



# Ministry of Health

Directorate of Biomedical Engineering

## Technical Specifications for Radiographic Equipments



**Item Description:** Ultrasound Scanner With Color Doppler  
And Cardiac Application

**Class No.:** ( )

**Item No.:** ( 1 )

**Qty.:** ( 1 )

No.	Technical Specifications	Min MOH Requirement	Bidder offer
1.	Manufacturer	Please specify manufacturer and country of origin	
2.	Model number	Please specify model number	
3.	Safety standard	FDA Approval or CE marking	
4.	Design	<ul style="list-style-type: none"><li>- Mobile System on four casters ,two with brakes</li><li>- Gel Warmer</li></ul>	
5.	Type of system	Advanced Digital system,. High end	
6.	Application	Abdominal, Vascular, Cardiac, Small parts, MSK hip ped joint , Shearwave Elastography as minimum .	
7.	Scanning techniques	<ul style="list-style-type: none"><li>1) Electronic convex scanning</li><li>2) Electronic linear scanning</li><li>3) Electronic phase scanning</li></ul>	
8.	Monitor	-High resolution color (medical grade ) with size not less than 21" with tilt , swivel, security lock mechanism for transportation	
9.	Control Panel	<ul style="list-style-type: none"><li>-Touch screen control panel</li><li>-Alphanumeric Keyboard with built in trackball</li></ul>	
10.	Display Modes	B, B/B , M , B/M , CW, CFM , PWD Duplex, Power Doppler, Tissue Harmonic imaging , Duplex, Triplex needle recognition, contrast image, real time 4D, & shearwave Elastography (Liver & breast).	
11.	Gray Scale	256 levels	
12.	Image Depth for all probe	<ul style="list-style-type: none"><li>-Convex 40cm min</li><li>- Linear 14cm min</li><li>- phased array 28cm min</li></ul>	
13.	Dynamic Range	300 dB min.	
14.	Frame Rate	2000 fps min.	

**Note :** Bidder must answer with YES or NO in the "BIDDERS OFFER" Field

Equipment Distribution Locations: م الاميرة بسمة الجديد

**: Ultrasound Scanner With Color Doppler and Cardiac Application**

No.	Technical Specifications	Min MOH Requirement	Bidder offer
15.	Image Control	Gain , TGC , Zoom , shift pre and post processing , Doppler angle	
16.	Processing Channels	10,000,000 channels or better	
17.	M -mode Sweep Speed	6 steps or better	
18.	Presets	10 or better	
19.	Cine Memory	Included	
20.	Automatic Gain Control	Included	
21.	Dual view Real -Time Color & 2D images	Included	
22.	Real -Time Compound Imaging	Included	
23.	Panoramic View	Included	
24.	System capacity	HDD or equivalent not less than 1T GB, USB flash drive	
25.	Measurements	- Real time -Distance ,Area ,Volume ,Angle , cardiac & vascular measurement , hip joint(angle & ratio)	
26.	Calculation	Calculation packages for abdominal ,vascular, Urology, cardiac and OB/Gyn. as min.	
27.	Networking capabilities includes	DICOM protocols including send ,query , retrieve and print	
28.	Probe Active Ports	Minimum Four	
29.	Probe Holder	Minimum five	
30.	Probe cable hanger	Included	
31.	Probe Technology	Wideband , no of elements multi-frequency for probe: -convex 192 no of elements min -Linear 192 no of elements min - phased array 80 no of elements min	

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Cont. : *Ultrasound Scanner With Color Doppler and Cardiac Application*

No.	Technical Specifications	Min MOH Requirement	Bidder offer
32.	Type of probes wanted, with B mode operating frequencies (Must be included)	<ul style="list-style-type: none"> <li>- Linear Probe 5 – 8 MHz Vascular with biopsy kit</li> <li>- Linear Probe 7 – 15 MHz superficial with biopsy kit</li> <li>- Convex Probe 2 – 5 MHz with biopsy kit</li> <li>- Ultra band phased array 2-4 MHz (adult/pediatric)</li> </ul>	
33.	Printer	<ul style="list-style-type: none"> <li>- Digital B/W Printer fixed to the cart</li> <li>- 100 original rolls of paper for printer</li> </ul>	
34.	Operating system software	Included	
35.	UPS on line double conversion , Specify manufacturer and model .	Sufficient Included	
36.	Power supply	220 V / 50 Hz	

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