

Technical Specification of X-Ray Machine 500mA with Digital Radiography System

S.N.	Purchaser's Specifications	Bidder's Offer		
		Yes /No	Ref Docs Page No.	Remarks
	X-RAY 500mA with DR System			
	Manufacturer			
	Brand			
	Type/Model			
	Country of Origin			
	Description of Function			
1.1	A general X-Ray Machine 500mA & Digital Radiography System			
	Operational Requirements			
2.1	It shall be suitable to be used for adult and pediatric patients in general radiography examination.			
	System Configuration			
3.1	500 mA X-Ray Machine			
3.2	Multiposition Table			
3.3	Wireless Flat Panel Detector System.			
3.4	Printer			
	Technical Specifications			
	4 X-Ray System			
4.1	X-Ray Generator			
4.2	Should be Line frequency X-Ray generator			
4.3	Should have Digital Display of KV, mA, mAs			
4.4	Output power 40KW or more			
4.5	KV Range- 40 to 125KVp			
4.6	mA range-50 to 500mA			
4.7	mAs range- 1 to 500 mAs			
4.8	Should have Over-Load Indication			
4.9	X-Ray Tube			
4.10	Should consist of Rotating anode			
4.11	Focal Spot Approx Small 1.0 mm x 1.0 mm, Large 2mm x 2mm.			
4.12	Anode heat capacity should be 140 KHU or more			
4.13	Floor Mounted Tube Stand			
4.14	Floor to Ceiling Stand			
4.15	Column Movement could be arrested by Foot Lock			
4.16	Column Height: Approx. 2200mm or more			
4.17	Column Horizontal Travel: Approx. 3100 mm or more			
4.18	Control Panel			
4.19	Should have Error Indication function in case of malfunction of X-Ray Equipment			
4.20	Display of KV, mA, mAs			
4.21	Should have switches for selection of various parameters			

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4.22	KVP increment & Decrement in step of 1KVp.			
4.23	Should have Alpha numeric LCD display.			
4.24	Should be Supplied with Multiposition Table.			
4.25	Must submit ISO13485:2003/AC:2007for Medical Devices for X-Ray System			
4.26	Must Submit CE or USFDA Certificate.			
4.27	Must Submit BIS and AERB type approval certificate forX-Ray System			
5	Flat Panel Detector System			
5.1	Amorphous Silicon (ASi) flat Panel detector			
5.2	Cesium Iodide (CSI) Scintillator and/or amorphous silicon			
5.3	Lossless AED (automatic exposure detection)			
5.4	Portable wireless approx. 14x17 inches size detector			
5.5	The detector should be light weight 3.3kg or below.			
5.6	Detector should have built in image storage option for at least 200 images or more.			
5.7	The Pixel pitch should be 150 microns or less.			
5.8	Should have a minimum AD conversion of 16 bit or more.			
5.9	Data communication should be wireless.			
5.10	The Detector must have internal AP function and system should have features to install from internal AP Features.			
5.11	System should also be supplied with external AP device.			
5.12	The Detector should have replaceable Lithium ion capacitor/ lithium Polymer battery.			
5.13	The Detector should be able to withstand surface load of 150kg.			
5.14	Detector panel should be supplied with one additional battery.			
5.15	Easy Switch from sleep mode to acquisition mode for better battery performance.			
5.16	Battery charger should be available to charge additional battery.			
5.17	Software should have DICOM & PACS connectivity as a standard feature			
5.18	DR software should have standard stitching features.			
6	Medical Printer :			
6.1	Inkjet printer			
6.2	Film Print Sizes: 8 x 10			
6.3	Single Online Tray			
6.4	Daylight film loading			
7	Certification			
7.1	Must be CE Certified & FDA for DR system			
8	Power source & Supply			
8.1	Electrical as well as generator, AC 220-240 v			

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9	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. Bidder's must specify the quantity of every item included in their offer (including items not specified above)			
10	Operating Environment			
10.1	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.			
11	User Training			
11.1	The Supplier shall conduct user training for this equipment to enable operators to use the equipment properly. The training shall include the use of all operational functions of the equipment as well as routine checks and maintenance expected by users			
12	Warranty			
12.1	Comprehensive Warranty for 1 Year after acceptance			
13	Maintenance Service During Warranty Period			
13.1	During warranty period supplier must ensure preventive maintenance & corrective/breakdown whenever required			
14	Installation & Commissioning			
14.1	The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites or installation to be communicated to the purchaser's in advance in details			
15	Documentation			
15.1	User (Operating) manual in English			
15.2	Service (Technical/maintenance) Manual in English			

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