

**TECHNICAL SPECIFICATIONS FOR  
HELICAL (SPIRAL) CT SCAN UNIT  
(Includes the supply, delivery, installation  
and commissioning of unit)**

**Application/Use**

Head/spines and body imaging including contrast studies

**Standard Composition**

- Gantry
- Patient Support/Couch
- Console
- Image Collection and Processing
- Scan Parameters
- Data/Image Storage
- Accessories
- Power Requirements
- Other Requirements
- Other Terms and Conditions

**Technical Specifications**

			Bidder's Offer (Please check if available)
<b><i>Gantry</i></b>	Gantry aperture	70 cm or better	
	Gantry tilt	-30° to +20° or better	
	Controls	Located on either or both sides of the gantry	
	X-ray tube assembly	Dual focus	
		Maximum tube voltage: 130 kV or higher	
		Anode heat storage capacity: 3.4 MHU or higher	
		Maximum tube current: 200 mA or higher	
	Digital read-out	Couch and gantry positions/settings	
Laser positioning lights	Sagittal, coronal and z-axis		
<b><i>Patient Support/Couch</i></b>	Table swivel angulation	±12° or better	
	Horizontal travel	180 cm or higher	
	Vertical travel	54 cm or higher	
	Scanning range	100 cm or higher	
	Controls	Remote from the console	
		Located on either or both sides of the gantry	
Couchtop movement system	Motor driven or manual		

Technical Specifications continued . . .

			Bidder's Offer (Please check if available)
<b>Console</b>	Operating panel/ Control desk	Displays all scanning parameters	
	Keyboard	With integrated function keys and mouse control or trackball	
	TV monitor	High resolution 14" diameter or bigger	
	Functions	Selection of scan parameters	
		Remote control of couchtop movement	
		Gantry tilt	
		Window level and window width adjustment	
	<b>Image Collection and Processing</b>	Reconstruction matrix	512 x 512 or better
Image display		Display matrix: 512 x 512 or better	
		Window width: continuously variable	
		Window level: continuously variable	
		Multiple image display	
		Three-dimensional (3D) display of images	
Image processing		Image retrieval: Display images can be changed from patient to patient or from image to image for the same patient using the keyboard or on-screen menus	
		Scanogram Processing: <ul style="list-style-type: none"> <li>• Slice position display</li> <li>• Anatomical scale</li> <li>• Slice position setting</li> <li>• Enlargement/zooming</li> </ul>	
		CT image analysis: <ul style="list-style-type: none"> <li>• ROI setting and processing</li> <li>• Measurement of distance and angle between 2 positions</li> <li>• Histogram</li> <li>• CT number display</li> <li>• Volume calculation</li> <li>• Profile</li> </ul>	
		CT image processing: <p>Continuously selectable image magnification</p> <p>Multi-frame display</p> <p>Addition/Subtraction between images</p> <p>Comment and annotation insertion</p> <p>Top/bottom, right/left, black/white reversal of image</p> <p>Image filtering</p> <p>Multiplanar reconstruction/reformatting</p> <p>Image stacking</p> <p>Image annotation and labeling</p>	

			Bidder's Offer (Please check if available)
<b>Scan Parameters</b>	Scan region	Whole body, including head	
	Slice thickness	5 thicknesses, minimum of 1.5 mm	
	Scan modes	Conventional single slice axial scanning	
		Dynamic scanning	
		Spiral scanning	
		Helical (Spiral) scanning	
		Fast/rapid scanning	
		Volumetric scanning and/or other modes	
<b>Data/Image Storage</b>	Digital film documentation	Manually or software controlled	
	Magnetic hard disk	1.5 GB capacity or higher	
<b>Accessories</b>	Set of QC phantoms		
	Headrest support		
	Adult and baby headrests		
	Wedges high and low		
	Headbands		
	Body straps		
	Knee support		
	Arm supports (elbow and shoulder level)		
	Shoulder lowering strap		
	Leg support accessory		
	Table extension		
	Direct coronal headrest		
	Automatic injector		
	2 pcs Lead rubber apron	at least 0.25 mm	
	Lead glass	at least 80 cm x 50 cm , 2 mm Pb equiv.	
	Laser camera imager		
	Automatic film processor	- heavy duty - compatible with the laser camera imager	
	Sensitometer and densitometer	for monitoring of film processor and film imager	
<b>Power Requirements</b>	Three phase		
	220 VAC		
	60 Hz		
<b>Other Requirements</b>	1 air-conditioning unit	A split type, 3-ton capacity, 220 VAC, 60 Hz, with automatic voltage stabilizer, 60 Hz, 170-260 V voltage range	
	1 unit automatic voltage stabilizer	60 Hz, 170-260 V voltage range for the whole x-ray unit	
	1 unit dehumidifier		
	Two sets of the ff: • operation and instruction manuals • service and installation manuals • wiring and schematic diagrams • parts listing • tube rating charts anode cooling curves		

Other Terms and Conditions	To be checked by the bidder
Three (3) years warranty for parts and service after passing the acceptance testing of the Radiation Health Service (RHS), Department of Health (DOH)	
Certificate showing that the supplier will provide preventive maintenance visits quarterly during the warranty period	
Must comply with the applicable requirements under DOH Administrative Order (AO) No. 35, s. 1994	
Bid offer is in Philippine peso to include taxes and duties; transportation to site, delivery, installation and testing expenses on site (hospital)	
Equipment must pass the acceptance testing of the RHS, DOH as provided in the DOH AO No. 21, s. 1996 dated 04 June 1996	
Supplier must provide orientation training for users and maintenance personnel of the hospital locally and abroad (These can be specified how many personnel and how long is the duration).	
Certification of manufacturer guaranteeing the availability of all spare parts for the next ten (10) years	
Inventory of spare parts for the unit/model offered duly signed by the principal	
Certification that the supplier has the capability for corrective and preventive maintenance of the unit	
Certificate/s of training for engineers/maintenance service personnel in model offered	
Certificate of sole distributorship from the unit manufacturer mentioning the name of the Philippine representative	
Certification of manufacturer guaranteeing delivery of equipment and all accessories	
Delivery together with the x-ray unit of the following: <ul style="list-style-type: none"> <li>• One (1) pc circuit breaker</li> <li>• One (1) pc extension board for troubleshooting</li> </ul>	
The unit should conform to the International Electrotechnical Commission (IEC) standards or its equivalent	
Certificate of Philippine Securities and Exchange Commission (SEC) registration	
Certification of guaranteed uptime for the equipment offered	
The supplier must submit the original brochure.	
Supplier to submit cost of service contract for parts and labor after the warranty period	
Supplier must provide and install a dedicated grounding system for the equipment	
Supplier must be accredited as a supplier of x-ray equipment by the DOH Accreditation Committee for Medical Equipment	