

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. FEATURES

1. This system is a high-performance whole-body multi-slice CT system suitable for routine and advanced diagnostic examinations.
2. This system provides high-speed data acquisition, image reconstruction, and image processing capabilities for efficient and consistent clinical workflow.
3. This system is equipped with a multi-row detector, a high-capacity data acquisition system, and a large-bore gantry suitable for various patient sizes and clinical applications.
4. This system provides wide-range volumetric data acquisition and thin-slice reconstruction for high-resolution axial, multiplanar, and three-dimensional imaging.
5. This system provides rapid continuous 360-degree gantry rotation, advanced image reconstruction, and radiation dose optimization functions to maintain diagnostic image quality and examination efficiency.

B. SPECIFICATIONS

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|--|---|-----|
| 1. Gantry
1) Gantry aperture size(cm) : 80cm or more
2) Maximum scan field of view(cm) : 50cm or more
3) Minimum rotation time(sec) : 0.27sec or less | 1 | Set |
| 2. Patient Table
1) Horizontal Scanable Range (metal-free, cm) : 200cm or more
2) Table load capacity with accuracy(kg) : 300kg or more | 1 | Set |
| 3. X-Ray Tube Unit
1) Type : each vendor unique specification
2) Anode heat storage capacity (MHU) : 30MHU or more (equivalent value acceptable)
3) Focal Spot size(mm) - Small : 0.4 X 0.5, 0.6 x 0.7mm or equivalent
4) Focal Spot size(mm) - Large : 0.8 x 1.1mm or equivalent | 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 : 1,000mA or more | 1 | Set |
| 5. Multi-slice Detector
1) Detector material : each vendor unique specification
2) Maximum number of slice per 360° rotation : 128 slice or more
3) High Pitch Scan Protocol : 1.5 pitch or more | 1 | Set |
| 6. Operation console & Host computer systems (or equivalent)
1) Main computer : each vendor unique specification
2) CPU : Intel Xeon or equivalent
3) Memory : 96GByte RAM or more
4) Hard disk for image & raw data storage capacity : 4.8TB or more
5) 2nd image storage device : External USB 3.0 or equivalent
6) Monitor : each vendor unique specification
7) Recon Time : Up to 80 images/sec or more
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 | 1 | Set |

17) Image reformat using thin axial images		
18) Latest generation reconstruction algorithms		
19) Perfusion studies and dynamic studies		
20) Automatically detect the optimal phase		
21) Functions to improve workflow - Image reformat using raw data		
22) Partial scanning to reduce direct X-ray exposure for breast, eyelens		
23) Auto optimal dose(kV, mAs) setting to improve image quality and CNR		
24) Dedicated pediatric CT imaging, including 70 kV scan modes		
25) Dose Reduction Special Filter		
26) Metal artifact reduction algorithm based on adaptive sinogram mixing		
7. Cardiac Application Package (or equivalent)	1	Set
1) Minimum cardiac temporal resolution 1-segment : 125msec 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		
8. Clinical Application Package (or equivalent)	1	Set
1) Automated anatomic landmark AI Landmark Parsing of Anatomy		
2) Automated vessel centerline and auto-labeling of CPR		
3) Automated spine recon CPR and auto-labeling vertebrae body		
4) Automated rib recon and rib cage spread out in one plane		
5) Automated bone free VRT reconstruction		
6) Virtual visualization of airways and intestines		
7) Lesion measurement and WHO for oncology		
8) Automated Lung nodules segmentation and Lung-RADS guidelines		
9) Calcium Scoring Software		
10) Cardiac application package - range, coronary tree, Heart isolation		
11) Automated bone free visualization for neurovascular assessment		
12) Automated assessment of neuro perfusion include Tmax evaluation		
13) Automated Alberta Stroke Program Early CT Score for early ischemic		
14) Chest pulmonary computed aided diagnosis software		
15) 4D Imaging and blood 4D flow evaluation software or ITFlow		
9. Dual Energy Package (or equivalent)	1	Set
1) Dual Energy technology		
2) Preparing and viewing of Dual Energy data		
3) Calculate images at a certain energy level		
4) Highlighting & Subtracting of bone structures bones		
5) Lung isolation, Color-coding, Iodine uptake quantification		
6) Visualization of the chemical composition of kidney stones		
7) Differentiate hemorrhage from contrast agent		
8) The generation of an unenhanced image		
9) Color-coded visualization of uric acid crystals in peripheral extremities		
10) Improved algorithm for enhanced image quality & iodine contrast		
11) Color-coding of bone marrow, Evaluation of diffuse tumor infiltrations		
10. Artificial intelligence Application Package (or equivalent)	1	Set
1) AI based scan protocol setting		
2) Remote Scan Control for mobile workflow		
3) Patient observation camera		
4) Visual Patient Instruction (VPI) visual guidance for patient breathhold		
5) AI based automatic patient positioning with three-dimension camera		

11. Accessories (사용자 협의 필수)	1	Lot
1) 조영제 Dual Injector / 2nd monitor 필수	1	Set
2) 조영제 온장고(보관함)	1	Set
3) 조정실 책상 / 보조책상 / 서랍장	3	Set
4) 의자	3	Set
5) 촬영실 인테리어 및 가구(촬영실 물품장 일체포함)	1	Set
6) Apron hanger	1	Set
7) CCTV & Monitor / 녹화 기능 포함 (사용자협의 필수)	3	Set
8) 촬영실 바닥 안전바 ("↔"자형)	1	Set
9) Easy-Slider	2	Set
10) Roll board sliding cover	2	Set
11) 향온항습기	1	Set
12) 3D 작업용 PC	2	Set
13) Additional license for the 3D/advanced post-processing workstation (in use at the hospital)	2	ea
14) 판독용 모니터(Dual)	4	Set

C. CONFIGURATIONS

1. Gantry
2. Patient Table
3. X-Ray Tube Unit
4. High Frequency Generator
5. Multi-slice Detector
6. Operation console & Host computer systems
7. Cardiac Application Package
8. Clinical Application Package
9. Dual Energy Package
10. Artificial intelligence Application Package
11. Accessories
12. Service Manual

D. 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.