Technical Specification Flat Panel digital detector (Digital Radiography)

S. N.	Purchaser's Specifications (Sadananda Mun FY:2081/82)	Bidder's Compliance sheet		
	Flat Panel digital detector	Yes/No	Page no.in catalogue	Remarks
	Manufacturer			
	Brand			
	Type/Model			
	Country of Origin			
1	**Operational Requirements**			
	Flat Panel digital detector with work station should be provided. It shall be suitable for adult and pediatric patients in general radiography examination.			
	The flat panel detector should be wired and Wireless both.			
	DR Workstations with fully integer Sedated console for image acquisition, processing, viewing and archiving. Maintain and manage data bank of all patient and image data. Retrieve and reproduce accurate, high-quality high-resolution images from stored data without loss of image quality.			
2	**System Configurations**			
	Detector:01			
	Imaging Workstation:01			
	Dry view imaging Laser printer : Double tray (film based):01			
3	**Technical Specifications**			
	Flat Panel Detector:			
	Flat Panel digital detector with work station should be provided. It shall be suitable for adult and pediatric patients in general radiography examination.			
	The Flat Panel should be a Retrofit Solution and capable to work with any of the X-Ray available in Department.			
	Detector Panel shall be made of amorphous Silicon with CsI or similar modern technology detector			
	Automatic Exposure Detection.			
	Image Matrix Size Approx. 3000*3000 Pixel or more			
	Flat Panel Detector Size of at least 43X43 cm			

	The detector should be light weight (less than 3.5Kgs) including battery.			
	Spatial resolution of 3.5 LP/mm or better.			
	The Pixel size : 140μ or lesser			
	Should have a minimum image depth of 16 bit.			
	Preview time after exposure 5 sec or less.			
	Storage Capacity: 100 images or more			
	Battery Backup: Minimum 5 Hours or more.			
	Point load Capacity: 180 kg or more			
	The Detector should have replaceable Lithium Ion or polymer battery.			
	Water Resistance: IPx or better			
4	**Imaging Workstation:**			
	Workstation shall have core i5/i7 with high speed processor, latest operating system, Latest model processor, RAM – 4GB, HDD – 500GB, latest windows 10 32/64bit. Display Monitor: at least 21" size			
	Operating console must have STANDARD Image Manipulation/Post Processing Software facility for patient identity entry, viewing and processing images, documentation.			
	DICOM work list, DICOM Print, DICOM Storage should be available			
5	**Imaging Printer (film based):**			
	The system must have at least two online film sizes, and should be capable to print on any of the 8" x 10", 10" x 12", 14" x17" sizes.			
	Printer should have dry Laser image Technology, compatible with DICOM and PACS without loss of information, allowing multiple modalities to be connected at a time.			
	Throughput: 70 films or more			
	DICOM Compatible			
	Docked in processor.			
	Resolution > 500 DPI.			
	Multiple Image and slide printing capability.			
	Contrast: 14-bit contrast resolution or more.			

6	Accessories, Spare Parts and Consumables			
	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and Extra batteries for detector with Charger, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).			
7	**Operating Environment**			
	The system offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.			
	Power supply: 380-415VAC 3 phase 50Hz fitted with appropriate plug for X-ray generator and 220 – 240 VAC, Single phase 50 Hz, fitted with appropriate plug for other units.			
8	**Standards & Safety Requirements**			
	Must submit ISO 13485:2003			
	Must submit CE (93/42 EEC Directives) **AND** USFDA approved product certificate For Detector.			
	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).			
9	**User Training**			
	Must provide user training (including how to use and maintain the equipment).			
10	**Warranty**			
	Comprehensive warranty for 1 year.			
	The bidder must perform PPM every 6 months during the warranty period.			
11	**Maintenance Service During Warranty Period**			
	During warranty period supplier must Maintenance &corrective/breakdown maintenance whenever required.			
	Manufacturer shall commit the availability of spare parts and consumables and accessories for at least 3 years.			
12	**Installation and Commissioning**			

		The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in Advance, in detail.			
13		**Documentation**			
		User (Operating) manual in English.			
		Service (Technical / Maintenance) manual in English.			
		List of important spare parts and accessories with their costing.			

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