

HLL LIFECARE LIMITED
(A Government of India Enterprise)
Projects Division
Corporate Head Office, Poojappura.P.O,
Thiruvananthapuram – 695012,
Kerala, India
Phn: 0471- 2354949, 2775588

AMENDMENT No. 2

Sub: Supply, Installation, Testing and Commissioning of Computed Radiography (CR) system & its accessories for Diagnostic Lab Facility at Sector 39, Gurugram, Haryana as per the tender specifications – reg.

Ref: 1) Our IFB Ref No: HLL/CHO/PROJ/HCS/MCG-EQP/CR SYSTEM/2018-19 dated 12.10.2018
2) Pre-bid Meeting held on 25-10-2018.

Amendment Date: 03-11-2018

With reference to the tender and the pre-bid meeting held on 25-10-2018, **Schedule II - Specifications** is amended and attached herewith.

All other terms and conditions of the tender remain unchanged.

SENIOR MANAGER (PROJECTS)

SCHEDULE II - AMENDED

SPECIFICATIONS

Sub: Supply, Installation, Testing and Commissioning of Computed Radiography (CR) system & its accessories for Diagnostic Lab Facility at Sector 39, Gurugram, Haryana as per the tender specifications – reg.

Item Name: Computed Radiography (CR) system & its accessories

Quantity: 1 No

TECHNICAL SPECIFICATIONS
A Brand new Computed Radiography must be a state of the art system manufactured by a reputed brand or manufacturer adhering to following specifications. CR system should broadly comprise of following modules/ components:
Image recording system (cassettes & reading plates)
Image reading system (reader / digitizer)
Identification & CR processing workstation.
Dry imager (Optional)
Image recording system (cassettes & imaging plates).
The following sizes of radiography cassettes along with image plates should be supported by the unit.
a. 35 cm X 43 cm or 14" X 17": 2 nos.
b. 24 cm X 30 cm or 10" X 12": 2.nos.
c. 18 cm X 24 cm or 8" X 10": 2 nos.
d. Mammography cassette 18 X 24cm: 1 nos. (Optional)
e. Mammography cassette 24 X 30cm: 1 nos. (Optional)
Image reader (CR reader / Digitizer)
a. The CR reader / digitizer should be able to process 120 image plates/hr or more of the largest size cassette
b. CR reader / digitizer must be able to handle phosphor image plates. CR reader capable of handling latest Dual side / needle / structured / columnar image plates will be preferred.
c. It should have a resolution of 5 pixels/mm (minimum) for standard resolution cassettes & 10 pixel/mm (minimum) for high resolution cassette reading.
d. Digitizer must have a resolution of 20 pixel/mm (minimum) for screening mammography.
e. It should have input -output buffer / stacker that can load at least 4 cassettes at least.
f. Gray scale resolution: CR reader / digitizer should have a minimum resolution of 12bits/ pixel for

images sent to CR processing station.
g. The preview should be available within 30 seconds or less.
Identification Station & processing server
a. The main console must have 4GB or more RAM, and 1 TB Hard Drive and 19 inch clinical grade monitor. Local storage should facilitate a minimum of 4000 Images. The work station should have RAID configuration Hard Disk and 19" monitor.
b. Processing server capable of identification of patient demographics to the acquired images will be preferred, else a separate identification station must be provided.
c. The server and /or ID station must be DMWL (DICOM modality worklist) compliant to access patient and study data from HIS or RIS.
d. It should provide display of acquired images with greater details of demographics viz. patient/ study listing for easy access
e. The server must provide full amount of post processing features viz. geometric corrections, window level algorithms, annotation like markers, predefined text, drawing lines and geometrical shapes, multi-scale image processing, measuring distance and angles, shuttering, histograms, zoom, grey scale reversal, edge enhancement, noise reduction, indication of gray scale saturation level, latitude reduction etc.
f. It should facilitate full-fledged DICOM printing and should be able to print multiple formats of patient study.
g. The camera should be compatible for any manufacturers dry images .
h. Should be able to send DICOM images to DICOM workstation or PACS without loss of information
i. Should be equipped with DICOM CD writer for transferring image
j. Should be able to store image on external device viz. CD or pen drive etc.
k. The system should have a facility to indicate over /under exposure in the preview screen. Kindly specify the image preview time.
l. The software must have dedicated paediatric and mammography image processing.
Dry imager (Optional): Rate shall be quoted separately including film rate
a. The system must have a dry imager without need of any wet chemistry
b. It must be DICOM 3.0 compatible allowing multiple modalities to be connected at a time
c. The system must be able to print at least 60 films/ hr of the largest size
d. The system must deliver its first film within 80 seconds from the request sent
e. The imager must have spatial resolution of 500 dpi minimum
f. The system must have contrast resolution of 14 bits/ pixel or more. The system must have at least three online film sizes and should be capable of printing any of the 8" X 10", 10" X 12", 14" X 17" films.
g. The imager should support daylight loading of films.
h. 500 Nos. of film of each size should be supplied
Suitable UPS with 15 minutes backup for the whole system(both CR + Dry Imager)
BOQ

CR UNIT, as specified - 1 No.
35 cm X 43 cm or 14" X 17" - 2 Nos.
24 cm X 30 cm or 10" X 12": - 2 Nos.
18 cm X 24 cm or 8" X 10": - 2 Nos.
Mammography cassette 18 X 24 cm: 1 no. (Optional)
Mammography cassette 24 X 30 cm: 1 no. (Optional)
Dry imager - 1 No. (Optional)

GENERAL SPECIFICATIONS

1. Power Supply: The equipment offered should be suitable for Indian electrical ratings as follows:
Power supply: 200-230V, 50 Hz (Single Phase) or 400-440 V, 50 Hz (3 Phase)
2. HLL will provide necessary incoming power supply upto isolator DB only. The contractor shall provide all necessary electrical connections from the equipment panel to this isolator panel for the operation of equipment/s.
3. The unit should be complete with all accessories and interconnections required for machine operation.
4. **The dry imager is optional and price for the same shall be quoted separately. The consumable for dry imager, i.e. films of sizes 14"x17", 10"x12" and 8"x10" shall be quoted separately and price for the same shall be fixed for 3 years.**
5. **Equipment shall be connected to RIS / PACS system for communication with External PC.**
6. **Parts required on FOC with the equipment: CD/ DVD Rom with driver, softwares and Instruction manual Hard copy original, Operations manual, 1 Nos. of External Barcode reader.**
7. Should be able to connect to external printer / should have in built thermal printer.
8. Instrument should have quality certificate as mentioned in the receptive technical specifications.
9. The supplier shall install, calibrate and validate the equipment at the location specified in the purchase order / Notification of award at the suppliers cost.
10. The supplier shall ensure 98% uptime in a financial year. If the uptime is less than the said percentage then penalty shall be imposed in a manner detailed in downtime penalty clause (Clause 6 in GCC).
11. The supplier shall provide brand new machines only.

12. The quote should be inclusive of comprehensive training in the equipment supplied for minimum 1 week to HLL staff.
13. The quote should also include comprehensive warranty for a minimum period of 5 years and submit rates for CAMC period of another 5 years.
14. The supplier should submit 3 copies of the following documents relevant to his scope of work, two weeks prior to the commissioning of the unit, free of cost.
 - a. Instruction / Testing / Operation manual (3 copies)
 - b. Maintenance manual / Lubrication Chart (3 copies)
 - c. All final drawings - Electrical, mechanical and civil (3 copies)
 - d. Relevant Test Certificates, Guarantee Certificate for each item of equipment.
 - e. Catalogue and literature on bought outs (3 copies)
 - f. Any other related documents
15. All electrical parts and control panel shall be conforming to and shall be done as per relevant BIS and any other standard stipulated by Electrical Inspectorate.
16. All the bought out items should be of standard and reputed make.
17. Utility requirements (Quality, Quantity, rating etc.) for the equipments shall be indicated in the bid.
18. Calibration certificates with traceability to National Standards shall be supplied for all the instruments coming under the scope of supply of supplier.
19. The bidder should attach to their bid detailed specifications, catalogues and other details of all the equipments quoted by them.
20. The supplier should submit necessary test certificates of the equipment.
21. After sales service center should be available at the city of Diagnostic Lab on 24 (hrs) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 12 hrs. The service should be provided directly by Tenderer / Indian Agent. The spares for the equipment shall be available for at least 10 years from the date of supply.
22. **Comprehensive Warranty:** 5 years comprehensive warranty shall be provided free of cost with the Equipment.
23. **Comprehensive Annual Maintenance Contract (CAMC) rates:** Should be quoted for another 5 Years after the completion of 5 years comprehensive warranty period in Price Bid (Schedule V - Annexure II) which will be considered for finalizing the L1 bidder and order placement on the Supplier after comprehensive warranty period of 5 years.
24. Any deviations from the bid documents shall be clearly indicated.