

**TECHNICAL SPECIFICATION FOR MOBILE DIGITAL X-RAY MACHINE**

S.N.	Parameters	Technical Specification	Remarks
1	Usage	For quick radiodiagnostic investigations of bed ridden patients at bedside	
2	Features	The system should be latest brand new Digital Radiography Mobile X-ray system with wireless detector.	
		The system should be high frequency inverter type.	
		The machine should be motor driven having forward, backward and brake mechanism with manual option upon motor failure.	
		It should have electromagnetic locking device.	
		It should be electrically grounded.	
		The generator should have rating of 25 KW or higher.	
		It should have overload protection system.	
		It should have output of 300mA or more.	
		It should have rotating anode and dual focus x ray tube.	
		The system should have self diagnostic mode with error code display.	
		The system should have precise mA and kVp control.	
		It should have a digital display of mAs and kVp on touch control panel.	
		It should have full post-processing software	
		It should contain KV selection range from 40 – 125 kVp or more with increment of 1kVp.	
		It should have indicator for x- ray exposure and ready state.	
		It should have exposure hand switch with at least 2 meters cord	
		It should contain audible alarm during exposure.	
		It should contain shielded cassette storage compartment for detector.	
		It should have multi-leaves collimator, manually controlled with field lamp and cross hair centering and SID measurement scale.	
		The x ray tube should be able to perform cranial and caudal angulation of +/- 180 or more. The tube should be able to rotate 90 forward or more .	
It should have vertical movement and lateral movement of + /- 180 or more along the X-ray tube axis			
Detector should be wireless, battery powered, chargeable and made of cesium iodide.			
The detector should have size of 14 x 17 inch or more.			
The image viewing time after exposure should not be more than 10 sec on the integrated image display.			
Image display monitor should be 15" or more.			
The company should provide latest imaging software and all necessary hardware to smoothly run the software for free. The licence required to operate the system should be provided for free.			
The system should be DICOM 3 compatible and should support PACS system.			
The system should be compatible with Dry chemical less printer and should have outlet for connection to printer.			

		The system should be able to export the image to a external storage device.	
		The system should have touch panel display monitor.	
		The system should have storage capacity of at least 3000 images or more.	
3	Power supply	220 VAC, 50 Hz, fitted with appropriate plug. The length of power cord should be at least 3 meters.	
4	Standard	Bidders should submit valid ISO and CE or FDA approved certificate	
5	Accessories	The system should be provided with one UPS back up of at least 15 minutes.	
		Two sets of Lead apron, lead goggles with thyroid shield at least 0.5 mm lead equivalent, each, should be provided.	
6	Terms and Conditions	The X Ray machine should be brand new with the latest technological software and protocols.	
		The date of manufacture should not be more than two years at the time of delivery	
		Bidding / Supplying company should provide an original authorized letter, signed and stamped from the manufacturer (not from second party) certifying that they are the authorized local agents for that particularly X Ray Machine company (Manufacturer).	
		Original catalogues and datasheets should be submitted.	
		Bidder should supply user manual in English	
		Bidder should supply service (maintenance) manual in English	
		Manufacturer and supplying company should provide assurance letter for spare parts availability for at least 10 years.	
		The manufacturer / company's trained engineer should be available locally to maintain the equipment. Training certificate and assurance that local engineers are capable to repair the equipment from the manufacturing company for the sold equipment should be provided.	
		Should provide user training on how to use and maintain the equipment	
		Should provide maintenance training to the maintenance team	
		The supplied equipment should have a minimum warranty and guarantee (including spare parts) of two years from the date of installation.	
After completion of warranty and guarantee period, supplying company should be able to provide comprehensive maintenance (maintenance and spare parts) for a period of at least another 8 years (if requested to do so).			
		Supplier should install the machine at local site for free of cost	