

Commodity Description

▶ 입찰서는 최소한의 기준사양을 알려드리오니 기준사양에 적합하거나, 그 이상의 규격을 가진 제품을 제시하여 주시기 바랍니다.

분류번호	등급	명 칭	수량	단위
A11010.01	2	전신용 전산화 단층 엑스선 촬영장치 (영문명 : Computed Tomography)	1	sys

A. Detector Technology : Photon Counting

B. 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.

C. SPECIFICATIONS

- | | | |
|---|---|-----|
| 1. MultiSlice Slip-Ring Gantry
1) Gantry aperture size(cm) : 82cm or more
2) Maxinum scan field of view(cm) : 81.5cm or more
3) Mininum rotation time(sec) : 0.25sec or less | 1 | Set |
| 2. Patient Table
1) Horizontal Scanable Range (metal-free, cm) : 200cm or more
2) Table load capacity with accuracy(kg) : 307kg or more | 1 | Set |
| 3. X-Ray Tube Unit
1) Type : Two X-ray tube
2) Anode heat storage capacity (MHU) : 30MHU or more
3) Focal Spot size(mm) - Small : 0.4 X 0.5, 0.6 x 0.7mm or less
4) Focal Spot size(mm) - Large : 0.8 x 1.1mm or more | 1 | Set |
| 4. High Frequency Generator
1) Max output power : 120kW or more
2) Min kVp range : 70kVp or less
3) Max kVp range : 140kVp or more
4) Max mA range : 1,300mA or more | 1 | Set |
| 5. Multi-slice Detector
1) Detector material : semiconductor for photon-counting
2) Minimum slice thickness for high resolution imaging : 0.2mm or less
3) High Pitch Scan Protocol with full z-axis coverage : 3.2 pitch or more
4) Maximum scan speed for motion aftifact reduction : 737mm/sec or more
5) Maximum neuro perfusion scan range : 11cm or more
6) Maximum dynamic perfusion scan range for body : 25cm or more | 1 | Set |

6. Operation console & Host computer systems	1	Set
1) Main computer : each vendor unique specification 2) CPU : each vendor unique specification 3) Memory : 128GB or more 4) Hard disk for image & raw data storage capacity : 3,840GB & 8TB or more 5) Image storage : 2,800GB or more 6) 2nd image storage device : each vendor unique specification 7) Monitor : each vendor unique specification 8) MIP, MPR, SSD including Curved MPR, MIP 9) Volume Rendering Technique 10) Volume viewer plus or volume evaluation and dynamic evaluation 11) Scan & recon control and display, analysis, processing and management 12) Automatic filming of user-selected images or series of images 13) Two-way bi-direction intercom system 14) Dose modulation software 15) Bolus tracking software 16) Quickly review S/W 17) Image reformat using thin axial images 18) Dynamic tube collimator for elimination of over-radiation in spiral mode 19) Dynamic 4D volume perfusion study 20) Partial scanning to reduce X-ray exposure dose-sensitive regions 21) Automatically adjusting kV and effective mAs settings to optimize the applied dose 22) Dedicated pediatric CT imaging 23) Dose Reduction Special Tin Filter 24) Metal artifact reduction algorithm based on adaptive sinogram mixing 25) Advanced Modeled Iterative Reconstruction 26) Large perfusion studies 27) Automatically detect the optimal phase (end-systole, end-diastole)		
7. Image Reconstruction Server	1	Set
1) Main Server system : each vendor unique specification 2) Memory : 512GB or more 3) Storage : 10TB or more 4) Reconstruction Performance : up to 55 images/sec or more 5) Number of Concurrent users : 12 users or more		
8. Cardiac Application Package (or equivalent)	1	Set
1) Minimum cardiac temporal resolution 1-segment : 66msec or less 2) Prospective ECG triggered sequences 3) Retrospective ECG gated spiral scans 4) Percentage triggering 5) ECG-synchronized volume acquisition 6) Integrated ECG device 7) ECG dose modulation 8) Image preview, ECG editing or phase triggering 9) Automatically detect the optimal phase (end-systole, end-diastole) 10) Coronary calcium scoring 11) Virtual iodine free spectral image with high spatial resolution. 12) Decrease tube current during ECG-Pulsing		
9. Dual Energy Application Package (or equivalent)	1	Set
1) Calculate images at a certain energy level for Dual energy 2) Unenhanced liver or kidney image without additional Pre-scan 3) Characterization of kidney stones 4) The visualization of lung nodules without an additional Pre-scan 5) Bone subtraction image without additional Pre-scan 6) The visualization of uric acid crystals in peripheral extremities 7) The differentiation of old and new intracranial bleedings 8) Visualize contrast agent concentration in the myocardium 9) Advanced monoenergetic Imaging (metal artifact reduction) 10) Visualization & segmentation of the bone marrow & calcium 11) Tissue differentiation based on electron density and effective atomic number 12) Dual Energy scatter plot application to visualize the energy dependencies of material 13) Dedicated Metal artifact reduction for DE(Not monochromatic) 14) Fatty liver analysis using dual energy dataset		

10. Unique itmes (or equivalent)	1	Set
1) AI based scan protocol setting : myExam Companion 2) Wireless Tablet and Remote Scan Control for mobile workflow : Scan&GO 3) Visual Patient Instruction (VPI) : CARE Breathe 4) AI powered automated workflow for patient positioning : FAST 3D camera 5) Advanced Cardiac reconstruction : ZeeFree 6) Detect individual photons and measure their indivisual energy at full FoV : Quantum Spectral Imaging 7) Quantum PURE Lumen Imaging 8) Quantum PURE Calcium 9) Quantum Cardiac Imaging 10) Quantum HD Imaging 11) Quantum Iterative Reconstruction 12) Metal artifact reduction 8 algorithms based on adaptive sinogram mixing : Tin Filter 13) Advanced reconstrucion signal enhancement : Adaptive Signal Boost		
11. Accessories	1	Lot
Refer to the addendum		

D. CONFIGURATIONS

1. MultiSlice Slip-Ring Gantry
2. Patient Table
3. X-Ray Tube Unit
4. High Frequency Generator
5. Multi-slice Detector
6. Operation console & Host computer systems
7. Image Reconstruction Server
8. Cardiac Application Package
9. Dual Energy Application Package
10. Unique itmes
11. Accessories
12. Service Manual

E. REMARKS

1. Supplier or contractor should be responsible for installation of this equipment.
2. The warranty for the equipment is three years after inspection (including all components except those specified as consumables).
3. An annual inspection of all components must be conducted at least once a year until the equipment is decommissioned, and the results must be submitted in writing to the medical engineering team.
4. The warranty period for parts supplied for a fee after the warranty period ends will be one year.
5. Before the end of the warranty period, a full inspection of the equipment must be carried out, and any defective parts and components must be restored to normal condition. The battery must be replaced regardless of its condition.
6. Service passwords, hardware keys, and other encryption systems necessary for using and maintaining the equipment must be provided. If encryption systems cannot be provided, technical support must be offered free of charge at any time.
7. All service activities, including preventive maintenance, must be reported to the medical engineering team before work, and confirmation from the medical engineering team must be obtained after work. Any service that is not confirmed by the proper procedures will be considered invalid.
8. The service manual must include circuit diagrams and information necessary for post-maintenance. If not submitted, the warranty period will be extended by one year. (If the circuit diagram is not included, alternative A/S information recognized by the medical engineering team must be provided.)
9. This configuration includes all options available from the supplier. Any additional or confirmed options before delivery must be included in the final delivery.
10. Maintenance training must be provided to the medical engineering team personnel at the supplier's expense, covering the following : Theory + Practical Training (The training location and schedule will be mutually agreed upon.)
11. The supplier shall provide training necessary for the operation of the supplied equipment.