

**TECHNICAL SPECIFICATIONS FOR
DUAL HEAD GAMMA CAMERA UNIT
(Includes the supply, delivery, installation
and commissioning of unit)**

Application/Use

- Thyroid, heart and small organs studies
- Brain, SPECT and total body studies

Standard Composition

- Gantry
- Detector
- Collimator
- Operator Console
- Imaging Couch and Rail
- Recording Medium
- Accessories
- Other Requirements
- Other Terms and Conditions

Technical Specifications

			Bidder's Offer (Please check if available)
Gantry	Can hold two detectors		
	Moves along the rail		
	Emergency switch		
	Remote Hand Control Device		
	Movement	Motor driven	
	Digital read-out for:	Gantry translation: -30 to 200 cm or better	
		Gantry rotation: -185° to +185° or better	
		Gantry rotation speed: 4 rpm, 24° per sec or better	
		Detector 1 and 2 rotation: -45° to +180° or better	
		Couch movement	
Power Source	Single phase, 220 VAC, 60 Hz		
Detectors	2 NaI material	180° apart	
		Not less than 55 cm x 43 cm	
		Effective field of view (FOV): 51.2 cm x 37 cm or better	
		Energy range: 50 keV to 610 keV or better	
		Intrinsic resolution: 3.2 mm FWHM (CFOV) at Tc 99m or better	
		Energy resolution: 10.6% at 140 keV or better	
		Not less than 59 tubes per detector	

Technical Specifications continued . . .

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Collimator	Contact sensing device	To assure patient safety	
	Warning device	For improperly mounted or mismatched collimators	
	Types	Low energy, high resolution	
		Medium energy, high resolution	
		High energy, high resolution	
		Low energy, general purpose	
		Pinhole	
Low energy, super high resolution			
Operator Console	Central Processing Unit	32 bit, 20 MHz or higher	
		mobile	
		Main memory capacity: not less than 20 MB	
		Image processing memory: not less than 32 MB	
	Display System	2 units 16" VGA color monitor for digital and analog display or better	
	Floppy Drive	1.44 Mbyte	
		3.5"	
	Disc Drive	1 Gbyte, 10 Mbytes/sec or bigger	
	Mouse	Optical 3 button	
	System	Windows	
	Keyboard		
	Magnetic Disk	Storage capacity: 702 MB (unformatted) or higher	
Magnetic Tape Unit	Storage capacity: 150 MB (for each type) or higher		
Emergency Switch Box			
Imaging Couch and Rail	Movement	Vertical: 84 to 109 cm from floor or better	
		Horizontal: up to 182 cm or better	
	Material	Carbon fiber	
	Thickness	Not more than 3.8 cm	
	Size	Not smaller than 35 cm x 200 cm	
Motions	Microprocessor driven		
Recording Medium	Multiformat Camera	Loading of film: cassette type	
		Film sizes: 8" x 10", 14" x 14" or more	
		No. of films in cassette: 2 sheets or more	
	Magneto-optical Disk Unit	Capacity: 600 MB or greater	
	Color or B/W Printer	Memory: 1 MB or greater	
Power requirement: 220 V AC, 60 Hz, 1 phase			
Accessories	Head Rest		
	Foot Rest		
	Cardiac Arm Rest		
	Arm Rest		
	Test Phantoms	Flood source phantom (for uniformity and other QC tests)	
		Linearity and spatial resolution test phantom	

Technical Specifications continued . . .

			Bidder's Offer (Please check if available)
Accessories		Multiple window spatial registration count rate performance lead pot holder with 20 pieces filter copper absorbers	
		Lead mask (for intrinsic QC tests)	
		Lead pot with a thin copper window (source holder for energy resolution, uniformity and other QC tests)	
		SPECT phantom	
		Network Adapter	
		Electronics Rack	For loading and changing collimators
		Mobile Cart	
Other Requirements	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 unit	
	One (1) unit dehumidifier		
	Two sets of the following: <ul style="list-style-type: none"> • operation and instruction manuals • service and installation manuals • wiring and schematic diagrams • parts listing 		

Other Terms and Conditions		Bidder's Offer (Please check if available)
Two (2) years warranty for parts and service after passing the acceptance testing of the Radiation Health Service (RHS), Department of Health (DOH)		
Must comply with the applicable requirements of the Philippine Nuclear Research Institute (PNRI) of the Department of Science and Technology (DOST)		
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 on site orientation training for users and maintenance personnel of the hospital		

Other Terms and Conditions continued . . .

Other Terms and Conditions	Bidder's Offer (Please check if available)
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 (from the manufacturer)	
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 (must be valid)	
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"> • One (1) pc circuit breaker • One (1) pc extension board for troubleshooting 	
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 be accredited as a supplier of x-ray equipment by the DOH Accreditation Committee for Medical Equipment	