इलाम नगरपालिका
नगर कार्यपालिकाको कार्यालय
भानुपथ, इलाम, कोशी प्रदेश, नेपाल

प्रति एकाई दररेट पेश गर्ने बारेको सूचना

सूचना प्रकाशन मिति : २०८३/०१/१८

इलाम नगरपालिका वडा नं ०७ स्थित निर्माण हुने आकस्मिक भवनमा जडान हुने यसै साथ संलग्न स्पेशीफिकेशन तथा दरभाउ फारम बमोजिमका थप स्वास्थ्य उपकरणहरुको खरिद कार्यको लागत अनुमान तयार गर्नुपर्ने भएकोले सार्वजनिक खरिद नियमावली, २०६४ (संशोधन सहित) को नियम ११ -२) अनुसार मिति २०८३/०१/२४ भित्रमा उल्लेखित स्वास्थ्य उपकरणहरुको प्रचलित प्रति एकाई दररेट उपलब्ध गराइदिनुहुन सम्बन्धित फर्म तथा सप्लायर्सहरुका लागी यो सूचना प्रकाशन गरिएको छ । यस सम्बन्धि थप जानकारी तथा स्पेशीफिकेशन सहितको दरभाउ फारमका लागी इलाम नगरपालिकाको आधिकारिक वेभ साइट www.ilammun.gov.np, फेसबुक पेज र कार्यालय समयमा यस कार्यालयको पूर्वाधार विकास महाशाखामा सम्पर्क राख्न सकिनेछ । साथै यस कार्यालयको आधिकारिक इमेल mun.ilam@gmail.com र yojanasakha.ilammun@gmail.com मार्फत समेत स्वास्थ्य उपकरणहरुको प्रति एकाई दररेट पेश गर्न सकिनेछ ।

प्रमुख प्रशासकिय अधिकृत

इलाम नगरपालिका

नगर कार्यपालिकाको कार्यालय

भानुपथ, इलाम, कोशी प्रदेश, नेपाल

दरभाउ फारम

योजनाको नाम: स्विकृत स्पेशीफिकेशन बमोजिमको स्वास्थ्य उपकरण उपलब्ध गराउने कार्य

कार्यान्वयन हुने स्थलः इ.न.पा. ७ , इलाम

आ.व. : २०८२/८३

BoQ Item No	Description of Goods	Unit	Quantity	Quoted Rate in		Amount	Remarks
				Figure	Words		
1	Bone Densitometer (DEXA Scan) System as per Attached Approved Specification	Set	1				
2	Orthopentamogram Machine Upgradable to Scan Cephalogram as per Attached Approved Specification	Set	1				
3	4K Laparoscopy Set as per Attached Approved Specification	Set	1				
					Total Amount with out VAT :		
					VAT @ 13% :		
					Total Amount with VAT :		

हस्ताक्षर :

दरभाउपत्रदाताको नाम तथा ठेगाना :

आधिकारिक प्रतिनिधिको नाम :

दरभाउपत्रदाताको आधिकारिक छाप :

गणेश कुमार खड्का
प्रमुख प्रशासकीय अधिकृत

TECHNICAL SPECIFICATION OF 4K LAPAROSCOPY SET

SN	Purchaser's Specification	Bidders Offer		
	4K LAPAROSCOPY SET	**Yes/No**	**Pg No in Catalog**	**Remarks**
	Manufacturer			
	Brand			
	Type/Model			
	Country of Origin			
1	**DESCRIPTION OF FUNCTION**			
2	**Operational Requirement**			
2.1	It shall operate on AC power supply			
2.2	All telescopes, ancillary equipment quoted must be brand new. It should be compatible to be used in all kinds of surgeries to promote sharing and hence increase utilization.			
3	**System Configuration**			
3.1	4K Camera System- 1 Set			
3.2	4K Camera Head			
3.2	4K Monitor,atleast 32 inch- 1 Set			
3.4	LED Light Source- 1 Set			
3.5	Laparoscopy Insufflator- 1 Set			
3.6	4K Telescope-1 Set			
3.7	Laparoscopy Trolley from same manufacturer- 1 Set			
3.8	Electrocautery-1 set			
4	**Technical Specification**			
4.1	**4K Camera System**			
4.1.1	System must have 4K UHD Camera Console image management system with recording via USB port along with recording in tablet.			
4.1.2	Processor should be 2- Dimensional endoscopic video camera in 4K resolution (atleast. 3840*2160).			
4.1.3	Picture in Picture and side by side visualization modes should be available.			
4.1.4	System should be screen touch with at least combine the latest technology, true 4K			
4.1.5	Camera head should provide at least 12 possible programmable functions and 5 controllable functions setting on 4 camera head button.			
4.1.6	Camera Head should be autoclavable and soakable.			
4.1.7	Camera Control Function – should be able to change camera setting by console, Camera Head			
4.1.8	Should have 10 bit color resolution for precise color reproduction in all surgical specialities.			
4.1.9	Should have unique augmented reality features like color filters, highlight function and image enhancement functionality to optimize visualization.			

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4.1.10	Should have heads up display on monitor screen and should show insufflator settings on the main monitor screen itself.			
4.1.11	Degree of safety :CF – Defib			
4.1.12	Camera head should be waterproof and disinfectant-proof (IPXn)			
4.1.13	Should have true 4K image capture.			
4.2	**LED Light Source**			
4.2.1	LED Light Source with life span of 30K hours			
4.2.2	Color Temperature at least 5500K			
4.3	**4K Monitor**			
4.4.1	Monitor should have resolution of atleast. 3840*2160			
4.4.2	Monitor should have aspect ratio of 16:9			
4.4.3	Monitor should have Pixel Efficiency of 0.9999			
4.4.4	Monitor should have LED backlight; LCD with IPS Panel Technology			
4.4.5	Monitor should support Approx.1.073 billion colors			
4.4.6	Should be at least 32 inch or more.			
4.5	**4K Laparoscope Set- 1 Set**			
4.5.1	Should be supplied with 10mm 0 degree and 30 degree infrared laparoscopes- 1 set each			
4.5.2	The laparoscopes should be compatible with 4K imaging.			
4.6	**Laparoscopy Insufflator**			
4.6.1	Insufflation medium: Medical grade CO_2			
4.6.3	Maximum gas supply pressure: 80 bar/1160 PSI			
4.6.4	Minimum gas supply pressure (bottle): 15 bar/218 PSI			
4.6.6	Atleast 2 operating modes:			
	o High Flow			
	o Bariatric: performed on severely overweight (BMI > 30 kg/m²) adults for rapid insufflation of large volumes			
4.6.7	Maximum gas flow:30L			
4.6.8	Automatic detection of Veres insufflation (flow of 1 to 5 l/min)			
4.6.9	Pressure range: 1-25 mmHg			
4.6.10	Pressure display resolution: 1 mmHg			
4.6.11	Gas flow display resolution: 1 l/min			
4.6.14	Should have function of gas heating			
4.6.15	Possibility of using reusable tube sets			
4.6.16	Status icon of gas supply incl. filling level indicator when using a gas bottle			
4.6.17	Possibility of setting start values for pressure and flow (presets)			
4.8	**Electrocautery**			
4.8.1	Operating Frequency: Approx. 300 kHz to 500kHz			
4.8.2	Monopolar cut: Up to 300-400 Watts (Pure cut, Blend modes)			

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4.8.3	Monopolar coagulation: Up to 120-150 watts (soft, Fulgurate, spray)			
4.8.4	Bipolar mode: Up to 70-100 watts(micro and macro modes)			
4.8.5	HF leakage monitoring: System monitoring for high frequency leakage to prevent patient burns.			
4.9	**Laparoscopy Trolley from same manufacturer- 1 Set**			
	Should be supplied with trolley with articulating monitor arm for better viewing			
5	**Accessories, Spare Parts and Consumables**			
5.1	All standard accessories / consumables/ parts required for the proper operation of the above item shall be included in the offer. Bidder's shall specify, in a separate Excel worksheet, the quality and details of any items included in this offer which have not been specified in this technical Specifications form.			
5.2	All standard Maintenance tools and cleaning / lubrication materials where applicable shall be included Bidders shall specify, in a separate Excel worksheet the quality and details of any items included in this offer which have not been specified in this technical specifications form.			
6	**Standard : Safety Requirements**			
6.1	Must submit ISO 13485: 2003/AC: 2007 Medical Devices			
6.2	Must submit valid European CE (93/42 EEC Directives) certificate ,USFDA (Listing/approved) product certificate must be valid on all components			
6.3	Must meet IEC 60601-1-2:2001 General Requirements of Safety for Electromagnetic Compatibility.			
7	**User Training**			
7.1	Must Provide user training (including how to use and maintain the equipment)			
8	**Warranty and AMC**			
8.1	Comprehensive Warranty for 2 year followed by 3 year free service warranty from the date of installation			
8.2	During the warranty period supplier must ensure planned preventive maintenance along with corrective/ breakdown maintenance whenever required.			
9	**GENERAL CONDITIONS AND DOCUEMENTATION**			
9.1	The supplier must submit the original brochure or ecopy			
9.2	Manufacturer Authorization letter			
9.3	The bidder must arrange for the equipment to be installed and commisiioned by certified or qualified personnel; any prerequisities for installation to be communicated to the purchaser in advance, in detail.			
9.4	The onsite Operational training should given by qualified technician to the users and maintenance training to the hospital's technician.			
9.5	Hard copy and soft copy of both user manual and service manual in English shall be provided at the time of installation			
9.6	List of important spare parts and accessories with their part numbers and costing for five years shall be submitted			

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Technical Specification of Bone Densitometer (DEXA) System				
S. N	**Purchaser's Specifications**	**Bidders Compliance Sheet**		
	Bone Densitometer (DEXA Scan) System	**Yes/No**	**Page No. in Catalogue**	**Remarks**
	Manufacturer			
	Brand			
	Type/Model			
	Country of Origin			
1	**Description of Function**			
	The system should pioneer in X-ray based bone densitometry, takes advanced heath assessment to a new level with the DEXA System, Which help clinicians assess bone health, body composition and cardiovascular risk- critical elements that will help patients keep in life motion.			
2	**Operational Requirements**			
2.1	It must be a fan beam X-ray bone densitometer, which uses two different energy levels produced by X-ray tube to estimate bone mineral content (BMC) and bone mineral Density (BMD).			
3	**System Configuration**			
3.1	Dual Energy X-Ray Absorptiometry Densitometer with complete accessories.			
4	**Technical Specification**			
4.1	**Scanner Hardware X-Ray Source**			
a	Dual energy technology on detectors that can measure the energy of each photon.			
b	Pencil beam or Fan beam geometry that provides accurate measurement of tissue densities and scan area.			
c	High Frequency oil or Air cooled X-ray Generator			
d	It must have automated internal calibration system with ability to store and analysis the data.			
e	Should have Automatic quality control program with multiple system checks.			
f	Filter should have the capability of transmitting high and low energy			
g	Drive System: stepper motor			
h	X-Ray Source: Dual Energy 100KV/140 KV.			
4.2	**Detector System**			
a	Multi-Detector Array Scanning method			
b	Number of detector array: 64 rows or more			
c	Multi element High Resolution digital detector array			
d	Please mention digital Detectors method.			
e	Please mention the Technology that reduces scatter radiation.			
4.3	**Scan Table**			
a	Scan region: 190cm x 55 cm or more			
b	Patient Table weight limit: 150kg or more			
c	Patient positioning: cross hair laser light,			
d	Patient marking: laser diode red class IEC certified.			
e	Motorized Table with Integrated movable C-arm.			
f	Arm clearance: 21" or more			
4.4	**Scanning Time (approx.)**			
A	Whole body Scan time: 500 Sec or less Lumber Spine/Femur scan: 30 sec or less Forearm Scan: 25 sec or less			

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	Lateral Scan : 25 sec or less IVA Scan: 25 sec or less BMD Precision: <1.0%			
B	System should have Regional Scan time 30 sec or less.			
c	System should have Resolution of: - Line Resolution of 15mm or less - Point Resolution: 8mm or less			
4.5	**Quality Assurance**			
a	System calibration including BMD, BMC and area measurements over a changing tissue. Built in software-based QC which can calibrate the machine for quality control measures.			
b	Automatic PASS/FAIL Quality Control			
c	Single Energy Scan Display Capability should be available			
d	Window/Level Control for Image Optimization			
e	Express Exam Workflow Management			
f	One-Time Auto Analysis with Histogram			
g	Capability to draw outline of vertebrae automatically should be available.			
h	Automatically radiation control for different size of patient.			
i	Auto Hip Positioning capability			
j	Reposition/Rescan Feature			
k	Automatic Scan Comparison for Serial Exams			
l	Least Significant Change Configuration			
m	Automatic calibration using internal reference system			
n	Automatic quality control program with multiple system checks.			
4.6	**Software required for clinical application**			
a	AP Lumbar Spine with Automatic L1-L4 edge detection & Analysis and Scoliosis Analysis,			
b	Proximal Femur, Automatic Low-Density Analysis and Hip Structure Analysis (HSA) Feature.			
c	Dual hips scan with automatic total hip analysis			
d	Forearm examination feature			
e	Whole Body BMD - Advanced Body Composition Analysis - Visceral Fat assessment			
f	Vertebral Fracture Assessment Capability			
g	Pediatric Analysis for spine, Femur & Forearm (Both Adult & infant)			
h	Pediatric Whole body with Body composition Assessment			
i	System should have automatic Scan Comparison for serial scans.			
j	Lateral Spine BMD in decubitus			
k	Core Scan			
l	Hip Axis length with reference population			
m	System must have the capability to scan small Region of Interest			
4.7	**Connectivity and Reporting**			
a	DICOM Communication			
b	HIPPA Privacy Tools			
c	Built-in 10-year Fracture Rate Assessment			
d	Side-by side scan comparison			
e	t-score & z-score			
f	Dual hip report			
4.8	**Reference data**			
a	Age, Sex and Ethnic matched reference data of different population			

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	should be provided			
b	System should have dual HIP Report Capability			
5	**Imaging Console**			
a	Software: - Supplied DEXA software must be the latest in the industry supported by documents - Highest configuration fully loaded software package to be supplied - Supplied software must be windows 10 compatible			
b	Computer with Intel Pentium or Core i5 processor			
c	8 GB RAM			
d	Window 10 Pro, 64-bit			
e	DVD Drive			
f	19" Flat panel Display			
i	Antivirus software			
j	500 GB Hard Drive			
k	UPS 3 KVA with minimal 20 min battery backup for the DEXA system unit and computer console unit.			
L	AC-1.5 Ton-1 unit			
6	**Accessories, spares and consumables**			
6.1	Accessories: Table pad and positioning accessories. - AP Spine Scan - Hip Scan			
6.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).			
7	**Operating Environment**			
7.1	The system offered shall be designed to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.			
7.2	Power supply: 220-240VAC, 50Hz fitted with appropriate plug.			
8	**Standards and Safety Requirements**			
8.1	Must be Certified: **USFDA,** European CE & ISO			
9	**User Training**			
9.1	Must provide user trainings to doctors and technicians at site.			
10	**Warranty**			
10.1	The supplier company must provide Comprehensive warranty for 2 years from the date of acceptance.			
11	**Maintenance Service During Warranty Period**			
11.1	Must ensure regular service with corrective breakdown maintenance whenever required.			
12	**Installation and Commissioning**			
12.2	The supplier must accomplish proper installation and commissioning of equipment onsite. Any prerequisites for installation to be communicated to purchaser in advance, in detail.			
13	**Documentation**			
13.1	User (Operating) manual in English.			
13.2	Service (Technical / Maintenance) manual in English.			
13.3	List of important spare parts and accessories with the part number and costing.			
13.4	Certificate of calibration and inspection from factory.			

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Technical Specification of OPG Machine

S.N	Technical specification	Bidder's Offer		
	Orthopentamogram machine upgradable to Scan Cephalogram	**Yes/ No**	**Page No in catalogue**	**Remarks**
	Manufacturer			
	Brand			
	Type/Model			
	Country of Origin			
1	**Description of Function**			
1.1	Panoramic picture, shows full-mouth X-rays in a single film provides dentists with the flexibility needed for temporomandibular joint analysis and produces repeatable lateral, anterior-posterior, posterior-anterior and oblique views of the skull.			
2	**Operation**			
2.1	Must cater to all types of patients including adult, paediatrics, standing, sitting and wheel chair patients.			
2.2	Advanced direct digital technology to cater to filmless imaging.			
3	**System Configuration**			
3.1	Orthopentamogram machine with complete accessories and option for future upgradation of Ceph			
3.2	DICOM printer compatible with the system.			
3.3	Machine & Software Compatible Branded Computer recommended by manufacturing company			
3.4	3 kVA Online UPS			
4	**Technical Specification**			
4.1	**Function:** Pano + CEPH			
4.2	Scan time**:** Pano : approx. HD 12 sec - 15 Sec / Normal 10 sec-11 Sec or less Lateral Ceph : approx. 13 Sec or less Lateral Ceph: 17 Sec or Less			
4.3	Ceph FOV: approx. 26 cm x 22 cm [LAT, PA, SMV, Waters View, Carpus] 26 cm x 22 cm [Full LAT] or better FOV			
4.4	Focal Spot: approx. 0.5 mm			
5	**Generator/Tube**			
5.1	Generator Type: Inverter Type			
5.2	Tube Voltage: 60~90 kVp or above (1 Kv Increment)			
5.3	Tube Current:4~10 mA (1 mA Increment)			
5.4	Cooling System: Air Cooling (Protect ≥ 60)			
5.5	Total Filtration : Min 2.8 mm AI			
5.6	Gray Scale: 14 bit or better			
6	**Detector**			
6.1	Type: CMOS Photodiode Array			

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6.2	Gray Scale: 14s bit or better			
6.3	Energy Range 60 - 90 kV			
7	**PANO EXAMINATION:**			
7.1	Arch: Narrow / Normal /wide/ Child/ Adult: Male/Female/ Orthogonal			
7.2	Examination Mode: Standard / Right / Front / Left			
7.3	Orthogonal Standard / Right / Front / Left			
7.4	Bitewing Standard / Right / Front / Left and more			
7.5	Arch: Normal			
7.6	Examination Mode: TMJ LAT Open / Close , Sinus LAT / PA and more			
8	**FUTURE UPGRADABILITY: CEPH EXAMINATION (OPTION)**			
8.1	Lateral, PA, Carpus, SMV and More			
8.2	The X-ray system have Rotating robot arm construction. The upper arm is able to drive aside to enable free view.			
8.3	The X-ray system use digital imaging with CMOS/CCD sensor technology and provide an Ethernet interface.			
8.4	The X-ray system have an additional remote control panel available On Acquisition Computer outside the room			
8.5	The unit have the capability to have standard images and constant magnification.			
8.6	The unit have special child panoramic program, where image area is reduced both at width and height.			
8.7	The unit have both lateral and posterior anterior temporomandibular imaging programs with adjustable projection angles.			
9	**Digital Imaging Software**			
9.1	General Administration			
9.2	2D Digital Imaging			
9.3	**The system should provide the following patient management functionality:**			
9.4	Patient search, by ID or by name, from database, image type, date, and comments			
9.5	Creating new patients			
9.6	Editing patient information			
9.7	Patient Demographics			
9.8	Patient name, ID, Address, employer, date of birth, gender, language, contact, etc.			
9.9	Optionally require user to define a reason for opening patient file			
9.10	Assigning patient to provider and reviewing assignments			
9.11	Inactivate patient files			
9.12	The system shall provide the following administrative functions			

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9.13	Adding new patient			
9.14	Viewing (all patient/assigned patients), inactivating, editing and printing patient's clinical info			
9.15	Assigning patients to provider			
9.16	Managing imaging templates			
9.17	Deleting imaging studies			
9.18	User demographics			
9.19	Patient Counseling feature with clinical animation and implant simulation tools.			
9.20	Image types, sensor orientation, alignments, exposure order, default tooth numbering			
9.21	Implant Simulation			
10	**Panoramic imaging**			
10.1	Support for TWAIN compatible scanners and digital camera			
10.2	**The System should provide the following Study/Template functionality**			
10.3	Creating/editing study templates			
10.4	Image capturing directly to study templates, capture assisted by user definable templates			
10.5	Combining different image types to same Study			
11	**The system shall provide the following image viewing tools**			
11.1	Zoom in/out			
11.2	Magnifier			
11.3	Full view			
11.4	Zoom to fit			
11.5	Layout tool			
12	**The system should provide the following images processing tools**			
12.1	Preset parameters for each image type,			
12.2	Brightness and contrast, Median filter, Softening filter , Sharpening filter,			
12.3	Equalize, Invert, soft tissue filter for cephalometric images, Invert			
12.4	Level adjustment (Gamma curve and windowing)			
12.5	Undo/Redo			
12.6	Recall original image			
12.7	Image Transformations: mirror, horizontal mirror, rotate clockwise, rotate counter clockwise			
12.8	Import/export in the following formats: DCM,JPG,RAW			
12.9	The system provide the following measurements and drawings tools			

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12.10	Calibration of the image			
12.1	Measure length and angle			
12.12	Line profile measurement			
12.1	Histogram of grayscales			
12.14	Drawing: line, horizontal line, vertical line, arrow, rectangle, ellipse, text, polyline, curve			
12.2	Image comments			
12.16	Image diagnosis			
12.2	The System should have printing option for single and multi-image printing with alignments			
13	**The System provide the following measurements and view handling and management**			
13.1	Measure length			
13.2	Measure angle			
13.3	Save view with measurements			
13.4	Delete view			
13.5	Zoom in/out			
14	**DICOM Printer:** **Should provide** DICOM Printer compatible with the system and able to print film of different sizes. Must provide OPG X ray film 100 sheets.			
15	**Computer Console:** Must have i7 Processor Must have minimum 16 GB RAM and Hard Disk 1 TB SSD minimum 500 GB Minimum 21 inches Monitor			
16	3 kVA Online UPS ,AC-1 ton			
17	**Accessories, Spare and Consumables** All standards accessories, consumables and parts required to operate the equipment, including all standard tools and clearing and lubrication materials, to be included in the offer. Bidders must specify the quantity			
18	**Operating Environment** The product offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The			
19	**Standards and Safety Requirements**			
19.1	Must submit ISO 13485:2003/AC : 2007 for Medical Devices AND			
19.2	CE (93/42 EEC Directives) and/or USFDA approved product certificate.			
19.3	Shall meet IEC-60601-1-2:2001 General Requirements of Safety for electromagnetic Compatibility			
20	**User Training**			
20.1	Must provide user training (including how to use and maintain the equipment).			

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21	**Warranty**			
21.1	Comprehensive warranty for 2 years after letter of acceptance.			
22	**Maintenance Service During Warranty Period**			
22.1	During the warranty period supplier must ensure planned preventive maintenance (PPM) and corrective/breakdown maintenance whenever			
23	**Installation and Commissioning**			
23.1	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for			
24	**Documentation**			
24.1	User (Operating) manual in English			
24.2	Service (Technical / Maintenance) manual in English			
24.3	Manufacturer Authorization Letter is to be submitted			

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