FILE No. DCEO/GeM/AVM/ Draft 1 19.12.2018

Creator : Mr. Ajmer Singh(TA) Moderator : Shri A.V.Muralidharan (Dy. CEO GeM) Approver :Shri A K Kamra (Ad. CEO GeM)

Major category : Medical Equipment and Accessories and Supplies -UNSPSC - 42000000

Sub Category : Medical diagnostic imaging and nuclear medicine products - UNSPSC Code - 42200000

: Medical ultrasound and doppler and echo imaging products - UNSPSC Code - 42201700

Ultrasound machine with colour doppler (Portable) with integerated trolley : UNSPSC Code - 42201725 (Temp)

S.No.	Parameters	Grouping		Value 1	Value2	Value 3	Value 4	Value 5	Value 6	Golden	Validation	Whether Filter Required	priority	Unit
1	Purpose	P	E	It is suitable for abdominal, Obs./Gynae, small parts,Vascular, Musculosheletal, Anaesthesia and Emergency applications in adults & paediatric patients										
2	Ultrasound machine should be a portable standalone system integrated on a light weight mobile cart/trolley	P	E	Yes										
4	Design feature	P	E	Compact,lightweight and portable unit & must be strudy material design which able to withstand accidental hits/fails during transportation										
5	Pre Sets	P	E	Multiple preloaded as well as user configurable application presets are available										
6	Imaging Mode	P	E	High resolution 2D, Real time 3D (4D), M-mode, , spectral wave/pulsed wave, , Duplex & Triplex imaging modex, Anatomical M-mode,										
7	Measurement for 2D mode	P	E	Multiple distances, area and volume										
9	Controls for 2D Mode	P	E	Total gain,depth,TCG,dynamic range,acoustic power output										
11	Controls for pulse doppler	P	E	Variable sample volume size from 1 to 5 mm or more ,Steer,PRF,Basewline,Gain angle coorection,Spectral invert,Duplex on /off										
14	M-Mode cursor to be adjustable in any plane and allow for accurate measurements	P	E	Yes										
18	Process signals freqency	P	E	2-17 Mhz										
19	Digital channel element number	P	E	1024										
20	Digital processing channels	P	E	50000 or more										
21	Display Grey Scale	P	E	256										

22	Maximum Scanning depth in cm	D	E	30	35	more than 35								
23	Dynamic range in db	P	E								>165			
24	Frame rate in B-Mode in fps	P	E	600	650	700								
26	Display unit	P	E	LED	LCD									
27	Size of display screen in inch	D	E	7	10	12	15	19	21					
28	User interface	P	E	By ergonomic full alphanumeric soft keys keyboard with easy access scan controls & trackball with provisions available for attaching an external keyboard & mouse										
29	The system should have Tissues Harmonic imaging	P	E	Yes										
30	Scanning Probes/transducer	P	E	Convex probe, TV/TR probe, Phased (Sector) probe, Linear Probes, 4D probes, Single type probe										
31	Convex phase array probe frequency	P	E	2-6 Mhz(+/-3Mhz)										
32	Broadband Linear Array probe frequency	P	E	3-12 Mhz (+/-2Mhz)										
33	Phased (sector) type probe frequency	P	E	2- 6 Mhz(+/-2Mhz										
34	Single type probe frequency	P	E	2-18 (+/-2Mhz)										
35	All probe/transducer should be light weight	P	E	Yes										
36	Cine loop	P	E	10000 frames or more										
37	Cine loop time	D	E	60 seconds or more										
38	Cropboard function	P	E	In freeze mode										
41	Number of needles in probe provided with biopsy guide	P	E	50 needles										
42	The system should select atleast Two Levels for Better Matching Frequency Band Width	P	E	Yes										
43	Combined mode of advanced tissue Harmonic Imaging and Real time compound Imaging	P	E	Yes										
46	Should have duplex/triplex imaging possibility on the system.	P	E	Yes										
48	Should have integrated hard disk for image storage /recall	P	E	Yes										
49	Should have in built CD/DVD writer	P	E	Yes										
50	Data transfer	P	E	USB Port and LAN transfer facility										
51	Should have full functional measurement facility and calculation should be possible.	P	E	Yes										
52	The unit should have option to connect external printer.	P	E	Yes										
53	Power supply	P	E	Single Phase AC (230V, 50 Hz)										

54	Unit should be supplied with suitable UPS with a minimum 30 minutes back-up time.	P	E	Yes										
55	Should have safety certificate from a competent authority CE / FDA (US) / BIS or equivalent	P	E	Yes										
56	System must have fast start up to scanning in less than 30 seconds as essential in critical and emergency situation in ICU, emergency, OT.	P	E	Yes										
57	Facilitate advanced Echocardiography scanning for vascular assessment and for early detection of CHD using Convex & Linear Probes	P	E	Yes										
58	Availiability of Power cable compactable with Indian plug	P	E	Yes										
59	Size of Portable Ultrasound Machine without doppler with integrated trolly (Lx W x H) in mm x mm x mm	D	Text											
60	Size of Portable Ultrasound Machine without doppler without integrated trolly (Lx W x H) in mm x mm x mm	D	Text											
61	Weight of Portable Ultrasound Machine without doppler without integrated trolly in Kg	D	N											
62	Weight of Portable Ultrasound Machine without doppler with integrated trolly in Kg	D	N											
63	Type of printer supplied with machine	P	E	Black & white thermal printer	Color Printer	Not Supplied								
64	Consumables supplied with unit	P	E	Paper & Cartridges for 1000 image printouts	Not Supplied									
65	Probe holder & jelly bottle holder provided	P	E	Yes										
66	Warranty in years	P	E	1	2	3	4	5	6					
67	Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual ,abour and spares, after satisfactory completion of Warranty period	P	E	1	2	3	4	No CMC after warranty						

68	Certificate to be available from OEM/principal regarding approval of service centre maintained by seller to be availlable			Yes	No									
69	Operating temperature & humidity	P	E	10 - 40deg C and relative humidity of 15-90%										
70	Suitable UPS with 30 min backup to be supplied with equipment	P	E	Yes	Not Provided									
71	Product should be made up of high quality material, pretreated with materials providing good finish, scratch resistant, bacteriostatic coating.	P	E	Yes										
72	Product instruction manual shall be supplied	P	E	Yes										
73	Demonstration of equipment and training to be provided after completing supplies before Acceptance	P	E	Yes										
74	Certifications for product	C&R	E	US FDA(with approved document)	European CE(with approved document)									
75	Certification No. and date	C&R	Text											
76	Manufacturer should have ISO certification for quality standards	C&R	E	Yes										
77	ISO Certification No & Date	C&R	Text											
78	Copies of reports and certifications to be furnished to buyer on demand at time of supplies	C&R	E	Yes	NA									
	Mr.Ajmer Singh (TA)				**Shri A V Muralidhran (Dy**									