



Running Contract Details	
Equipment Name	Cone Beam CT
Running Contract Valid Till	15-06-2020
Tender Ref No	KMSCL/EP/T271/624/2017(R)
Tendered Quantity	10
Supplier Name	M/s Virgo Solutions
GST No	29AKNPM4113F1Z5
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	
# 210/19-1 10th Main Nagendra Block BSK 1st Stage Bangalore - 550 050.	Contact Person	R S Krishnamurthy
	Phone	918026725756
	Mobile No	,9886013895
	Email	planmecarkrish@gail.com,krishsubbarao@virgosolutions.in

Item-wise Price Details				
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	Cone Beam CT <i>Model & Make : Promax MID / Planmeca OY</i>	9016851.2 Incl.GST :12%	664992.78	9681843.98
2	Dicom Printer	392000 Incl.GST :12%	28910	420910
3	Distributed Digital Radiography System with one dummy work station	237180 Incl.GST :18%	16602.6	253782.6
4	UPS	112100 Incl.GST :18%	7847	119947
5	Laser printer	12390 Incl.GST :18%	867.3	13257.3
6	Two Tonne inverter split Air conditioner with stablizer and installation charges	54999.04 Incl.GST :28%	3549.16	58548.2

Item-wise Price Details				
7	Wooden computer table	14629.64 Incl.GST :18%	1024.07	15653.71
8	Computer chair	13334 Incl.GST :18%	933.38	14267.38
9	Three folded lead barrier	44800 Incl.GST :12%	3304	48104
		9898283.88	728030.29	10626314.17

Annual / Comprehensive Maintenance Charges (Exl.Tax)							
Rate	4 th Year	5 th Year	6 th Year	7 th Year	8 th Year	9 th Year	10 th Year
Cone Beam CT							
Labour	1,00,300.00	1,00,300.00	1,00,300.00	1,12,100.00	1,12,100.00	1,23,900.00	1,23,900.00
Comprehensive	8,50,780.00	8,50,780.00	8,50,780.00	10,62,000.00	10,62,000.00	10,62,000.00	10,62,000.00

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% 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 :Cone Beam CT

A. Basic Unit

Items Technical specifications

1. Generator High frequency
2. Line Voltage 220V – 240V, 50-60Hz
3. Tube voltage Adjustable kV (60 kV and above)
4. Tube Current Adjustable mA (2-15 mA) or above
5. Focal spot size 0.5 mm or less
6. Filtration Aluminium or copper filtration with an aluminium-equivalent thickness 2.5 mm or more

7. Collimation Should be electronically controlled
8. Exposure type Pulsed
9. Effective exposure time Adjustable Timer (Pediatric & Adult) for the available imaging programmes and should be specified.
10. Patient position Should have facility for sitting, standing and Wheelchair access also
11. Sensor/Detector Flat Panel Detector with Cesium Iodide scintillator or better.
12. Gantry Movable C –arm set up
13. Grey Scale 15-16 bit
14. Field of View (FOV) Should have FOV flexibility, preferably minimum FOV: 5X5 cm or less; Max FOV: 18X20 cm without stitching or above
15. Rotation angle 360°
16. Scan time Should specify 10-40 Sec (\pm 5 sec)
17. Reconstruction time Should specify; less than 1 minute
18. 2 D Imaging 2D panoramic, and 2D cephalometric imaging possibilities should be there
19. Voxel Shape Isotropic
20. Voxel Size Wide choice of selection of Voxel sizes to suit different resolution modes should be there
21. Active surface area 15x15cm or better. Should specify
22. Display Should possess centralized graphic user interface touch screen / PC control for easy operation
23. Image Reconstruction Algorithm Should specify
24. The x ray machine should have AERB Certification and copy of the certificate must be attached with tender document. In case of NOC, type approval certificate shall be provided before handing over the machine after installation.
25. Should be floor or wall mounted model.
26. Should have fully motorized patient positioning system
27. Scout view for better positioning and lesser retakes which is good for the patient as well as operator.
28. Should have a test mode which disables X-ray radiation during operation

B. SPECIFICATION FOR WORK STATION DESKTOP PC

Items Technical Specification

1. Processor Intel i7 (6th or 7th Generation), 3.4 GHz, 8 MB Cache of its higher version
2. Chipset Q8 series
3. RAM 16 GB with 32 GB expandability

4. Hard Disk 1 TB
5. Operating system Windows 7 or above with Media and Documentation and Certificate of Authenticity
6. Monitor Medical (Industrial) Grade LED/TFT color Monitor of minimum 24" size with high resolution (1920 X 1200dpi)
7. Graphics Card NVIDIA 2 GB (Dedicated GPU)
8. Keyboard 104 Keys
9. Mouse Optical with USB interface
10. Ports 6 USB ports or more (at least 2 USB with 3.0)
11. DVD ROM DRIVE 8X or better DVD RW Drive
12. Preloaded Antivirus Software Microsoft Security Essentials
13. Networking facility Should be available
14. Bays 2 Nos or above
15. Extra software Adobe reader

C. Functional Requirments For Work Station

1. Built in routine for using predefined image processing parameters for image quality enhancement.
2. Mechanisms for storing the patient image based on name, date, etc.
3. Capability of storing user defined image processing parameters
4. Capability of overwriting predefined image parameter with user defined parameters & storing these two images separately
5. Correcting typographically in patient demographic module in case the RIS connection was down and manually date entry was done.
6. Capability of changing W/I, flipping, rotating, zooming, collimating annotating incoming image.
7. Auto routing incoming image to predefined DICOM store (SCP storage) or print destination (SCP print destination).
8. Mechanism of printing multiple images in one film, with the possibility of slide and True size printing.
9. The work station should let the user select a film size and lay out for hard copies with a WYSIWYG (what you see is what you get), output look up table selection number of copies selection capabilities.
10. Minimum of 15 pre configured layouts for printing and also possibility of further configuration should be possible.

D. Specification For Software

The system should include the following SW application as standard:

1. Quality control software- software which enables to see in the preview terminal the deviation from normal exposure and with the

details of the deviation on the Digital works station.

2. Software masking of the collimation areas.
3. Software for printing on any DICOM PRINTER.
4. Software for storing images on any DICOM 3 or newer versions compliance station
5. Provision for softwares for various applications such as implant imaging, orthodontics (Ceph analysis), Airway analysis, endodontic, periodontal applications etc should be provided.
6. Any software upgradeability for 5 years to be done by the company.

E. Specification For Dicom Printer

1. Should be a dry laser printer with a resolution of 500 dpi or more.
2. Should have a gray scale resolution of at least 14 bits
3. Capable of printing images in DICOM 3.0 format or newer version
4. Should have minimum 2 universal trays and have mechanism to print images with five film sizes – 8"x10", 10 "x 12", 10 "x 14", 14" x 14" and 14" x 17".
5. Should be supplied with the following film packets while installation.
 - a. 14x17" – 5packet of at least 100 films
 - b. 12x10" – 2 packets of each at least 100 films
 - c. 10x8" – 5 packets of each at least 100 films
6. Day light film packet loading should be possible
7. Processing capacity – Should specify
8. Input voltage AC 100-240V

F. Accessories & Consumables

1. Distributed Digital radiography system (Networking) with 1 dummy work station Laptop with the preloaded software should be provided.
2. Uninterrupted Power Supply (UPS): 2 Nos
 - a. 5 KVA online UPS for the basic machine
 - b. 5 KVA online UPS for the digital work station and printer.
3. Laser Printer for printing the report

4. Two Ton inverter Split AC for Air conditioning with stabilizer and installation charges.

5. Wooden Computer Table of good quality drawers: 2 Nos; Godrej / wipro/featherlite

6. Computer Chair with wheels: 2 Nos; Godrej / wipro/featherlite

7. Three folded lead barrier: 1 No

G. Comprehensive Training: At site should be provided for different categories of staff such as radiographers and radiologists etc.