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Ref. No.: IGIMS/ 2024/ 760 / Store

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E-Tender Notice No.: 01/ 2024-2025/ Bio-medical Equipment/ IGIMS/ Store

CORRIGENDUM- IV

Amendment Notice to the Tender Notice bearing E-Tender Notice No.: 01/ 2024-2025/ Bio-medical Equipment/ IGIMS/ Store for the supply, installation & commissioning of Bio-Medical Equipments / Instruments for the department of Anesthesiology, CTVS, General Surgery, G.I. Surgery, Neurology, Paediatric Surgery, Pathology, Physiology, Radiology, RIO and Urology of IGIMS-Patna.

Amendments mentioned hereunder are notified:

Description	Specifications mentioned in the Bidding Document	Should be read as follows:
BOQ		
	Total Comprehensive annual maintenance contract over a period of seven years after expiry of warranty period of three years from the date of successful Installation.	Total Comprehensive annual maintenance contract over a period of five years after expiry of warranty period of five years from the date of successful Installation.
Group: B – CTVS		
1: Heart Lung Machine		
No Change		
2: Cell Saver		
No Change		
3: IABP (Intra Aortic Balloon Pump)		
No Change		
4: Invasive Cardiac Monitors		
Sl. No. 02 (d)	Monitor should have a minimum of 72 hours of data storage, real time trend (graphical and tabular with intervals of 1, 2, 5, 10, 15, 30 minutes) and alarm logs	Monitor should have 120 hours of graphical and tabular trend support review and storage of at-least 120 hours trend, 1000 alarm events, 1600 groups of NIBP measurements, 128 ARR alarms, 24 hours of OxyCRG events, 120 hours of ST review and 48 hours full disclosure waveforms.
Sl. No. 02 (e)	Monitor should have arrhythmia detection and arrhythmia logs	Monitor should have 25 types of arrhythmia classifications
Sl. No. 02 (f)	Customizable 6 or more screen layouts	Customizable 6 or more screen layouts including Minitrends, OxyCRG, large font and standard screen.
Sl. No. 02 (g)	Monitor should be ready for IABP interface	Monitor should be ready for IBP signal out via Analog Port.
Sl. No. 02 (h)	Monitor should be capable of integrating and communicating with clinical information management server and software without any up gradation.	Monitor should be capable of direct HL7 output via LAN port data which can be mapped and used for further integration with any EMR
Sl. No. 02 (k.iii)	SpO2 (conventional SpO ₂ technology and Massimo Signal Extraction Technology both)	SpO2 (conventional SpO ₂ technology or Massimo Signal Extraction Technology)
Sl. No. 03 a (iii)	Rotary knob for navigation	Delete
Sl. No. 03 a (iv)	Rotary knob for navigation	Delete
Sl. No. 03 a (v)	20 or more waveforms	12 or more waveforms

Sl. No. 03 a (vi)	Wide visibility 150 degree or more	178 degree or more viewing angle
Sl. No. 03 a (viii)	User selectable font size	Number of waves and wave sizes shall be dynamically adjusted depending on measurement parameters selected on board
Sl. No. 03 a (ix)	Ready for split screen display	Delete
Sl. No. 03 b (iii) 1	Should have the compatibility with conventional SpO ₂ technology and Massimo Signal Extraction Technology (SET)	Should have the compatibility with conventional SpO ₂ technology or Massimo Signal Extraction Technology (SET)
Sl. No. 03 b (iii) 1	Standard accessories as part of essential supply for SpO ₂ measurement by conventional as well as Massimo Signal Extraction Technology	Standard accessories as part of essential supply for SpO ₂ measurement by conventional or Massimo Signal Extraction Technology
Sl. No. 04 c (i)	RS232, USB, RJ45 and DVI	USB, RJ45 and DVI
Sl. No. 07 g	Product should be European CE / US- FDA approved.	Product should be European CE & US- FDA approved.
Sl. No. 09 (2) a.	Module for continuous beat to beat arterial pressure monitoring through non invasive technique with complete technical details including standard accessories as part of essential supply.	Deleted
5: ICU Ventilator- High End		
	The ventilator should be microprocessor based and work with hospital external high pressure line/ external compressor to be used in ICU for Adult, Paediatric and infant patients. It should be easy to use having a color inbuilt touch screen at least 12 inch or more in size with screen lock, intuitive menu structure, , Mode preset capability, Pressure bar graph/ breath indicator and prioritized alarms alongwith the following settings/ features	The ventilator should be microprocessor based and work with hospital external high pressure line/ external compressor to be used in ICU for Adult and Paediatric patients . It should be easy to use having a color inbuilt touch screen at least 15 inch or more in size with screen lock, intuitive menu structure, , Mode preset capability, Pressure bar graph/ breath indicator and prioritized alarms along with the following settings/ features
Sl. No. 1 (Point 5)	Non invasive ventilation: VCV, PCV, SIMV, PSV	Non invasive ventilation: PCV, SIMV, PSV
Sl. No. 1 (Point 6)	Volume assured pressure support: VAPS	Volume assured pressure support: VAPS or equivalent
Sl. No. 2 (Point 2)	Inspiratory Peak Flow: 0 to 200 LPM (Compensated) [preferred]	Inspiratory Peak Flow: 0 to 180 LPM (Compensated) [preferred]
6: ACT Machine		
No Change		
7: ETHYLENE OXIDE STERILIZER		
No Change		
8: Specification of External Pacemakers		
No Change		
9: Specification of External Pacemakers		
No Change		
10: SPECIFICATION OF SYRINGE INFUSION PUMPS		
Sl. No. 13	Should have Infusion accuracy: +_ 3%	Should have Infusion accuracy: +_ 5%
Sl. No. 3.3	Display of Drug Name with a provision of memorizing 10~15 names by the operator	Should have a provision of Drug Library with 500 or more drug name with color coding for identification of the drugs by the operator.

Sl. No. 3.5	Selectable Occlusion pressure trigger levels selectable from 300/500/900 mmHg	Selectable Occlusion pressure trigger levels selectable from 50-1125 mmHg with 1 mmHg as increment.
Sl. No. 3.9	Should have comprehensive alarm package including: Occlusion limit exceed alarm ,Near end of infusion pre-alarm & alarm, Volume limit pre-alarm & alarm, KVO rate flow, Low battery pre-alarm and alarm, AC power failure, drive disengaged and preventive maintenance.	Should have comprehensive alarm package including: Occlusion limit exceed alarm ,Near end of infusion pre-alarm & alarm, Volume limit pre-alarm & alarm, KVO rate flow, Low battery pre-alarm and alarm, AC power failure, drive disengaged.
Sl. No. 4.2	Mounting device/ Docking Station for two or four pumps as per requirement so as to enable to power up to 2-4 pumps with one power cord when mounted on IV pole. - 01	Delete
	Add	<ul style="list-style-type: none"> • The screen size should be not less than 3.5” and should have a color display. • Key infusion parameters should be displayed in larger font than normal letters after screen lock, so that the users can more easily get key infusion details during infusion. • The accepted syringe sizes must range from 2-60 ml. • The unit must automatically restart the infusion after in-line pressure is shortly produced and quickly reduced. • The unit must have volume collection function, which can assist infused volume record through automatically volume calculation with 4 modes: 24 total, current total, time (certain period), time volume (timing interval). • The unit must have up to 5000 history records. • The unit must support color- coding drug name so that the user have the ability to set the color display for specific drug name. • The unit must have an visible and color indicator to show the real-time pressure in IV tube.
11: SURGICAL LOUPE		
No Change		
12: Surgical Head with light		
No Change		
13: STERNAL SAW		
Sagittal Saw Hand piece: Sl. No. 7	The sternal saw operates through a flexible drive cable by an electric motor.	Deleted
Sagittal Saw Hand piece: Sl. No. 14	Should provide minimum 1 Nos. of sterile micro oil 300 ml.	Deleted
Battery Kit: Sl. No. 1	Ni Mh batteries with low internal impedance to deliver higher current than other battery Types.	Li-ion batteries with low internal impedance to deliver higher current than other battery Types.
Battery Kit: Sl. No. 2	Ni Mh cells with capacity to produce more torque and non autoclavable with life of 300 approximate charging cycles.	Ni Mh cells with capacity to produce more torque and non autoclavable with life of 100 approximate charging cycles.
14: Specification of Redo STERNAL SAW		
No Change		
15: Surgical Instrument Set		

No Change		
Group: C – General Surgery		
9: Portable Diode Laser and Emission		
Modified/Amended Technical specification of Portable Diode Laser and Emission		
<p>Technical Specification for Soft Tissue Diode Laser for Varicose Veins and Coloproctology</p> <p>The system should be a Diode, Semiconductor Type Laser, 5th generation.</p> <p>The system should have 1470 nm/15W + 635 nm/ 0.5W wavelength.</p> <p>The system should have a Microprocessor based controller.</p> <p>The display size of the system should be big for clear viewing of parameters, minimum 7" IPS with touch panel medical approved.</p> <p>The system should have Footswitch based operation for beam emission Initiation.</p> <p>The Foot switch should have minimum IPX6 Protection Degree Standards.</p> <p>The system should have In-built Air and Thermoelectric Cooling system.</p> <p>The system should have Aiming Beam 635nm/ 1.4mW max or 515nm/ 2.5mW max.</p> <p>The system should have Continuous or Pulsed Operating Mode.</p> <p>The system should have Pulse Time: 0.05 ms-1000 ms.</p> <p>The system should have Beam delivery through Fiber Optic with SMA 905 connector.</p> <p>There should be a STOP RED individual button for any emergency.</p> <p>The system should have Optical Fiber Connector: SMA 905 which accepts optical fibers having a core diameter from 200µm up to 1000µm, NA-0.22-0.48 beam.</p> <p>The system should be a handy model and easy to carry and move from one place to another, maximum weight of 3.5 kg with a dimension size 53cm x 38cm x 23cm (LXWXH).</p> <p>The weight of laser with case should not be more than 10 Kgs.</p> <p>The system should be Class II B Medical Device.</p> <p>The system should have Class A Laser safety standards.</p> <p>The system should have Class I Type B Electrical Safety Standards.</p> <p>The system should have 18208 Housing Protection Degree.</p> <p>The system works between +10°C up to +24°C; Relative humidity from 30% up to 60%</p> <p>POWER REQUIREMENTS:</p> <p>Power Supply of the Laser: DC 24V/8.33A from the Separate AC adapter</p> <p>Power Supply of AC Adapter: Single phase 100-240V AC, 50-60 Hz; max 90W</p> <p>AC Adapter: DC 24V,3-33A Medical Approval EN60601-1 Class I</p>		
Group- D: G.I. Surgery		
1: Modular OT		
Sl. No. 16 Led OT Light With HD Camera System:		
OT Light (Point 4)	Field Size Diameter Depth: 5 inch – 10 inch	Field Size Diameter Depth: 16 inch
OT Light (Point 5)	Depth of Field: 30 – 35 inch	Depth of Field: 80 – 120 inch
OT Light (Point 7)	Controls: Wall Control Touch Panel	Controls: Should be on light head and on wall also
OT Light (Point 8)	Rotation: 360 degrees	Rotation: 360 degrees all joints
OT Light (Point 15)	Dimming Range: 30% - 100%	Dimming Range: 10% - 100%
Camera System (Point 3)	Optical Zoom: 10x	Optical Zoom: 20x & 4x Digital
Camera System (Point 5)	Power Supply: Through Light / max. 12W	Power Supply: should be less than 100W
Camera System (Point 7)	Video Output: S-Video & Composite Video	Video Output: DVI, S-Video & Composite Video
2: OT Light		

No Change		
3: Laparoscopic Instruments		
No Change		
4: Electro Surgical Unit		
Sl. No. 02	It should have capacity to monitor changes in tissue impedance by 4,34,000 times per second to produce clinical tissue effects and adjust the energy output accordingly .	It should have capacity to monitor changes in tissue impedance up to 4,34,000 times per second to produce clinical tissue effects and adjust the energy output accordingly .
Sl. No. 03	It should come with Three- Section touch screen display for ease of use and should display error alerts also	It should come with Three- Section touch screen display/ single screen membrane LCD display keyboard for ease of use and should display error alerts also
Sl. No. 04	It should be compatible with three button cautery pencil to use advanced monopolar mode like cut/ coagulation with single button and independently also with cut & coagulation button and have a capacity to use lower power settings resulting in less char, less thermal spread and less arcing than a traditional monopolar coagulation mode.	Deleted
5: Open Laparoscopic Instruments		
	Add	All instruments should be European CE (4 Digit notified body) or USFDA approved. Copy of certificate is to be enclosed with bid.
6: OT Table		
No Change		
7: Body Composition Analyzer		
No Change		
Group- E: Neurology		
1: Specifications For Transcranial Doppler		
No Change		
2: Apheresis Machine		
No Change		
3: High Frequency Ultrasound Machine for Nerve and Muscle Examination		
No Change		
4: RTMS Machine (Repetitive Trans Magnetic Stimulation Machine)		
No Change		
5: Autonomic Testing Lab (Tilt Table Machine)		
No Change		
6: 8 Channel EMG/ NCS/ EP System with Ultrasound		
No Change		
7: Long Term & Quantitative EEG System with Video		
Sl. No. 2 (c)	A/D bits: 224 bit	A/D bits: 24 bit
Sl. No. 2 (d)	Common Mode Input Impedance: 21 GOhm	Common Mode Input Impedance: 1 GOhm
Sl. No. 5 (b)	RAM:28 GB 1600 MHz DDR3 Memory	RAM: 8 GB 1600 MHz DDR3 Memory
Sl. No. 5 (c)	Hard disk capacity :22 TB SATA Hard Drive	Hard disk capacity : 2 TB SATA Hard Drive
Sl. No. 5 (d)	Display i Type: Flat screen color LED ii. Size: 2 min 24"	Display i Type: Flat screen color LED ii. Size: min 24"
8: 64 Chanel Video EEG System		
No Change		
9: 4 Chanel Digital EMG/ NCV/ EP System		
No Change		
10: 3 Channel Portable NCV/ EMG/ EP		
No Change		
11: Portable 32 Channel EEG System		

No Change		
Group : K- Urology		
1: O.T. & Other Instruments		
No Change		
2: ESWL Machine		
No Change		
3: Endoscopes Upper and Lower Tract for Adults & Paediatrics		
	Endoscopes Upper and Lower Tract for Adults & Paediatrics	Endoscopes Upper and Lower Tract for Adults
A. (3)	Telescope 70 Degree, 4mm, autoclavable	Telescope 30 Degree , 4mm, autoclavable
A. (6)	Cystoscope Bridge,with 1 lockable channel	Cystoscope Bridge,with 1 lockable channel (02 nos.)
A. (8)	Catheter deflecting mechanism with 2 lockable channels, with quick control	Deleted
A. (12)	Working Element passive cutting action handle closed for Resectoscope sheath	Working Element passive cutting action handle closed for Resectoscope sheath same working element should be compatible with Urethrotome sheath
A. (17)	Cutting electrode loop 0,3 mm wire	Deleted
A. (32)	cold knife,round	Deleted
B. (6,7,8)	Small Loop Electrode Medium Loop Electrode Large Loop Electrode	Loop Bipolar Cutting
C. (1)	Mini Nephroscope 10 ⁰ -12°, with angled eyepiece, 11-13 Fr., length 24-28 cm, autoclavable, one working channel 5-7 Fr. fiber optic light transmission incorporated	Mini Nephroscope 10 ⁰ -12°, with angled eyepiece, 11-13 Fr., length 22-28 cm , autoclavable, one working channel 5-7 Fr. fiber optic light transmission incorporated
C. (3)	Single Set Dilator, 11-12fr.	Single Set Dilator, 17-19fr.
D. (1)	Wide angle straight forward Rigid nephroscope with angled eyepeice, View 10 ⁰ -12 ⁰ working channel 3-3.5 mm	Wide angle straight forward Rigid nephroscope with angled eyepeice, View 6⁰-12⁰ working channel 3-3.5 mm
D. (3)	Obturator continuous flow operating sheath capability 19-20 Fr	Obturator continuous flow operating sheath capability 19-22 Fr
D. (13)	Wide angle straight forward Rigid nephroscope with parallel eyepeice, Angle of view 16 ⁰ -20 ⁰ working channel 3-3.5 mm	Wide angle straight forward Rigid nephroscope with parallel eyepeice, Angle of view 6⁰-20⁰ working channel 3-3.5 mm
F. (1)	Uretero-Renoscope, 6/7.5Fr., 12°, one-step, conical, 8-13.5 Fr., length 43 cm, autoclavable, withangled eyepiece, fiber optic light transmission incorporated, 2 lateral irrigation ports and 1 working channel 3Fr. for instruments up to 3 Fr., sealing and tray for cleaning, sterilization and storage.	Uretero-Renoscope, 6/7.5Fr., 12°, one-step, conical, 8-13.5 Fr., length 43 cm, autoclavable, withangled eyepiece, fiber optic light transmission incorporated, 2 lateral irrigation ports and 1 working channel 4-4.8 Fr. for instruments up to 3 Fr., sealing and tray for cleaning, sterilization and storage.
F. (3)	Druck Ball	Druck Ball/ Pathfinder (5 nos.)
G. (1)	Uretero-Renoscope, 8 Fr/9.8Fr., 12°, one-step, conical, 8-13.5 Fr., length 43 cm, autoclavable, with angled eyepiece, fiber optic light transmission incorporated, 2 lateral irrigation ports and 1 working channel 5 Fr. for instruments upto 5 Fr., sealing and tray for cleaning, sterilization and storage.	Uretero-Renoscope, 8 Fr/9.8Fr., 6°-12° , one-step, conical, 8-13.5 Fr., length 43 cm, autoclavable, with angled eyepiece, fiber optic light transmission incorporated, 2 lateral irrigation ports and 1 working channel 6 Fr. for instruments upto 5 Fr., sealing and tray for cleaning, sterilization and storage.
G. (3)	Druck Ball	Druck Ball/ Pathfinder (5 nos.)
4: 4 K Endovision System with working Instruments		
1. 4K Camera Systems	inbuilt or External USB port for capturing FULL HD video/HD stills in External USB drive and direct interface of USB recording device from the camera head	Inbuilt or External USB port for capturing FULL HD video/HD stills in External USB drive and direct interface of USB recording device from the camera head or company should provide medical grade recording device of same manufacturer.
Technical	Image sensor: 3CCD or 3 chip CMOS progressive scan.	Image sensor: 3CCD or single chip CMOS progressive

Specifications		scan.
Technical Specifications	Lens: It should be optical Zoom lens f=13 to 29 mm or Digital Zoom 0-2 X	Lens: It should be optical Zoom lens F=18 mm fixed zoom lens with up to 2X Digital Zoom
4k Medical Grade Monitor	4k Medical Grade Monitor	4k Medical Grade Monitor should be from same OEM
Light Source	LED 300 with fibre optical cable	LED light source equivalent to Xenon 300 watt light source with fibre optical cable Power consumption-110 VA or more.
ELECTRON IC CO2 insufflators	Add	Innovative sensitive mode for sensitive areas such as paediatric application with safety limits in the pressure up to maximum 15 mmhg and flow ranges up to maximum 15 l/min
Telescopes (1)	Forward- oblique Telescope 30 degree enlarged view diameter 10mm. Length 31 cm autoclavable fiber optic light 4K HD telescope transmission incorporated	Forward- oblique Telescope 30 degree enlarged view diameter 10mm. Length 31 cm autoclavable fiber optic light 4K HD telescope transmission incorporated compatible with 4K Camera
Telescopes (2)	Forward - oblique 4K HD Telescope 30 degree enlarged view diameter 5mm. Length 29 cm autoclavable fiber optic light transmission incorporated. Connection for fiber optic light cable offset by 90degree	Forward - oblique 4K HD Telescope 30 degree enlarged view diameter 5mm. Length 29 cm autoclavable fiber optic light transmission incorporated. Connection for fiber optic light cable offset by 90degree compatible with 4K Camera
Telescopes (3)	Forward- oblique Telescope 0degree enlarged view diameter 10mm. Length 31 cm autoclavable fiber optic light 4K HD telescope transmission incorporated	Forward- oblique Telescope 0degree enlarged view diameter 10mm. Length 31 cm autoclavable fiber optic light 4K HD telescope transmission incorporated compatible with 4K Camera
Telescopes (4)	Forward - oblique 4K HD Telescope 30 degree enlarged view diameter 5mm. Length 29 cm autoclavable fiber optic light transmission incorporated. Connection for fiber optic light cable offset by 90degree	Forward - oblique 4K HD Telescope 30 degree enlarged view diameter 5mm. Length 29 cm autoclavable fiber optic light transmission incorporated. Connection for fiber optic light cable offset by 90degree compatible with 4K Camera
6: Ultrasound Scanner with all Transducers including ABD Trus Lap and Robotic Arms		
	Fusion specifications (added) –sl. no. 01-18	Deleted
7: Advance Integrated Videourodynamic with chair C Arm with Ambulatory Urodynamic Work Station on Turnkey Basis		
No Change		
9: Flexible Disposable Digital RIRS		
1(A) 1.6	Display the usage time of each scope	Deleted
1(A) 1.10	Insertion tip diameter: 7.7Fr or less.	Insertion tip diameter: 7.7Fr to 9 Fr. (Preferably less than 7.7 Fr.).
1(A) 1.11	Insertion sheath outer diameter: 8 Fr or less.	Insertion sheath outer diameter: 9 Fr or less.
1(A) 1.17	Must connect to a digital video processor unit with built in cold light source with LED bulb as light source , integrated 14 inch screen or bigger with provision of connecting via DVI and SDI connection ports to view live image on external medical grade monitors	Must connect to a digital video processor of connecting via DVI and SDI connection ports to view live image on external medical grade monitors or it will be preferred scope be compatible to existing monitor available in the operation theatre.
1(B) 3	Should include an integrated 14-inch HD screen or bigger in the video processor unit	Should include an integrated 14-inch HD screen or bigger in the video processor unit or it will be preferred scope be compatible to existing monitor available in the operation theatre.
1(B) 8	Must connect to a flexible digital ureteroscope with OD of 7.5 Fr and compatible for sterilisation methods with ETO, Steris, Sterrad and also compatible with complete immersion of full scope including hand piece in high level disinfectant like cidex and paracef.	Must connect to a flexible digital ureteroscope with OD of 9 Fr or less and compatible for sterilisation methods with ETO, Steris, Sterrad and also compatible with complete immersion of full scope including hand piece in high level disinfectant like cidex and paracef.
10: Open Surgical Instrument for Renal Transplant, Self Retacting Retractors		
	Add	Should supply with reusable autoclavable sterilization

		container 66 mm x 300 mm qty-02, 300 mm x 450 mm qty- 02, 300 mm x 300 mm qty-02
11: Flexible Digital Uretero-Renoscope		
C. Sl. 12	Working for 2.1mm ,the thumb support is movable and inrest position the electrode is inside the resectoscope sheath	Deleted

Note:

1. All other specification, terms and conditions of the original tender documents shall remain unchanged.
2. This amendment shall be part of the tender document and become effective immediately is supersession to the earlier corresponding version.

The document also can be downloaded from www.eproc2.bihar.govt.in and the IGIMS website www.igims.org.

Sd/-
Director,
IGIMS – Patna.