7) Monitor : Dual 24" Flat LCD
 - 8) MIP, MPR, SSD including Curved MPR, MIP : Provided
 - 9) Volume Rendering Technique : Provided
 - 10) Volume viewer plus or volume evaluation and dynamic evaluation: Provided
 - 11) Scan & recon control and display, analysis, processing and management : Provided
 - 12) Automatic filming of user-selected images or series of images : Provided
 - 13) Two-way bi-direction intercom system : Provided
 - 14) Dose modulation software : CARE Dose4D
 - 15) Bolus tracking software: CARE Bolus CT
 - 16) Quickly review S/W: Provided
 - 17) Image reformat using thin axial images : Real-time MPR
 - 18) Dynamic collimator for elimination of over-radiation : Adaptive Dose Shield
 - 19) Dynamic 4D volume perfusion study: Quantum 4D imaging
 - 20) Partial scanning to reduce X-ray exposure dose-sensitive regions : X-CARE
 - 21) Automatically adjusting radiation dose to optimize dose : Flex Dose Profile
 - 22) Dedicated pediatric CT imaging : CARE Child
 - 23) Dose Reduction and high resolution image with Special Filter : Tin filter
 - 24) Metal artifact reduction algorithm based on adaptive sinogram mixing: iMAR
7. Quantum imaging IRS (Image Reconstruction Server) 1Set
- 1) CPU : Intel Xeon W7-3465
 - 2) Memory : 512 GB RAM
 - 3) Storage : 8 TB
 - 4) Reconstruction Performance : 55 ips
8. Quantum Imaging Post-processing 1Set
- 1) Multi Energy (Preparing and viewing of multi energy data)
 - 2) Iodine Map

- 3)Interactive Spectral Imaging
- 4)Auto Result Imaging
- 5)Spectral Recon Imaging
- 9.Quantum Cardiac Imaging 1Set
 - 1)Minimum cardiac temporal resolution with 1 segment : 125msec
 - 2)Prospective ECG triggered sequences : Provided
 - 3)Retrospective ECG gated spiral scans : Provided
 - 4)Percentage triggering : Provided
 - 5)ECG-synchronized volume acquisition : Provided
 - 6)Integrated ECG device : Provided
 - 7)ECG dose modulation : Provided
 - 8)Image preview, ECG editing or phase triggering : Provided
 - 9)Automatically detect the optimal phase (systole, diastole) : Cardio best phase
 - 10)Automated cardiac stack artifact reduction algorithm : Zee-Free
 - 11)Coronary calcium scoring : CaScoring application
 - 12)Virtual iodine free spectral image with high spatial resolution : Quantum PURE Calcium 1Set
- 10.Quantum HD Imaging 1Set
 - 1) Ultra-high resolution images with thin slice thickness : UHR Acquisition
 - 2) Reconstructions of images with matrix sizes of up to 1024×1024 : Precision Matrix
- 11.Quantum Pure Lumen imaging
 - 1) Virtual calcium free image based on spectral information : Quantum Pure Lumen
 - 2) Virtual iodine free image based on spectral information : Quantum Pure Calcium
- 12.Quantum Spectral Imaging 1Set
 - 1)Display monoenergetic images in the range of 40- 190 keV: Quantum Monoenergetic Plus
 - 2)Calculation of virtual unenhanced image : Quantum Virtual Unenhanced
- 13.Quantum Iterative Reconstruction 1Set
 - 1)Iterative reconstruction to spectral data produced by a photon-counting detectorsegment : QIR
- 14.Artificial Intelligence Package & 3D Camera 1Set
 - 1)AI based scan protocol setting : myExam companion
 - 2)Wireless Tablet and Remote Scan Control for mobile workflow : Scan&go
 - 3)Visual Patient Instruction : Provided
 - 4)AI powered automated workflow for patient positioning : Fast 3D Camera
- 15.CT-guided intervention 1Set
 - 1)Assists planning and guiding the needle : myNeedle Guide
 - 2)Real-time CT fluoroscopic image guidance : i-Fluoro
 - 3)The patient table is fully adjustable : Tablet dock for patient table
 - 4)For triggering scans from the examination room: X-Ray Foot Switch

- 5) Flexibly mount the tablet dock and the i-Joystick : Tablet side rails long
16. Independent server-client based post-processing hardware uplift 1Set
- 1) Server : syngo.via server
 - 2) CPU : 2x Intel Xeon Gold 32 Core
 - 3) GPU : Provided
 - 4) RAM : 1024GB
 - 5) Storage : 17TB
17. Existing applications available through 3D Post processor upgrade 1Set
- 1) Photorealistic 3D views of CT datasets through highly sophisticated photon simulations : SY Cinematic VRT
 - 2) Automated and standardized reconstructions and one-click segmentation of organs; Anatomical Range Preset; Auto View with one-click accession : ALPHA Technology
 - 3) Standardized and automated anatomical ranges and archiving, triggered from the CT scanner : Rapid Result Tech
 - 4) Calculation and visualization of time/phase dependent intensity distributions : SY Time Curve Tool
 - 5) Automatic comparison of CT Lung studies from two different timepoints and visual highlights of changes : SY Lung Change
 - 6) Auto-perpendicular measurements : SY Basic Onco Tool
 - 7) Navigation synchronized across segments, semi-automated RECIST/WHO/Volume measurement, image registration and fusion, etc. : SY MM Oncology
 - 8) Automatic labeling of rib : SY Rib Label
 - 9) Automatic labeling of Spine : SY Spine Label
 - 10) Automatic image reconstruction of spine : SY Spine Range
 - 11) Multi-modality Image fusion : SY Image fusion
 - 12) Automatic Bone Removal Software : Bone Removal
 - 13) Automated 3D volume segmentation of heart for volume measurement : CT Organ Segmentation - Heart
 - 14) Automated 3D volume segmentation of aorta for volume measurement : CT Organ Segmentation - Aorta
 - 15) Automated 3D volume segmentation of lung for volume measurement : CT Organ Segmentation - Lung
 - 16) Automated 3D volume segmentation of lung nodule for evaluation of diameter, volume and mean density in HU : CT Lung Lesion Quantification
 - 17) Tool for quick review and assess changes in the lung in two different time points : CT Lung Change
 - 18) Software for analyzing and quantifying coronary arteries disease : CT Coronary Analysis
 - 19) Software for quantifying calcified plaque in coronary arteries : CT CaScoring

- 20)Functional evaluation of heart LV : CT Cardiac Function
- 21)Visualizing software of hyper-/hypo-dense myocardial areas : CT Cardiac Function Enhancement
- 22)Evaluation software of right ventricular function : CT Cardiac Function RVA
- 23)Automated assessment of annulus plane and providing measurement and reporting tools for preparing TAVI procedures : CT Cardiac Planning
- 24)Software for analyzing and quantifying vascular disease : CT Vascular Analysis
- 25)Software for automatic vessel centerline extraction and anatomical labeling of the main vessels : CT Vascular Autotracer
- 26)Software for automatic registration and bone subtraction for head & neck angio : CT Neuro DSA
- 27)Software for providing color maps of each perfusion value of the brain lesions : CT Neuro Perfusion
- 28)Dynamic evaluation of vascular structures using 4D cine or dynamic image data : CT Dynamic Angio
- 29)Advanced colon analysis & colon wall analysis : CT Colonography
- 30)Advanced tools for CT Colonography : CT Colonography Advanced
- 31)Automatic colon polyp detection software : CT Colonography PEV
- 32)Automated segmentation of lung and highlighting low or high attenuation area of lung parenchyme : CT Pulmo 3D
- 33)CT based surgical planning tool for liver transplantation : CT Liver Analysis
- 34)Provide perfusion color map and quantification of abdomen perfusion data : CT Body Perfusion
- 35)Automated 3D Segmentation of Organs for Quantitative Volume Measurement : CT Segmentation
- 36)Automatic lung nodule detection software : CT Lung CAD
- 37)Remove bone or dense plastic from CT angiography data sets : CT DE Direct Angio
- 38)Visualize enhancement of lung parenchyma and color-coded displaying of thrombus and pulmonary arteries : CT DE Lung Analysis
- 39)Characterization of urinary stone : CT DE Calculi Characterization
- 40)Subtraction of iodine in the intracranial area : CT DE Brain Hemorrhage
- 41)Visualize contrast agent concentration in the myocardium : CT DE Heart PBV
- 42)Visualize iodine enhancement in organs and virtually create unenhanced image : CT DE Virtual Unenhanced
- 43)The visualization of uric acid crystals in extremities : CT DE Gout
- 44)Visualization & segmentation of the bone marrow & calcium : CT DE Bone Marrow
- 45)Calculate images at a certain keV level with reduced image noise : CT DE Monoenergetic Plus
- 46)Electron density and effective atomic number images and thus performs a basic

characterization of the material of interest : CT DE Rho/Z

47) Panoramic and para-axial view of oral and maxillofacial area : CT Dental

18. Additional Clinical Application Softwares 1Set

1) Generating VNCA images by subtracting calcium from the data PCCT data sets : CT DE VNCA

2) Software for analyzing and quantifying coronary arteries disease : CT Coronary Analysis

3) Remove bone or dense plastic from CT angiography data sets : CT DE Direct Angio

19. Accessories

1) Mattress 1Set

2) Mattress Protector 1Set

3) Table Extension 1Set

4) Knee/leg support 1Set

5) Head arm support 1Set

20. Local Accessories

1) Water Chiller 1Set

2) 15 평형 시스템 냉난방기 2Sets

3) Injector 2Sets

4) Client PC(For 3D) 1Set

5) Apron Hanger (5 hole) 1Set

6) Apron(Thyroid 포함) 2Sets

7) Petermann YK roll Board (Easy slider) 2Sets

8) Petermann YK roll Board cover (Easy slider 외피) 6Sets

9) CCTV 1Set

10) O2 Flowmeter 제작 2Sets

11) 기존장비 철거(이전설치용도) 원내 지정장소 이전 1Set

21. Site Equipment Facilities

1) Facility for Equipment installation 1Set

2) Operating Room Interior 1Set

3) CT Room Furniture for Operation Console 1Set

C. CONFIGURATIONS:

1. MultiSlice Slip-Ring Gantry 1Set

2. Patient Table 1Set

3. X-Ray Tube Unit 1Set

4. High Frequency Generator 1Set

5. Multi-slice Detector 1Set

6. Operation console & Host computer systems 1Set

7.Quantum imaging IRS (Image Reconstruction Server)	1Set
8.Quantum Imaging Post-processing	1Set
9.Quantum Cardiac Imaging	1Set
10.Quantum HD Imaging	1Set
11.Quantum Pure Lumen imaging	1Set
12.Quantum Spectral Imaging	1Set
13.Quantum Iterative Reconstruction	1Set
14.Artificial Intelligence Package & 3D Camera	1Set
15.CT-guided intervention	1Set
16.Independent server-client based post-processing hardware uplift	1Set
17.Existing application server-client based post processing hardware uplift	1Set
18.Additional Clinical Application Softwares	1Set
19.Accessories	1Set
20.Local Accessories	1Lot
21.Site Equipment Facilities	1Lot
22.Operation & Service Manual	each 1bk

D. REMARKS :

1. The equipment should be installation by contractor.
2. Three years warranty should be provided after the performance test.
3. Manufactured products must be delivered within one year based on the inspection date.
4. Products that are not scheduled to be discontinued within one year after delivery must be delivered.
5. A report must be submitted after conducting a preventive inspection in accordance with the hospital medical equipment inspection regulations within the warranty period.
6. Remove the old equipment to the warehouse