**KERALA MEDICAL SERVICES CORPORATION LTD**

(A Government of Kerala Undertaking)

Thycaud P.O, Thiruvananthapuram - 14, Kerala.

Tel: 0471 - 2945600, 2337353, Fax: 0471 - 2945647

Email :engg_ep@kmscl.kerala.gov.in

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

## Running Contract Details

| | |
|---|---|
| Equipment Name | Digital Panoramic X-ray Machine |
| Running Contract Valid Till | 22-03-2021 |
| Tender Ref No | KMSCL/EP/T307/97B/2019(R) |
| Tendered Quantity | 35 |
| Supplier Name | M/s Villa India |
| GST No | 07AACPN9000D1Z6 |
| 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 | |
|---|---|---|
| B-22 Naraina Industrial Area Phase -I New Delhi - 110 028 | Contact Person | Mr V L Narayan |
| | Phone | 011-25891801 |
| | Mobile No | 9810153050 |
| | Email | welcome@villaindia.com |

## Item-wise Price Details

| # | Item Details | Unit Rate (Incl.all taxes & charges) | Service Charges (Through KMSCL) | Grand Total |
|---|---|---|---|---|
| 1 | **Digital Panoramic X-ray Machine** *Model & Make : Pax-i / Vatech* | 1848000 Incl.GST :12% | 136290 | 1984290 |
| 2 | **Workstation** *Model & Make : Villa India* | 70800 Incl.GST :18% | 4956 | 75756 |
| 3 | **Dry Imager System** *Model & Make : Drypro Sigma / Konica Minolta* | 324800 Incl.GST :12% | 23954 | 348754 |
| 4 | **UPS** | 100300 Incl.GST :18% | 7021 | 107321 |
| | | **2343900** | **172221** | **2516121** |

## Annual / Comprehensive Maintenance Charges (Exl.Tax)

| Rate | 4th Year | 5th Year | 6th Year | 7th Year | 8th Year | 9th Year | 10th Year |
|---|---|---|---|---|---|---|---|
| **Digital Panoramic X-ray Machine** | | | | | | | |
| **Labour** | 25,000.00 | 25,000.00 | 30,000.00 | 35,000.00 | 40,000.00 | 40,000.00 | 50,000.00 |

| Annual / Comprehensive Maintenance Charges (Exl.Tax) | | | | | | |
|---|---|---|---|---|---|---|
| Comprehensive | 80,000.00 | 80,000.00 | 90,000.00 | 1,00,000.00 | 1,00,000.00 | 1,10,000.00 | 1,10,000.00 |

## 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 : Digital Panoramic X-ray Machine

A. X-Ray Tube

1. Generator:  High frequency DC generator, operating frequency at least 40kHz

2. Line Voltage: 230V- 240V, 50-60Hz

3. Tube voltage: 57-85KV

4. Tube Current: 10 mA

5. Exposure compensation: Automatic Exposure Control.

6. Focal spot size: : Between 0.7mm X 0.7 mm and 0.5mm X 0.5 mm as per IEC standards

7. Total Filtration: Equivalent to 2.5mm Al or more

8. Magnification of exposures: Should have a constant magnification

9. Effective exposure time: Adjustable Timer (Pediatric & Adult) for the

    available imaging programmes.

B. Basic Unit

1. The x ray machine should have AERB approval certification.

2. Should be floor or wall mounted model.

3. Should have fully/semi motorized patient positioning system

4. Should have 3 laser positioning lights – Mid Sagital, Frankfurt and Canine

5. Patient positioning by Bite block, Chin rest, Chin support and motorized/manual temple     support.

6. Should have accessibility for wheel chair patients.

7. Should have centralized control system with all functions controlled by colour TFT touch screen or PC, Graphical User Interface (GUI) with digital display of technical factors and selected programmes.

8. Should have an adjustable form of focal trough depending on jaw shape and size of patient.

9. Should have automatic compensation for the cervical vertebrae shadow.

10. The imaging geometry should eliminate the redundant shadows and ghost images.

11. Should have a test mode which disables X-ray radiation during operation.

12. Should have exposure counters separate /or combined for Panoramic, Cephalometry and total no of images

13. Should have the following programs:

a) Standard Panoramic Program.

b) Pediatric program (low dose, reduced exposure area for small patient)

c) Automatic Double TMJ Program

d) Sinus program

e) Lateral and PA Cephalogram.

f) Should Support carpus / hand wrist imaging.

g) Submentovertex views.

14. Should have motorized up and down movement.


C. Digital Cephalometric System


1. Should have Computerized automatic cephalometric system.

2. Should have automatic alignment of radiation source

3. Should have functionally designed and easy-to-use head positioner.

4. Should have swiveling nasal support.

5. Should have magnification scale that appear on the image

6. Automatic soft-tissue filter based on the position of the nasion support.

D. Digital Sensor System

1. Should have a high resolution CCD /CMOS flat panel sensor for panoramic and cephalometry. It should be possible to take both panoramic and cephlometric image by using the sensor provided. The cost of one additional sensor shall be quoted separately in the BOQ and the cost offered will not be taken for evaluation.

2. CCD pixel size: between 35?m and 150 ?m.

3. CCD active surface: to be specified.

4. Image field: to be specified.

5. Pixel matrix: to be specified.

6. Soft tissue filter should be software operated.

E. PC Configuration Requirements

Latest branded computer with following specifications

1. Processor –core i5 4th generation or better or equivalent

2. 8 GB RAM and 1 TB or more on Hard disk.

3. Should include 21" LCD/TFT monitor with high resolution to ensure image quality.( Display /monitor resolution min 1024 x1024 or higher)

4. CD/DVD Burner.

5. Graphics card NVIDIA 2 GB  dedicated GPU or equivalent.

6. Accept images from CCD/CMOS sensor without any loss of data.

7. Capable of archiving & printing selected image to a standard DICOM destination in DICOM 3.0 format (or newer versions).

8. Storing images in the local disk for predefined period.

9. Should be with upgradeable imaging software.

F. Functional Requirements 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 data 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.

11. Should be provided with table and chair for workstation.

12. Should provide necessary cabling work for additional workstations.

13. Operating system: Windows 7 or more

G. Software specifications

The system should include the following SW applications as standard:

1. Special attention should be placed on pediatric applications.

2. Software for printing on any DICOM printer.

3. Software for storing images on any DICOM3 or newer versions compliance stations.

4. Software for e-filming application: Any Software upgradeability for 5 years to be done by the company

H. Dry Imager System

1. Print images from work stations.

2. Should be capable of printing images in DICOM format / Direct DICOM   Compatibility.

3. Mechanism to print images of OPG, Ceph and multiple image prints of IOPA. The tray should be adjustable to (8" x 10") and (10" x 12").

4. Resolution should be 300- 508 dpi or better.

I. Accessories & consumables

1. Films for Dry Imager system – (8" x 10")- 300 numbers

2. Three folded leaded protective barrier – 1 no.

3. 5 KVA Online UPS with 30 minutes backup for operating all the above mentioned equipments.

4. Lead apron light weight Velcro type 1 no, Thyroid guard -1 No, AERB Approved

5. Air conditioner -2 TR (3 star rating )-1 no.