



# KERALA MEDICAL SERVICES CORPORATION LTD

(A Government of Kerala Undertaking)

Thycaud P.O, Thiruvananthapuram - 14, Kerala.

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CIN: U24233KL200TSGC021616, PAN : AADCK4029M, GSTIN : 32AADCK4029M1ZK

Running Contract Details	
Equipment Name	Analog Mammography
Running Contract Valid Till	29-01-2026
Tender Ref No	KMSCL/EP/T460/305B/2022
Tendered Quantity	20
Supplier Name	M/s Allengers Medical Systems Ltd.
GST No	03AABCA2332H1ZE
Installation & Delivery Period	8 Week(s)
Up-time / PM vist	95% & 4 Visits per year
Warranty period	3 Years

Supplier`s Details		
Address	Contact Details	
SCO-212-213-214 Sector 34 A Chandigarh-UT.160022	Contact Person	Sujith Babu
	Phone	
	Mobile No	9946618748
	Email	sujit.babu@allengers.net

Item-wise Price Details				
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	<b>Analog Mammography</b> <i>Model &amp; Make : MAM-VENUS+/ Allengers Medical Systems Ltd</i>	2114000 Incl.GST :12%	155907.5	2269907.5
2	Stereotactic Biopsy 3D (If needed order shall be placed separately)	1617280 Incl.GST :12%	119274.4	1736554.4
3	Cassettes 18 X 24 cms (If needed order shall be placed separately)	15400 Incl.GST :12%	1135.75	16535.75
4	Cassettes 24 X 30 (If needed order shall be placed separately)	21683.2 Incl.GST :12%	1599.14	23282.34
		<b>3768363.2</b>	<b>277916.79</b>	<b>4046279.99</b>

Annual / Comprehensive Maintenance Charges (Exl.Tax)							
Rate	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> Year	7 <sup>th</sup> Year	8 <sup>th</sup> Year	9 <sup>th</sup> Year	10 <sup>th</sup> Year
<b>Analog Mammography</b>							

<b>Annual / Comprehensive Maintenance Charges (Exl.Tax)</b>							
<b>Labour</b>	47,204.00	49,564.00	52,042.00	54,644.00	57,377.00	60,245.00	63,258.00
<b>Comprehensive</b>	94,408.00	99,128.00	1,04,085.00	1,09,289.00	1,14,753.00	1,20,491.00	1,26,516.00

### **Other terms & conditions**

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender document).
2. The supplier shall submit performance security amounting to 5.00% of the value of the supply order.
3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.
4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).
5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

### **Technical Specification**

#### **Equipment :Analog Mammography**

#### **I. General**

Mammography Machine should be ergonomically designed with iso-centric C arm

#### **II. X-ray Tube and generator**

1. High frequency generator 20 KHz ripple or more, constant potential
2. Power : 3.0KW or more
3. Rotating anode
4. Focal spot: dual; Large: 0.3mm and small: 0.1mm
5. Molybdenum target
6. KVp – 22 to 35 in increments of 0.5 KVp.
7. mA – 100mA or more
8. Max mAs 400 or more @ 30 KVp
9. Anode heat capacity should be 150 KHU or more
10. Beryllium Window
11. Molybdenum Filter
12. Digital display of KV, mAs and dose delivered in the control panel.

### **III. Exposure modes.**

1. Automatic Exposure control (AEC) should be available in 3 modes -fully automatic, Semi automatic and manual mode.
2. Should have at least three electronically user selectable detector positions for AEC
3. Should have at least six levels of Optical Density correction
4. Should have in-built AEC calibration programmes and at least three programme locations. During installation the tenderer shall calibrate as per user requirements and suit the conditions to get optimum image quality.
5. Source Image Distance: The distance from the focal spot to the image receptor should be at least 60 or 65 cms.
6. Should have automatic light beam collimation device which should automatically adjust for 18x24 cms and 24x30 cms film size.
7. Should have exposure switch with extendable cables.
8. AEC should be compatible with CR system.
9. Exposure should not be possible when cassette not present in the bucky and appropriate alarm messages should be displayed in the display.
10. Should have facility to avoid double exposure of the cassette and appropriate alarm messages should be displayed in the display.

### **IV. C-ARM**

1. C-arm should be isocentric
2. C-arm should have motorized vertical travel of 75 to 135 cms or better with respect to the bucky platform from the floor ( $\pm 10\%$  tolerance)
3. C-arm rotation with selectable reference projections for quick, easy and light operation
4. It should be capable of rotating at least 180degree to the vertical in at least one direction and 120degree in the other direction.
5. It should be possible to lock C-arm rotation at any point just by release of the switch
6. The angle of rotation shall be displayed in the control panel.
7. Vertical movement of the C-arms for favoring examination of patients on a wheel chair (Telescopic movement).
8. Should have provision for magnification 1.5 or 1.8
9. Should have ergonomic handles located conveniently on both sides of the c-arm.
10. Should have provision to prevent the entry of patient head into the x-ray field while x-ray exposure.
11. All cables to the C-arm from the control panel shall be concealed inside the C-arm assembly.

### **V. COMPRESSION DEVICE**

1. Compression system should be motorized, comfortable in such a way that the paddle speed progressively should reduce as it gets in contact with the breast and the overall movement shall be smooth and slow.
2. The applied force of compression should be readily visible on the display and the maximum limit should be adjustable.
3. Compression paddle controlled through foot switch. Two sets of foot controls to be provided on either side.
4. It should have an automatic post exposure release and also the compression force should be released in the event of power failure.

5. There should be provision for knowing the thickness of breast after compression.
6. Should have single press compression paddle full release in case of any emergency.
7. Should have facility for providing micro compression.
8. The c-arm up and down movement and the C-arm rotation should not be active when the patient is under compression.

## **VI. BUCKY DEVICE**

1. Should be removable without using any tools.
2. Should be provided with 24x30cms Bucky device with carbon fiber top and 18x 24 cassette adapter or 18x24cms Bucky device with carbon fiber top and 24x30cms Bucky device with carbon fiber top
3. Moving carbon fiber grid on both bucky device
4. Bucky device should have position and angle lead markers for making appropriate impression in the film.

## **VII. OTHERS**

1. Should have bright LCD display for display of selected exposure parameter, exposure modes, Optical density, film screen combination, focal spots, etc.
2. Compression paddle for 18x 24cms and 24 x 30cms bucky device
3. Spot compression paddle for magnification
4. Operator shield at least half part shall be transparent.
5. Magnification device
6. Should be provided with required Phantoms for periodic check up and routine calibration of AEC
7. Should be supplied with suitable capacity automatic servo stabilizer.
8. The offer should be accompanied by original product data sheet/brochure of the product and AERB type approval certificate or valid No Objection Certificate (NOC) for the model offered. In case of NOC valid type approval certificate has to be submitted prior to submission of invoice for payments.
9. Should have safety certificate from a competent authority CE / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid.

## **VIII. OPTIONAL ITEMS (If needed, order shall be placed for each item separately)**

### **A. Stereotaxic Biopsy (3D)**

1. Should be a 3D stereotaxic biopsy system automated in all the three axis X, Y and Z.
2. Should have an accuracy of 0.1mm in all the three axis.
3. The offer for stereotaxic biopsy will not be taken for price bid evaluation.

### **B. Cassettes**

1. Rates for 18x24 cms and 24x30cms cassettes with screen has to be quoted as option.