



**The Children's Hospital,
University of Child Health Sciences,**
Ferozepur Road, Lahore Phone # (92) (42) 99230901-23 Fax # 99231560



No. P.C./

58546

/CH&UCHS

Dated 22-10-2022

To


✓ **Mr. Abdul Wahab**
I/C Programmer (I.T.)
Health Department, Civil Secretariat,
Lahore.

Subject: -

**REQUEST FOR UPLOADING THE MINUTES OF PRE-BID MEETING
REGARDING THE PURCHASE OF ELECTRO MEDICAL
EQUIPMENT FOR ENT & UROLOGY FOR THE YEAR 2022-2023 ON
HEALTH DEPARTMENT WEBSITE**

Please find enclosed herewith Minutes of the Pre-Bid Meeting regarding the
Purchase Of Electro Medical Equipment For ENT & Urology in The Children's Hospital,
University of Child Health Sciences, Lahore for the year 2022-2023, need to be upload in the
Health Department website.

Your positive response will be highly appreciated.


Prof. Dr. Muhammad Saleem
Professor of Paediatric Surgery
Medical Director

MINUTES OF THE PRE BID MEETING FOR THE PROCUREMENT OF ELECTRO MEDICAL EQUIPMENT FOR ENT AND UROLOGY HELD ON 13-10-2022 AT 10:30 A.M. IN THE CONFERENCE ROOM OF THE ADMIN BLOCK IN THE CHILDREN'S HOSPITAL, LAHORE.

1. Bids regarding the procurement of Electro Medical Equipment for ENT and Urology was advertised vide bid notice No. P.C./53106/I-58/CH&UCHS Dated 27-09-2022.
2. Tender Published in newspaper on 01-10-2022 under IP1. No. 9813 (Daily Dawn & Daily Express) as well as on PPRA website on 03-10-2022 and ready for sale.
3. As per advertised tender a Pre-Bid Meeting held on 13-10-2022 at 10:30 am (As per schedule already given in the advertisement).
4. Meeting starts with the recitation of the Holy Quran. It was briefed to the Chairperson that pre-bid meeting scheduled to clarify the queries of the company in order to avoid any misunderstanding during the bidding process. Detailed discussion made by the Pre-Bid Committee with the representative of the firms - following points were discussed and decision made as follow.

Sr. No.	Equipment	Clarification from the Committee
1.	CO2 Laser for ENT	After pre bid specification are attached please quote the bid as per specification.
2.	Operating Microscope for ENT	After pre bid specification are attached please quote the bid as per specification.
3.	Fess Equipment Functional Endoscopic-Sinu Surgery	After pre bid specification are attached please quote the bid as per specification.
4.	HFO Ventilators (Peadiatrics / Neonatal)	After pre bid specification are attached please quote the bid as per specification.
5.	Endoscope Cameras System (High Definition)	Please note that 4K Camera System required instead of HD camera system.
6.	Pediatric Laparoscope Set / System	After pre bid specification are attached please quote the bid as per specification.
7.	C-Arm (Portable Fluoroscopy)	After pre bid specification are attached please quote the bid as per attached specification.
8.	Medium Range Color Doppler Machine	After pre bid specification are attached please quote the bid as per attached specification.
9.	Intracorporeal lithotripter (ballistic & ultrasound combined with suction) Probes 50 pieces	After pre bid specification are attached please quote the bid as per attached specification.
10.	Holmium LASER 100 watt with LASER fibers 25 pieces	Please read as Thulium fiber laser 60 Watts. Quote as per specification.
11.	(a) Extra-Corporeal shock waves Lithotripter (ESWL) integrated type for Pediatric patient	Modular type ESWL lithotripter for Pediatric patient instead of Extra-Corporeal shock waves Lithotripter (ESWL) integrated type for Pediatric patient. Quote as per provided specification

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Sr. No.	Equipment	Clarification from the Committee
	(b) General anesthesia set up as per PVMS	After pre bid specification are attached please quote the bid as per specification.
12.	Cochlear Implantation Set	After pre bid specification are attached please quote the bid as per attached specification.
13.	Middle Ear Micro Ear Surgery Set	After pre bid specification are attached please quote the bid as per attached specification.
14.	Middle Ear Surgery Tympanoplasty and Stapedotomy Set	After pre bid specification are attached please quote the bid as per attached specification.
15.	Flexible Nasopharyngoscope for ENT	After pre bid specification are attached please quote the bid as per attached specification.
16.	Mastoid Drill System	Item No. 16 & 23 should be read as package items. After pre bid specification are attached please quote the bid as per attached specification.
17.	Patient (facial) Nerve Monitor	After pre bid specification are attached please quote the bid as per attached specification.
18.	Operating head lights	After pre bid specification are attached please quote the bid as per attached specification.
19.	Coblation equipment	No approved PVMS available/Retender.
20.	Suction machines	After pre bid specification are attached please quote the bid as per attached specification.
21.	Rigid bronchoscope set with Optical Forceps	After pre bid specification are attached please quote the bid as per attached specification.
22.	Rigid Esophagoscope set with Optical Forceps	After pre bid specification are attached please quote the bid as per attached specification.
23.	Shaver Debrider with components	Item No. 16 & 23 should be read as package items. After pre bid specification are attached please quote the bid as per attached specification.
24.	Mastoidectomy Set	After pre bid specification are attached please quote the bid as per attached specification.
25.	Myringotomy Set	After pre bid specification are attached please quote the bid as per attached specification.
26.	ENT Unit combined	Item No. 26 & 36 should be read as package items. After pre bid specification are attached please quote the bid as per attached specification.
27.	Video Otoscope System	No approved PVMS available/Retender
28.	Oto Endoscope	No approved PVMS available/Retender
29.	Pulse Oximeter	After pre bid specification are attached please quote the bid as per attached specification.
30.	Laryngoscope Set	After pre bid specification are attached please quote the bid as per attached specification.




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Sr. No.	Equipment	Clarification from the Committee
31.	Bronchial Endoscope	No approved PVMS available/Retender
32.	Micro Laryngeal Surgery Set	After pre bid specification are attached please quote the bid as per attached specification.
33.	Tracheostomy Set	No approved PVMS available/Retender
34.	BAHA Surgery Set	No approved PVMS available/Retender
35.	Flexible Endoscope Equipment	After pre bid specification are attached please quote the bid as per attached specification.
36.	ENT Treatment Units	Item No. 26 & 36 should be read as package items. After pre bid specification are attached please quote the bid as per attached specification.
37.	Adeno-Tonsillectomy Set	No approved PVMS available/Retender
38.	Nasal Surgery Set	No approved PVMS available/Retender
39.	Stroboscope System	No updated PVMS available/Retender
40.	Non-Invasive Monitor	After pre bid specification are attached please quote the bid as per attached specification.
41.	Docking Station with two Syringe Pump	After pre bid specification are attached please quote the bid as per attached specification.
42.	Cystoscope Set for Neonates	Item No. 42, 43, 44, 55 & 56 should be read as a package items.
43.	Cystoscope for Infants and Pediatrics	Item No. 42, 43, 44, 55 & 56 should be read as a package items.
44.	Resectoscope for Infants and Pediatrics	Item No. 42, 43, 44, 55 & 56 should be read as a package items.
45.	Cystoscope & Resectoscope for Adolescent	After pre bid specification are attached please quote the bid as per attached specification.
46.	Irrigation pump with pressure monitor system for endoscopy	No approved PVMS available/Retender
47.	Pediatric Mini Nephroscope set	After pre bid specification are attached please quote the bid as per attached specification.
48.	Pediatric Micro PCNL Set	Retender.
49.	Pediatric Uretero-Renoscope Semirigid URS 4.5-7.3 Fr, 50-60. Length 25-57cm, working channel 3-4 Fr or better	Item No. 49 & 50 should be read as package items
50.	Pediatric Uretero-Renoscope Semirigid URS 6.5-9 Fr, 6-120. Length 25-57cm, working channel 3-4 Fr or better	Item No. 49 & 50 should be read as package items

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Sr. No.	Equipment	Clarification from the Committee
51.	Flexible digital ureteroscope 6-8 fr (URS)	Retender
52.	Video cysto-urethroscope (FLEXIBLE) 12-16 Fr	No approved PVMS available
53.	Mobile Ultrasound Machine with Doppler	Nil After pre bid specification are attached please quote the bid as per attached specification
54.	Hand held Doppler ultrasound	No approved PVMS available
55.	Resectoscope for Neonates	Item No. 42, 43, 44, 55 & 56 should be read as a package items.
56.	Optical Urethrotome for Pediatrics	Item No. 42, 43, 44, 55 & 56 should be read as a package items.
57.	Magnifying Loupe 2.5X	After pre bid specification are attached please quote the bid as per attached specification.
58.	Digital Camera High definition	After pre bid specification are attached please quote the bid as per attached specification.

In case of spelling mistake only (grammatically error please referred PVMS draft)


Engr. Arif Hader
Bio Medical Engineer Purchase
Officer


Engr. Shaukat Ali
Bio Medical Engineer Technical Officer


Dr. Muhammad Sarwar
Associate Prof. Paediatrics
Intensive Care Unit


Dr. Gulshan/Muhammad Zafar
Associate Prof. of Paed. Urology
Endoscopy


Dr. Imran Saeed
Prof. of Paediatric ENT, Endoscopy

Item No 01	
Clinical Specialty	ENT
Generic Name	CO ₂ Laser for ENT
QTY	01
Clinical Purpose	The use of lasers in ENT surgery is common practice today the surgical otolaryngology approach has been revolutionized by the ability to perform minimally invasive, highly precise surgery, suitable for a wide range of treatments for diseases of ear/nose/throat. The most used source is the CO ₂ laser, particularly appreciated for the high degree of precision in cutting combined with an excellent coagulation effect.
TECHNICAL SPECIFICATIONS	
Consisting of: Mobile console with keypad/ color touch panel Multi user system for storage of user programs 25W or better power output Operation modes including continuous wave, pulse mode Single pulse upto 5s/500Hz variable Pulse repetition Beam delivery through free moving articulated arm with seven joints and 360° rotation Low noise cooling system Hand piece 4"/5"/6" with standard set of tips Nasal Hand piece with stainless steel probes Micromanipulator with 200 to 500 mm zoom type focusing Foot switch 5 protective goggles Smoke evacuator	
Accessories: Sterilization system complete	
Warranty: Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.	
Country / Origin of Manufacturer: USA / Europe / Japan	
Trainings: One doctor foreign attachment at manufacture's site and one Biomedical Engineer comprehensive service training at manufacturer's site.	





Clinical Specialty	ENT	Item No 2
Generic Name	OPERATING MICROSCOPE FOR ENT	QTY 01
Clinical Purpose	For high quality imaging and brilliant illumination with microscopes for ear, nose and throat	
TECHNICAL SPECIFICATIONS		
Floor mounted stand with counterbalanced arm and motorized balancing Microscope body with linear motorized zoom (1:6) or better Motorized fine focusing Adjustable speed for focus and zoom Continuously variable focal length 225 to 600 mm without changing front lens Binocular tilt able 0°C to 180°C with IPD adjustment Coaxial illumination Variable spot illumination Eyepieces 10X/12.5X with diotric adjustment Fully apochromatically corrected optics with high light transmission Dust cover Sterilization protective caps for all drive knobs LED/Xenon illumination with controllable intensity 180 Watt or better Waterproof panel Stereo co-observation attachment with inclination with straight Beam splitter HD camera attachment Recorder with hard drive and 30" LCD / LED screen		
Warranty: Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.		
Country / Origin of Manufacturer: USA / Europe / Japan		



Clinical Specialty	ENT	Item No 3
Generic Name	Functional Endoscopic Sinus Surgery Complete Set (FESS)	QTY 1
Clinical Purpose	Functional endoscopic sinus surgery (FESS) is a surgical treatment of sinusitis and nasal polyps, including bacterial, fungal, recurrent acute and chronic sinus problems. FESS uses nasal endoscopes to restore drainage of Clinical Purpose the par nasal sinuses and ventilation of the nasal cavity	

TECHNICAL SPECIFICATIONS

Hand Instrument Set For Fess

Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 17.5cm to 18 cm, Autoclavable, fiber optic light transmission incorporated, color code: green
 Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 17.5 cm to 18 cm, Autoclavable, fiber optic light transmission incorporated, color code: red
 Lateral Telescope 70°, enlarged view, diameter 4 mm, length 17.5 cm to 18 cm, autoclavable, Fiber optic light transmission incorporated, Color code: yellow
 Forward-Oblique Telescope 45°, enlarged view, diameter 4 mm, length 18 cm, Autoclavable, Fiber optic light transmission incorporated, Color code:
 Straight Forward Telescope 0°, enlarged view, diameter 2.7mm, length 17.5 cm to 18 cm, Autoclavable, fiber optic light transmission incorporated
 Straight Forward Telescope 30°, enlarged view, diameter 2.7mm, length 17.5 cm to 18 cm, Autoclavable, fiber optic light transmission incorporated
 Straight Forward Telescope 70°, enlarged view, diameter 2.7mm, length 17.5 cm to 18 cm, Autoclavable, fiber optic light transmission incorporated.

SHAVER SYSTEM FOR FESS.

ENT motor system with display, two motor outputs, integrated irrigation pump and integrated module,
 Including:
 ENT motor system Mains Cord Irrigator Rod
 Single /Two-Pedal Footswitch, two-stage irrigation, sterilizable
 Clip Set, for use with Tubing Cable, length 100 cm Single Use Tubing Set, sterile, package of 3
 Shaver Hand piece, for use ENT
 Suction Shaver Blade with integrated irrigation for Hand piece straight, Autoclavable, double ended irrigation for Hand piece, straight, Autoclavable, double serrated cutting edge, rectangular cutting window, diameter 4 mm, length 12 cm, color code: blue-yellow for use with Hand pieces
 Suction Shaver Blade with integrated irrigation for Hand piece straight, Autoclavable, concave cutting edge, diameter 4 mm, length 12 cm, color code: blue-green, for use with Hand
 Nasal Forceps, straight, with cleaning connector, working length 13 cm Nasal Forceps, 45° upturned, with cleaning connector, working length 13 cm
 Nasal Forceps, straight, through-cutting, tissue-sparing, BLAKESLEY shape, width 3 mm, with cleaning connector, working length 13 cm
 Antrum Grasping Forceps, jaws curved downwards, fixed jaw curved, movable jaw backward opening 120°, with cleaning connector, working length 10 cm
 Antrum Grasping Forceps, jaws curved to right, fixed jaw curved, movable jaw backward opening with cleaning connector, working length 10 cm
 Nasal Scissors, straight, with cleaning connector, working length 13 cm
 Bipolar Suction Forceps, 45° upturned, with suction channel, for bipolar coagulation in para nasal

Specification of ENT and Urology Item Due on 27th October, 2022

areas, working length 12.5 cm, for use with Bipolar High Frequency Cords
 Bipolar High Frequency Cord, for Bipolar Suction Forceps and Bipolar Forceps length 450 cm
 Punch, circular cutting, for sphenoid, ethmoid and choanal atresia, diameter 3.5 mm, with
 cleaning connector, working length 18 cm, including Cleaning Tool
 KAMEL Punch, 45° upturned, punch head diameter 4.5 mm, circular cutting, with cleaning
 connector, working length 13 cm
 Frontal Ostium Seeker, double ended, both sides curved, tips bent right and left, length 22 cm
 Antrum Curette, oblong, small size, length 19 cm
 Antrum Cannula, LUER-Lock/Equivalent, short curved, outer diameter 2.5 mm, length 12.5 cm
 Suction Tube, with mandrel and cut-off hole, with distance marking at 5 - 9 cm, 9 Fr., working
 length 10 cm
 Sickle Knife, pointed, length 19 cm
 Elevator, double-ended, semi sharp and blunt, length 20 cm
 Endo Vision System For Fess
 Full Modular Camera System for both Flexible & Rigid endoscopy. Camera System (CCU & Camera
 head) should be HD or FULL HD.

The system must comprise of following
 HD/FULL HD Video Processor CCU with integrated documentation function image and video
 capturing with CMOS FULL HD camera Heads with following technical data or better or Equivalent

- Max. Resolution: - 1920 x 1080p
- Internal storage 50 GB.

Special Features:

Compatible with a large variety of camera heads.

Supports camera heads in combination with rigid and
 single use flexible video endoscopes

Complete documentation of the procedure is po

Patient data entry, store images and videos in ii

USB. Attachment of printer is possible.

HD CMOS Camera Head

CMOS HD Camera Head, compatible, progressive scan, soak able, with focal length $f = 16$ mm or
 better, 2 freely programmable camera head buttons

Technical data:

losscopes as well as reuseable and
 ossible

nternal memory, transfer of Videos and images on

- Image sensor: CMOS chip • Progressive scan (full frame) for Integrated zoom lens
- $f = 16$ mm or better
- Control of them freely programmable).

27" Medical Grade Monitor

27" Medical Grade Monitor from the same manufacturer and should have recommendation for
 endoscopic MIS surgery with following technical data. Max. screen resolution 1920 x 1080, image
 format 16:9, Interface: RS 232,

Video Inputs: 2xDVI, 1x3G-SDI, 1xRGB, 1x S-Video, 1x Composite Video Outputs: 1x DVI, 1x 3GSDI, 1x
 Comp. 1x S-Video, 1x RS232. CE label, class I.

Certified to: ANSI/AAMI ES60601-1, CAN/CSA C22.2 N0.60601-1:14 und EN 60601-1, EN60601-1-
 2.

FCC part 15. Subpart B Class A, MDD 93/42/EEC. FDA Class I Medical Device. Including Following
 Accessories:

1x DVI cable

1 x External 24 VDC power supply. 1 x Main's cord.

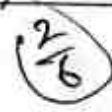
1 x Cable cover.

4 x Mounting screws M4.

Equipment Cart with monitor Stand (LOCAL Supply),

rides on 4 antistatic dual wheels equipped with locking brakes, central beam with integrated
 electrical sub distributors with 6

Specification of ENT and Urology Item Due on 27th October, 2022

sockets, grounding plugs Equipment cart:

Shelf: Including:

Base Module, equipment cart LC Cover, equipment cart LC

Beam Package, equipment cart LC

Shelf, wide Drawer Unit with Lock, wide Camera holder LED light source 150 with one light port

Technical data:

Lamp type: High performance LED.

Light intensity adjustment: Continuously manual

Certified to: IEC 60601-1, IEC 60601-2-18, UL 60601-1, CSA M601.1,

CE according to MDD, protection class I / safety class CF. Special features:

Extremely long average lamp life time of 30,000 hours. Fiber optic light cable compatible with telescopes.

Recording system (same Manufacturer) Technical Data:

Input Voltage: 100-240VAC Input Frequency: 50-60 Hz

CPU: Intel® Core™ i7-6700 @ 3.4GHz. Internal storage: SSD (70 GB) | HDD (; 16 GB.

Connections: 2 x 1 GB Ethernet (RJ 45), 9 x USB 2.0 & 3.0 Image formats: BMP, JPG, PNG

Video format: MPEG-4, MPEG-2, MOV.

Video signal inputs: 1 x DP 1.2A, 1 x HDMI 2.0 Video outputs: 1 x DP1.2 | 1 x HDMI 2.0

Resolution images: up to 3840x2160p (native resolution and aspect ratio) Resolution video clips: up to 3840x2160p @ 60Hz

Type approval: IEC 60601-1-1, EN60601-1, EN60601-2-37 O'

Classification: CE, MDD, CSA. Special Features:

11" or better touch screen Aspect ratio: 16:9.

Record of two image sources (parallel or Individual)

Stills and video sequences (with optional audio) in 2D, 3D, and 4 k.

Easy management and overview of open/automatic memory operations. Patient data import via keyboard, query HL7 or DICOM work list.

Save USB storage media through 2.0 and 3.0, network drives, FTP,

via DICOM or HL7 ORU/MDM. Pawjheyn internal memory (2 TB, FIFO) Network transfer via SMB3 security encrypted DICOM Protocol or sFTP possible

SUCTION IRRIGATION UNIP (same manufacturer)

Line voltage: 100-240

Separately available time installable software modules.

Irrigation pressure during flow controlled procedures *: - max. 500 mmHg*. Irrigation flow during flow controlled procedures:

- Depending on software can be from min 100ml/min to 3500ml/min. Irrigation pressure during pressure controlled procedures: - 20-150 mmHg. (Accuracy <100 mmHg: +/- 10 mmHg; Accuracy 100 - 150 mmHg: +/- 20%). Automated recognition of attached tubing sets (additional safety).

MAGNIFIED DISPLAY SYSTEM

0° with Integrated Illuminator, 'straight forward scope 0°, working distance 25 - 75 cm, length 11 cm, 'autoclavable', with fiber optic light transmission incorporated and condenser lenses.

Tray for cleaning, sterilization and storage of two rigid endoscopes and one light cable. Including holder for adaptors, silicone telescope holders and lid. For rigid endoscopes with up to 10mm diameter and 20cm working length

Holding System

with quick release coupling (same Manufacturer) Consisting of:

Electrical base unit, for use with holding arm.

holding arm, with electrical locking mechanism with quick release coupling

Clamping Jaw, metal, with axial uptake, clamping range 4.8 up to 12.5 mm with quick release coupling for use with instrument and telescope sheaths. The system must be capable of indicating its status as being ready to use or battery voltage

Sinus Burr

Speed range 34000 Rpm or more rotation mode: Rotations Weight 400g or less

Sinus Burr, with integrated irrigation, curved 15°, bud drill, burr diameter 4 mm, shaft diameter 4

Specification of ENT and Urology Item Due on 27th October, 2022

mm, length 12 cm, sterile, for single use, package of 5,
 Sinus Burr 35k, with integrated irrigation, curved 70°, diamond head, burr diameter 3.6 mm, shaft diameter 4 mm, length 12 cm, sterile, for single use, package of 5,
 Sinus Burr 35k, with integrated irrigation, curved 40°, diamond head, burr diameter 5 mm, shaft diameter 4 mm, length 12 cm, sterile, for single use, package of 5
 Tungsten Carbide Shaft Burrs, stainless, sizes 006-070, length 7 cm, set of 15 (Autoclavable)
 Diamond Straight Shaft Burr, stainless, length 12.5 cm, sizes 014- 070, set of 11
 Sterilization Tray for Hand Pieces and Burrs

Diamond cutting burrs length 7 cm, set of 15 (Autoclavable)
 Intra Drill Handpiece

Intra drill handpiece angled length 12.5 cm, transmission 1:2
 (40,000 to 80, 000 rpm), for use with straight shaft burrs

Intra drill handpiece angled, length 18 cm, transmission 1:2
 (40,000 to 80,000 rpm), for use with straight shaft burrs

Intra Drill Handpiece, straight, length 18 cm, transmission 1:1 (40,000 to 80,000 rpm), for use with straight shaft burrs

Motor For Drill Hand Pieces Features

Self Cooling , Brushless

Autoclavable,

Torque 4Ncm or more

motor and straight shaft burrs connect

ACCESSORIES:

Sterilization system complete consisting of standard accessories or following. Container Bottom

Container Lid

Wire Basket Silicone mat Wrapping Drapes

Optional Items

1. DCR Intranasal Drill to be use with shaver system

2. DCR titPVC

3. 4 K Camera for Functional Endoscopic Sinus Surgery

"Full Magnifying Camera System for both Flexible & Rigid endoscopy. Camera System (CCU & Camera head) should be UHD 3840 x 2160p or better and should have backward and forward compatibility and modularity for future upgrade and with latest image enhancement modules for better image quality and identifications of the landmarks and pathology for better outcomes of the surgery.

The system must comprise of following

4K UHD Video Processor CCU with integrated documentation functions for image and video capturing with 4K camera Heads with following technical data or better or Equivalent

• Connections: -1x DVI-D, 2x display port 1.2 output 1 X12G/3G-SDI output, 4 USB

Rotation Socket, to clamp to the OR table, for standard rails, with lateral clamp for height and angle adjustment of the stand.

Connection (2 x front, 2 back)

• Max. Resolution: - 3840 x 2160 p

• Power Supply: - 100-120 VAC, 50/60 Hz, 200-240 VAC, 50/60 HZ

Certified to: IEC601-1, 601-2-18, CSA 22.2 No. 601, UL2601-1 and CE acc. to MDD, protection class 1

Special Features:

Should contain following image enhancement modes:

• Homogenous Illumination across the screen and dark spaces are brightened dynamically

• Enhances the color contrast, without altering the user's natural color perception. Structures are represented more clearly

• Homogenous illumination and color contrast can be used together.

• Spectral change can be performed to identify tumors and normal tissues. Color change is due to spectral color shifts and color exchange.

• Control of peripheral devices i.e., light source, insufflators, recording system parameter via camera head buttons or better

• Still image capturing in 4K UHD (JPEG) Format via camera head buttons

Specification of ENT and Urology Item Due on 27th October, 2022

- Video Capturing in Full HD Quality (MPEG4 Format) via Camera head buttons
- Grid and pointer mode for teaching and training purpose or Better
- Should have compatibility with further upgrades like with Flexible Scyigg or HD camera heads or 3D camera heads
- Laparoscopic and flexible endoscopy view can be displayed on same monitor with compatible camera heads and scopes
- 4K UHD camera head

Technical Data:

Sensor: 1x1/ 2.3" CMOS chip. Pixels: 3840 (h) x 2160 (v) pixels.

CMOS chip supports 16:9 input format.

Lens: Integrated lens, f = 18mm

Control buttons: 3 (2 of them freely programmable) Special features:

3x digital zoom.

Shifting the color spectrum, homogeneous illumination and contrast enhancement is possible.

Light sources are controllable by camera head buttons.

Various display options for NIR/ICG fluorescence applications.

Insufflators are controllable by camera head buttons via communication bus.

Suitable camera control units can store 4K UHD images and FULL HD video clips to USB mass storage devices in conjunction with the camera head.

58" or better 4K Monitor (same manufacturer) LED 300 cold light source (Same manufacturer)

Technical Data:

Lamp type: High performance LED. Color temperature: White light 6000 K

Light intensity adjustment: Continuously manual/Automatic Both Power supply: 100-240 VAC.

Certified to: IEC 60601-1, IEC 60601-2-18, UL 60601-1, CSA M601.1,

CE according to MDD, protection class I / safety class CF. Extremely long average lamp life time of 30,000 hours.

Special features:

Manual control via camera head buttons from sterile field Integrated color touch screen for control of light source. Fiber optic light cable compatible with telescopes Equipment Cart with monitor Stand (same manufacturer).

rides on 4 antistatic dual wheels equipped with locking brakes, central beam with integrated electrical sub distributors with 6 sockets, grounding plugs.

Equipment cart
Shelf

Including:

Base Module, equipment cart LC Cover, equipment cart LC

Beam Package, equipment cart LC Shelf, wide

Drawer Unit with Lock, wide Camera holder Recording system (same Manufacturer)

Technical Data:

Input Voltage: 100-240VAC

CPU: Intel® Core™ i7-6700 @ 3.4GHz. Internal storage: SSD (70 GB) | HDD (2 TB). Memory RAM: 16 GB.

Connections: 2 x 1 GB Ethernet (RJ 45), 9 x USB 2.0 & 3.0 Image formats: BMP, JPG, PNG

Video format: MPEG-4, MPEG-2, MOV.

Resolution images: up to 3840x2160p (native resolution and aspect ratio) Resolution video clips: up to 3840x2160p@60Hz.

Type approval: IEC 60601-1-1, EN60601-1, EN60601-2.

Classification: CE, MDD, CSA.

11" or better touch screen

Record of two image sources (parallel or individually).

Stills and video sequences (with optional audio) in 2D, 3D, and 4 k

Easy management and overview of open/automatic memory operafThos. Patient data import via keyboard, query HL7 and DICOM work list.

Specification of ENT and Urology Item Due on 27th October, 2022

Save USB storage media through 2.0 and 3.0, network drives, FTP, DICOM or HL7 ORU/MDM.
Network transfer via SMB3 security encrypted DICOM Protocol or sFTP possible

Accessories:

Sterilization system complete consisting of standard accessories or following.
Container Bottom, Container Lid Wire Basket, Silicone mat
Wrapping Drapes

Warranty:

Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 5 years.

✂ Training for shavers & 4k camera by Mr

6/6

Clinical Specialty	Anesthesia & Ventilator	Item no 4
Generic Name	HFO VENTILATOR WITH HUMIDIFIER Required	QTY 06
Clinical Purpose	High frequency ventilation is a type of ventilation which utilizes a respiratory rate greater than 4 times the normal value.	
TECHNICAL SPECIFICATIONS		
<p>Pre term Infant & Peads Ventilator System with High Frequency oscillatory Ventilation, Microprocessor controlled ventilation system with HFO oscillatory ventilation.</p> <p>LCD/TFT color Monitors 12" or better.</p> <p>Patient Range: Pre term Infant and Peads.</p> <p>Body weight range 0.3kg – 20kg.</p> <p>Modes of Ventilation:</p> <ul style="list-style-type: none"> • CMV • Pressure Control/PS • CPAP • SIMV • Volume Targeting • High Frequency oscillatory Ventilation • NIV <p>CONTROL</p> <p>Set & measured parameters simultaneously.</p> <p>Measurement Range/Specification.</p> <p>High Frequency Oscillatory Ventilation: 5-10Hz.</p> <p>Inspiratory Tidal Volume: 2-150 ml or more.</p> <p>Respiratory Frequency: 5-150bpm</p> <p>Inspiratory Pressure: 5-60cm H₂O</p> <p>PEEP: 0-20cm H₂O</p> <p>I:E Ratio: 4:1</p> <p>FiO₂/O₂ Delivery: 21-100%</p> <p>Monitoring Parameters for set and measured value simultaneously with Digital Display</p> <p>Total breath rate</p> <p>Oxygen concentration FiO₂</p> <p>Expired Minute Volume</p> <p>Expired Tidal Volume</p> <p>Peak expiratory flow</p> <p>I : E Ratio</p> <p>Peak Pressure</p> <p>Mean airway Pressure</p> <p>Lung Mechanics with pressure and volume loops</p> <p>OTHERS CONTROL AND FUNCTIONS</p> <p>Back up Ventilation.</p> <p>Microprocessor Gas Delivery System</p> <p>Breathe Circuit Compliance Compensation.</p> <p>Expiratory hold/Inspiratory Hold</p> <p>Pressure / Volume and Flow Trigger Sensitivity.</p> <p>Trigger Sensitivity Indication</p> <p>Should able to operate on single air/and gas source at 21% Oxygen.</p> <p>Mounted on trolley with lockable wheel</p> <p>Autoclave able Reusable Patient Tubing Circuit for Infant & Peads (O₂ each)</p> <p>Trend Data</p>		

Specification of ENT and Urology Item Due on 27th October, 2022

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ALARMS

Apnea
AC Power Failure
High and Low Expired Minute Volume
High and Low Peak Air Way Pressure
High and Low breath rate
FiO₂ Variation
Low and High baseline pressure
Gas Supply Source Failure
Low battery

HUMIDIFIER:

Automatic compensation (Servo) controlled heated humidifier with temperature monitoring at air way and
Humidification chamber with alarm for low/ high limits with water trap in the patient circuit.

POWER SUPPLY

220V 50Hz with internal chargeable battery backup with compressor time for minimum 1 hr.

PNEUMATICS

The unit will be driven on the central compressed air and oxygen
Should have provision of connecting external compressor.

ACCESSORIES:

Maintenance kits during warranty period.
Re-usable breathing circuits (02 each)
All standard Accessories to execute all above mention functions

Warranty:

Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.

The warranty includes (Filters, flow sensors batteries. Expiratory membrane) etc

Country / Origin of Manufacturer:

USA / Europe / Japan







Clinical Specialty		QTY 02
Generic Name	Digital Color Doppler	
Clinical Purpose	It is immediately available imaging modality with its main use in obstetrical and antenatal care likewise in conditions when ionizing radiations are contra indicated.	

TECHNICAL SPECIFICATIONS

Color Doppler with Fully Digital Beam former having 2D / M-Mode and Doppler Facilities, (PW, HPRF, & Color Flow Imaging) with High Resolution Imaging Doppler Signal Quality; having DICOM Compatibility and upgradeable to CW and 4D imaging in convex probe.

B-MODE SPECIFICATION:

- Sector Scan Angle Variable in Four Steps.
- Viewing Depth: 40cm or more (Both in Grey Scale and Color).
- Frame Rate: 1500 f/sec or more.
- Built-in cine loop with ability to vary reverse and slow motion of display; Internal Memory 2000 /600MB or more Color Images.
- Real time and Freeze Image Magnification at least 10X or more with panning for Real, Freeze and Memorized Images.

M-MODE SPECIFICATION: a) Magnification: x2 or more.

- Sweep Speed: Slow, Medium and Fast.
- Color Display of M-Mode.

D-MODE SPECIFICATION:

- Pulse-Wave Doppler Measureable Velocity Range.
- HPRF Doppler.

CONTINUOUS-WAVE DOPPLER:

- Measurable Velocity Range: Steerable.
- Must have Doppler Beam Steering and Bi-Directional Stereo-Audio.
- Colorized Spectrum Display.
- Automatic Baseline and Velocity Range Control.
- Live Measurements for Doppler Spectrum.

5) COLOR DOPPLER MODE SPECIFICATIONS :-

Both CW and PW Doppler must be Continuous Steerable in the Color Blood Flow Image Mode in Real Time.

- 2D Image with Color, CW and PW Doppler.

Windows based System for easy usage with Programmable Control Panel Keys.

- Tissue Harmonic Imaging with 4THI or more Frequency. Power Doppler.
- Triplex Mode for Simultaneous Display of Color B/M and D-Mode Displays.
- 270db or more system dynamic range or more.

MEASUREMENT PACKAGE: To provide Comprehensive Software Package for Measurement of Distance, Circumference, Area, Time Depth, ANGLE, Velocity, Frequency, Heart Rate, Volumes, Nuchal Thickness Measurement Software, IMT measurement software to be Provided as a Standard.

SYSTEM COMPLETE WITH FOLLOWING FACILITIES AND ACCESSORIES:

- Minimum 21-Inches LCD/LED/OLED Color Monitor, with Resolution 1280 x 1024 Pixels minimum.
- Foot-Switch.
- 4 Active Transducer Connector for trans-thoracic Probes.
- DVD /CD Drive for Image Storage to be Built-in to the System.
- 500GB or more hard disk drive to be Built-in to the System.
- Built-in DICOM Compatibility. (3.0 with all components)

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- Touch Command Screen Control at least 10.0 inches or more LCD/LED/OLED.
- Full DICOM (Upgradable)
- Probes must be supplied by same manufacturer.

UPGRADEABILITY :-

System Software must be Upgradable.

STANDARD PROBES :-

- 2 – 6 MHz Multi-Frequency Convex Probe for B/M/CDI/PW, shear-wave Elastography. Probe should have single crystal technology with Pin/ pin-less connector.
- 7-15 MHz or more multifrequency linear probe with strain and small parts and MSK studies..
- 4-11MHz micro-convex pediatric probe.
- Hockey-stick probe (frequency range 8-16Mhz).

NOTE: All Probes must be supplied by same Manufacturer. + 1Mhz deviation from the quoted frequencies of probes would be considered as minor deviation.

STANDARD RECORDING DEVICES:-

Thermal Paper Printer with 20 Rolls of Paper (Black & White) with HD.

CINEWAVE UPS Online with 30 minutes back up time for the System. IMPORTED

10) Tissue Doppler Imaging Mode.

11) Pure Wave / Pulse Inversion / Differential Tissue Harmonic Imaging to Enhance Effective.

Wide Band Frequency Range to provide Simultaneously Spatial Resolution, Contrast Resolution and increased Penetration using Two Transmission Pulses at Different Frequencies Simultaneously and Reception at Harmonic as well as Differential Component.

12) Auto Image Optimization / Quick Scan Imaging for Automatic STC / GAIN and Doppler Spectrum Adjustment with Optimal Image Quality by using One Touch Operation.

13) B-Flow / Dynamic Flow Imaging / E-Flow / Clarify.

14) Trapezoid Imaging / Virtual Convex Imaging with Linear Probe. Compound / Aplipure Imaging for TH/both Frequency Compounding and Spatial Compounding in B/W and Color Mode.

16) Panoramic / SIESCAPE / Logic view Imaging with Measurements.

17) TISSUE CONTRAST ENHANCEMENT SOFTWARE/SPECKLE REDUCTION/X-View Plus.

18) N-Sight / Adaptive Suppression / Precision Imaging /Cross beam / XFlow or equivalent to Enhance B-Mode Imaging. Xpress / Care / DTCE or equivalent Detailed in Layers and Boundaries and Sharpened Outlines of the Lesions and reduce Cluttering.

19) Micro CPA / Superb Micro Imaging/vascular enhancement/B flow HD Color/ Micro-V with Color/spectral to Clearly Show Blood Flow in tiny Vessels.

Accessories :

1. Thermal Printer 256-Gray scale (Sony, Mitsubishi or equivalent)

2. UPS: on line with sine waves 2 KVA with thirty minutes back up time. (IMPORTED)

3. 50 High Density / High Glossy thermal paper Rolls

4. Gel: 20 liters

5. Revolving chairs for the ultrasound operator (2 per machine)

6. Patient Couch

7. Latest computer system with Printer for Ultrasound reporting. Package should include computer table with computer chair

8. Wall-hanging X-ray film viewer.

Optional Mandatory to quote.

Complete with Hardware /needle navigation with tracking system.

Contrast Harmonic Imaging Upgradable.

3D/4D multifrequency probe.

Fibro-scan/ Attenuation Imaging for fat liver assessment.

REMOTE SERVICES

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The firms will provide the remote service connectivity through modem with manufacturer's remote service center. The firms will also provide the connectivity/license to share the global resources for information, images, clinical protocols and research purposes and remained valid till the life of USG.

Warranty:

Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.

Country / Origin of Manufacturer:

USA / Europe / Japan

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Clinical Specialty	Anesthesia & Ventilator	item 11b
Generic Name	ANESTHESIA WORKSTATION	QTY 01
Clinical Purpose	The anesthesia workstation is used by anesthesiologists and nurse anesthetists to support the administration of anesthesia. The most common type of anesthetic machine is the continuous-flow anesthetic machine, which is designed to provide an accurate and continuous supply of medical gases (such as oxygen and nitrous oxide), mixed with an accurate concentration of anesthetic vapor (such as isoflurane), and deliver this to the patient at a safe pressure and flow. Anesthesia work station incorporate a ventilator, suction unit, and patient monitoring devices.	

TECHNICAL SPECIFICATIONS

Anesthesia work station machine to administer anesthetic agents in precise control and flow manner. The machine will equip to monitor the vital sign parameters and anesthetic agents during operation. It should stay on the theatre (for mobile use) housing 3-gases O₂/N₂O/AIR.

Provision of communication port for sharing and transfer of data.

Unit shall comprise of the following components:

Electronically/digitally control, mixing and monitoring of anesthetic gases (O₂, AIR, and N₂O) both by digits as well as virtual tubes.

Built-in illumination system.

Non-interchangeable pipeline inlets

Pipeline & cylinder gauges for O₂, N₂O and AIR.

Central gas/ electronically driven unit.

Pin index cylinder yokes for Oxygen & N₂O (One each), as backup.

Pin index type cylinders will be provided with the unit (2xO₂ and 2xN₂O: BS standard)

Gas outlet and O₂ flush control

1 auxiliary O₂ outlet (preferably electronics).

Two Lockable castors

Stainless steel/fiber work surface

Absorber bag support arm

Integrated heated breathing system.

Three gas electronic digital flow meters for precise control and monitoring of gases.

Drawer unit 5-6" high.

Power outlet with 3/4 socket outlets to connect the auxiliary equipment.

CO₂ absorber 800 – 1,500 gm or better with changeable during the surgery.

Complete with valve for bag/ventilator, manometer, 0.5, 1.0, 1.5, 2 & 3 L breathing bags,

Breathing tube (adult and paed).

Mounts and Y-piece.

Additional breathing hose and connector (adult and paed).

Scavenging system passive / active type.

Suction system.

ANESTHESIA VENTILATOR:

Anesthesia Ventilator with minimum 12" or more LCD /TFT Screen.

The ventilator shall be capable of ventilating Neonates /pediatric patients/Adult Patients) The ventilator shall have following features as a minimum requirement:

Volume Preset Time Cycled Ventilator (IPPV Mode)

Manual, spontaneous: Volume Mode (IPPV) / CMV

Pressure Mode (PCV)

Pressure Support (PS)

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Pressure Control (PC)

Pressure Controlled and pressure support Modes

Synchronized volume controlled ventilation (SIMV) with PS

PS with apnea back up

Breathing Mode Selection (Standby / Volume / Spontaneous and Pressure)

Built in Oxygen Monitor

Inverse I:E ratio Capability

Gas Specific Input Connectors (Air or Oxygen ISO or ANSI Standards)

Tidal Volume P.C 5ml to 1400ml. & VC 20-1400ml.

Rate or Frequency 4 to 80 bpm

PEEP 3 to 20 cm of H₂O.

Inspiratory Pressure Limit

Pressure and Volume (Spirometry) Loops / Curve.

Oxygen / Electronically Driven

Power Supply 220 VAC, 50 Hz

Battery Backup (60 Minutes or more)

Low / High FiO₂ Alarm

Incorrect Rate or Ratio alarm

Mains Failure alarm

Low battery alarm.

Oxygen Sensor: Paramagnetic

Hypoxic Device.

The ventilator shall be supplied with complete drive hose and power cable.

Note: Annual maintenance kits (needs to replace annually) will be included in the warranty period as per manufacturer's guidelines.

Two pre calibrated Vaporizers of Isoflurane & Sevoflurane vaporizer, temperature and flow

Cardiac bypass mode / HLM / Spontaneous Mode.

Anesthetic Agent monitoring (with in the anesthesia machine)

220V, 50 Hz operated.

Battery backup of at least 60 minutes

Online UPS with backup of 30 minutes for complete unit.

Temperature probe Qty 3

Skin Probe Qty 3

MONITORING :

Modular Vital sign monitor.

Size of minimum 17" touch screen or more for display of vital sign parameters of neonates, infants and adults.

Measurement of ECG

NIBP with re-usable single hose cuff for neonates, child and small adults

SpO₂ (Massimo Technology / Equivalent motion tolerant technology) with re-usable cable and sensors for neonates, infant, adult and small adults sizes (Qty I.O specify).

HR

Temperature with nasal probe.

Respiration

Four Channel IBP

EtCO₂ main / side stream (Complete with all sensors probes, reusable).

Note: Monitors must be supplied by the same manufacturer and must be compatible with the machine and ventilator.

ACCESSORIES:

NIBP Cuff-Qty 2

2 SpO₂ probe QTY 2

Temperature probe QTY 2

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Skin Probe QTY 2

ECG Leads QTY 2

Four Channel IBP leads QTY 2

Optional:

NIRS (Near Infra-Red Spectroscopy unit for Cerebral Pulse Oximetry for pediatric patients. Complete with main unit with monitor and sensors including disposable head sensor/probe (Qty 50 Nos.)

NMT Neuro muscular transmission.

BIS Monitoring.

Warranty:

Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.

The warranty of equipment will be including batteries, oxygen sensor, all kinds of filters and flow sensor.

Country / Origin of Manufacturer:

USA / Europe / Japan

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3/3

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Clinical Specialty	ENT	Item No 12
Generic Name	Cochlear Implantation Set	QTY 2 SETS
Clinical Purpose	A Cochlear Implant is a device that can be surgically implanted into a person's cochlea to stimulate it to cause hearing. It consists of a tiny receiver which is placed under the skin in the bony part behind the ear. The receiver has a probe with several electrodes (usually 22 now), that is implanted into the cochlea. This set is used to implant the cochlear device.	
TECHNICAL SPECIFICATIONS		
<p>Surgical Handle, No. 3, length 12.5 cm, for blades</p> <p>PLESTER Retractor, 2 x 2 prongs, 11 cm</p> <p>WULLSTEIN Retractor, 11 cm</p> <p>ANDERSON-ADSON Retractor, 4 x 4 prongs, sharp, curved, length 20 cm</p> <p>OLIVECRONA Brain Spatula, double ended, angular, 11 and 13 mm wide, concav, eleastic, length 18 cm</p> <p>OLIVECRONA Brain Spatula, double anded, angular, 7 and 9 mm wide, concav, elastic, length 18 cm</p> <p>PLESTER Suction Tube, with grip plate, cut-off hole and stylet, LUER, 20 cm, 5 Fr.</p> <p>PLESTER Suction Tube, with grip plate, cutt-off hole and stylet, LUER, 20 cm , 7 Fr.Z</p> <p>PLESTER Suction Tube, with grip plate, cut-off hole and stylet, LUER, 20 cm, 9 Fr.</p> <p>Suction Cannula, LUER-Lock, working length 6 mm, O.D.: 0.5 mm</p> <p>Suction Cannula, angular, LUER- Lock, working length 6 cm, O.D. 0.7 mm</p> <p>WULLSTEIN Adaptor, for suction cannula with cut-off hole, LUER cone, 10 cm.</p> <p>Octogonal handle with LUER-cone, straight, length 17 cm Diamond Burr, cylindrical, diameter 5mm, length 10mm, for Cochlear Implant surgery, with smooth bottom to protect the dura, with straigt shaft diameter 2.35mm, length 44mm.</p> <p>Diamond Burr, shaft diameter 2.35 mm, length 70 mm, diameter 0.6 mm</p> <p>Diamond Burr, shaft diameter 2.35 mm, length 70 mm, diameter 1.0 mm</p> <p>Diamond Burr, shaft diameter 2.35 mm, length 70 mm, diameter 1.4 mm</p> <p>Seeker, delicate, angled 25°, with ball end 1 mm O.D., length 16 cm</p> <p>Seeker, delicate, angled 25°, with ball end 1.5 mm O.D., length 16 cm</p> <p>Forceps, for insertion of cochlear electrodes, nucleus 24 contour, curved to left, working length 6 cm</p> <p>Forceps, for insertion of cochlear electrodes, nucleus 24 contour, curved to right, working length 6 cm</p> <p>Micro Guiding Instrument for electrodes array, length 16 cm, claw-shaped, tip 13° angled upwards</p> <p>Micro Guiding Instrument for electrodes array, length 16 cm, claw-shaped, tip 13° angled downwards</p> <p>Hook, footplate, 16 cm, 0.2 mm. PLESTER Hook, footplate, 16 cm, 0.6 mm.</p> <p>LENARZ Retractor, 43 mm x 11 mm, slim and flat blade with integrated suction tube, length 21.5 cm</p> <p>SCHOENBORN Thymus Retractor, length 20.5 cm</p> <p>RANEY Applying and Removing Forceps for scalp hemostasis clips, length 16 cm</p> <p>Needle Holder, tungsten carbide inserts, 15 cm.</p> <p>Dissecting- and Ligature Forceps, straight, smooth jaws, length 9.5 cm</p> <p>FREER Elevator, double-ended, length 20 cm.</p> <p>PLESTER Elevator, 18 cm, 8 mm wide.</p> <p>ALLIS Dissecting Forceps, toothed, length 20 cm.</p> <p>WULLSTEIN Forceps, 15 cm, Dressing</p> <p>Dressing Forceps, length 14.5 cm, delicate size</p> <p>ADSON-BROWN Tissue Forceps, non-traumatic, fine side grasping teeth, length 12 cm</p> <p>Bipolar Coagulating Forceps, insulated, bayonet-shaped, slim shaft, tip 0.5 mm, length 19 cm, for use with bipolar high frequency cord</p> <p>Preparation Plate, glass, 13 cm x 8 cm.</p>		
Accessories:		

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Sterilization system complete consisting of standard set or as follows. Container Bottom Container Lid
Wire Basket Silicone mat Wrapping Drapes.

Warranty:

Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.

Country / Origin of Manufacturer:

USA / Europe / Japan



(2/2)

Clinical Specialty	ENT	Item No 13
Generic Name	Middle Ear Micro Ear Surgery Set	QTY 1 SET
Clinical Purpose	To restore hearing loss, which is usually due to otosclerosis, stapedectomy is performed. Stapedectomy is the removal of all or part of the stapes, one of the bones in the middle ear, and replacement with a tiny prosthesis	

TECHNICAL SPECIFICATIONS

HARTMANN Nasal Speculum, for adults, length 13cm PLESTER Elevator, 18 cm, 8mm wide.
 LEMPERT Raspatory, width 3 mm, length 19 cm Tissue Forceps, 1x2 teeth, length 11.5 cm
 WULLSTEIN Forceps, serrated, length 15 cm Scissors, curved, sharp/blunt, length 12 cm PLESTER
 Retractor, 2x2 prongs, length 11cm
 PLESTER Retractor, 2 prongs on right, full blade on left, length 11 cm PLESTER Retractor, 2 prongs
 on left, full blade on right, length 11 cm WILLIGER Retractor, 4 prongs, sharp, lenajTT*SBcm
 Surgical Handle, size 3, length 12.5 cm, for Blades Blade, size 15, non-sterile,
 Blade size 11, non-sterile, package of 100 Blade size 10, non-sterile, packa
 100 Scissors, curved, sharp/blunt, length 14.5cm
 ROCHESTER-PEAN Haemostatic Forceps, straight, length 14cm
 Needle Holder, tungsten carbide inserts, length 13 cm HALSTEAD "
 straight, length 12.5 cm HALSTEAD "Mosquito" Artery Forceps,
 Towel Forceps, length 9 cm
 GUILFORD-WRIGHT Wire Cutter, serrated, length 10 cm SC
 HARTMANN Ear Speculum, standard mosquito Artery Forceps, 12.5 cm
 BACKHAUS of IECHT Wire Bending diameter 5mm, length 3.6cm
 Instrument Guard, teflon, autoclavable, for mic
 working length 8cm, length 11.5cm
 Micro fore and micro scissors with
 HARTMANN Ear Speculum, standard model, outer diameter 5 mm, length 3.6cm HARTMANN
 Ear Speculum standard model, outer diameter 6 mm, length 3.6cm HARTMANN Ear Speculum,
 standard model, outer diameter 7.5 mm, length 3.6 cm HARTMANN Ear Forceps, extra delicate,
 serrated, 1 x4.5 mm, working length 8cm FISCHE Ear Forceps, extra delicate, pointed, serrated,
 1x4.5mm, working length 8cm HARTMANN Ear Forceps, serrated, working length 8cm
 WULLSTEIN Ear Forceps, extra delicate, oval cupped jaws, 0.9mm, working length 8cm
 HARTMANN Ear Forceps, round cupped jaws, diameter 2 mm, working length 8cm BELLUCCI
 Scissors, delicate standard model, blade length 8 mm, working length 8cm HOUSE- DIETER
 Malleus Nipper, up biting, working length 8cm Me GEE Wire Crimper, straight, working length
 8cm
 Suction Tube, angular, LUER-Lock, outer diameter 0.7 mm, working length 6 cm
 Suction Tube, angular, LUER-Lock, outer diameter 1mm, working length 6cm
 Suction Tube, angular, LUER-Lock, outer diameter 1.3 mm, working length 6 cm Suction Tube,
 angular, LUER-Lock, outer diameter 1.5 mm, working length 6 cm Suction Tube, angular,
 LUER- Lock, outer diameter 2mm, working length 6cm
 Suction Handle, with cut-off hole, LUER cone, length 10 cm, for use with Suction Tubes PLESTER
 Suction Tube, with grip plate, cut-off hole and stylet, LUER, 5 Fr., length 20 cm PLESTER Suction
 Tube, with grip plate, cut-off hole and stylet, LUER, 7 Fr., length 20 cm PLESTER Suction Tube, with
 grip plate, cut-off hole and stylet, LUER, 9 Fr., length 20 cm Ear Hook, without ball end, size 1,
 length 15.5 cm
 Seeker, ball end angled 45°, 15.5 cm, size 3, BUCK Ear Curette, sharp, size 00, length 14.5cm BUCK
 Curette, sharp, 14.5cm, size 0
 PLESTER Hook, 15.5 cm, retrospective, 2 mm, to granulate the underside of the tympanic
 membrane.
 HOUSE Curette, large, spoon sizes 2 x 3.2 mm and 1.6 x 2.6 mm, length 15 cm HOUSE Curette,
 small, spoon sizes 1 x 1.6 mm and 1.3 x 2 mm, length 15 cm HEERMANN Hook, reinforced,

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16cm. retrospective, 0.8mm.

Pick 45°, 16 cm, 0.5 mm KLEY Knife. Footplate, 16cm Hook, footplate, 16cm, 0.2mm. PLESTER Hook, footplate, 16 cm, 0.6mm. FISCH Perforator, 16cm, diameter: 0.3mm.

PLESTER Guide, 15.5 cm Pick 45°, 16cm, 1.0mm

PLESTER Knife, round, vertical, 16 cm, standard size 3.5 x 2.5 mm Round Knife 45°, 16 cm. diameter: 2.0 mm.

PLESTER Sickle Knife, double-edged, standard model, slightly curved, length 16cm

WULLSTEIN Needle. 16.5cm, light curve.

Pick 90°, 16cm, 0.4mm

Pick 90°, 16cm, 0.6mm

Pick 90°, 16cm, 0.8mm

Pick 90°, 16cm, 1.0mm

Accessories:

Sterilization system complete consisting of standard accessories or as follows Container Bottom

Container Lid Wire Basket Silicone mat Wrapping Drapes

Warranty:

Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.

Country / Origin of Manufacturer:

USA / Europe / Japan



Clinical Specialty	ENT	Item no 14
Generic Name	Middle Ear Surgery Tympanoplasty and Stapedotomy Set	QTY 1 SET
Clinical Purpose	Tympanoplasty is the surgical operation performed for their construction of the eardrum (tympanic membrane) and/or the small bones of the middle ear. Stapedectomy is a surgical procedure of the middle ear performed to improve hearing	
<p>Retractor, 2x2 prongs, length 13 cm Scissors, curved, length 15 cm</p> <p>"Mosquito" Artery Forceps, micro-model, curved, length 12.5 cm Scissors, extra delicate, curved, sharp/sharp, length 10.5 cm</p> <p>Suction and Irrigation Tube, conical, suction tube outer diameter 3.2mm, irrigation tube outer diameter 2mm, working length 9.5 cm</p> <p>Suction and Irrigation Tube, cylindrical, suction tube outer diameter 1.9 mm, irrigation tube outer diameter 1.9 mm, working length 9.5 cm</p> <p>Suction and Irrigation Tube, cylindrical, suction tube outer diameter 2.5mm, irrigation tube outer diameter 2mm, working length 9.5 cm</p> <p>Surgical Handle, Fig.3, length 12.5cm, for Blades</p> <p>Dual Purpose Scalpel Handle, elevator on one side, scalpel handle no. 7 on the other side, length 6 cm</p> <p>Double Curette, medium, spoon sizes 1 x 1.8 mm and 2 mm, length 15 cm</p> <p>Jeweler Forceps, fine, pointed, soft spring-action, length 11 cm Tissue Forceps, 2 teeth, slender, soft spring-action, length 13 cm Forceps, serrated, soft spring-action, length 15 cm Raspatory, width 10mm, length 16 cm</p> <p>Raspatory, curved, width 4mm, length 6.5 cm</p> <p>Suction Tube, angular, with grip plate, outer diameter 1.2 mm, working length 9 cm</p> <p>Suction Tube, angular, with grip plate, outer diameter 1.5 mm, working length 9 cm</p> <p>Suction Tube, angular, with grip plate, outer diameter 2 mm, working length 9 cm</p> <p>Suction Tube, angular, with grip plate, outer diameter 2.2mm, working length 9 cm</p> <p>Suction Tube, angular, malleable, LUER-Lock, outer diameter 0.7 mm, working length 7 cm, for use with Adaptor 204250 for use with Handle</p> <p>Suction Tube, angular, malleable, LUER-Lock, outer diameter 1 mm, working length 7 cm, for use with Adaptor</p> <p>Suction Handle, with long thumb grip, cut-off hole diameter 1 mm, inner diameter 1.7 mm, LUER cone, length 5.5 cm, for use with Suction Tubes,</p> <p>Micro Raspatory, single curved to right, length 16 cm Micro Raspatory, single curved to left, length 16 cm Round Knife 45°, diameter 1 mm, length 16 cm Tenotome, sickle-shaped, extra delicate,</p>		

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length 16 cm Pick, 45°, size 0.5 mm, length 16 cm

Pick, 45°, size 1 mm, length 16 cm

Pick, 45°, size 1.5 mm, length 16 cm Pick, 45°, size 2.5 mm, length 16 cm

Pick, 90°, size 0.5 mm, length 16 cm

Pick, 90°, size 1 mm, length 16 cm

Pick, 90°, size 1.5 mm, length 16 cm

Pick, 90°, size 2 mm, length 16 cm

Manual Perforator, diameter 0.3 mm, length 16 cm Perforator, diameter 0.4 mm, length 16 cm

Perforator, diameter 0.5 mm, length 16 cm Perforator, diameter 0.6 mm, length

Anterior Footplate Elevator, tip angled upwards 90°, 0.2 mm, length 16 cm

Anterior Footplate Elevator, tip angled downwards 90°,
0.2 mm, length 16 cm

Caliper, angled shaft, diameter 0.4 mm, marker pin at 10 mm, length 16 cm
0 mm, length 16 cm

Caliper, angled shaft, diameter 0.6 mm, marker pin at 1 y

Measuring Rod, length 16 cm, Marker pins at 3 mm, 4 mm, 5 mm

Ear Forceps, extra delicate, oval cupped jaws, 0.9 mm, working length 8 cm

Ear Forceps, extra delicate, oval cupped jaws, 0.6 mm, working length 8 cm

Ear Forceps, round cupped jaws, diameter 2 mm, working length 8 cm Ear

Forceps, extra delicate, serrated, 4.5 mm, working length 8 cm

Ear Forceps, extra delicate, serrated, 0.4 x 3.5 mm, working length 8 cm

Ear Forceps, extra delicate, smooth, 1 x 4.5 mm, working length 8 cm

Micro Scissors, extra delicate scissor blades, with thin shaft, blade length 3 mm, working length 8 cm

Micro Scissors, extra delicate scissor blades, blade length 3 mm, working length 8 cm

Scissors, blade 7 mm, extra delicate, working length 8 cm Scissors, for crurotomy, curved to right,
working length 7.5 cm Scissors, for crurotomy, curved to left, working length 7.5 cm

Malleus Nipper, extra delicate, up biting, width 0.8 mm, working length 8 cm

Metal Tray, for sterilizing and storage of ear instruments, perforated, base with holder for 20
straight ear micro instruments with octagonal handle, lid with silicone bridges, external
dimensions (WxDxH): 275x175x36 mm

Wire mesh tray for cleaning, sterilization, transport and storage of Instruments, including hole
plate walls and fold away handles. External dimensions (WxDxH): 480x250x60 mm.

Accessories:

Sterilization system complete consisting of standard accessories or as follows Container Bottom
Container Lid Wire Basket Silicone mat Wrapping Drapes

Warranty:

Specification of ENT and Urology Item Due on 27th October, 2022

Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.

Country / Origin of Manufacturer:

USA / Europe / Japan



3/2

Clinical Specialty	ENT	Item No 15
Generic Name	Flexible Nasopharyngoscope for ENT	QTY 1
Clinical Purpose	A diagnostic procedure that examine the nasal passage ways and pharynx with an instruments outfitted with an optical system.	
TECHNICAL SPECIFICATIONS		
Shaft Diameter : 3.8 mm or less Working Length: 300 mm or more Field of View: 70 Degree or Better Angulations up/down: 100 or better Depth of view: 5-50 mm or better Fiber optic light cable Light source LED		
Accessories: Sterilization system complete		
Warranty: Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.		
Country / Origin of Manufacturer: USA / Europe / Japan		

& Training ✕



Clinical Specialty	ENT	Item No 18
Generic Name	Operating Head Light	QTY 4
Clinical Purpose	Head Light used during inspection and surgery of Ear Nose and Throat	
TECHNICAL SPECIFICATIONS		
Headlight with double lens system and Y-fiber optic light cable, > 175,000 lux, illuminated area adjustable from 20- 80 mm with 40 cm or better working distance, with removable and sterilizable focus handle, Y-Fiber Optic Light Cable, with straight plug, diameter 2 x 2.5 mm, length 290 cm LED 150 WATT or better light source High-Performance LED Light with one light outlet, power supply 100 - 240 VAC, 50/60 Hz including: Mains cord		
Warranty: Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.		
Country / Origin of Manufacturer: USA / Europe / Japan		



	OT General Surgery	Item No 20
Generic Name	HEAVY DUTY SUCTION MACHINE	QTY 3
Clinical Purpose	Heavy duty suction machine is used to keep the airways clean and in operation theater for suction of various secretions/fluids from various cavities of body.	
TECHNICAL SPECIFICATIONS		
<p>Reciprocating, oil free pump mechanism. Heavy duty Mobile Suction Unit with twin jars (Polysulfone / Polycarbonate type) of capacity up to 4 or 5 liter each, Autoclave able. Aspiration rate up to 40-50 liters/minutes or more at 650-900mm.Hg Vacuum continuously adjustable Triple flow safety device Change over valve Suction tubing of silicone with coupling connection for each jar Noise Level 45 dB or less, 220V/50Hz. Accessories: •10 x bacterial filter •Original trolley with lockable wheels</p>		
<p>Warranty: Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.</p>		
<p>Country / Origin of Manufacturer: USA / Europe / Japan</p>		

Clinical Specialty	ENT	Item No 21
GENERIC NAME	RIGID BRONCHOSCOPE WITH OPTICAL FORCEPS	QTY 1
Clinical Purpose	Bronchoscopy is an endoscopic technique of visualizing the inside of the airways for diagnostic and therapeutic purposes. An instrument (bronchoscope) is inserted into the airways, usually through the nose or mouth, or occasionally through a tracheostomy. Rigid bronchoscopy is used for retrieving foreign objects.	
TECHNICAL SPECIFICATIONS		
<p>Bronchoscope, length 20 to 30cm, size 5-6mm</p> <p>Bronchoscope, size 4 to 5 mm, outer diameter 4-6 mm, inner diameter 6-7mm, length 20 to 30cm</p> <p>Bronchoscope, size 3.5 to 5 mm, outer diameter 5-7 mm, inner diameter 5-6mm, length 30-40cm</p> <p>Prismatic Light Deflector autoclave able, with connection to fiber optic light cable or equivalent</p> <p>Glass Window Plug or equivalent</p> <p>Rubber Telescope Guide for use with telescopes or optical forceps or equivalent</p> <p>FLUVOG Adaptor with sliding glass window plug, sealing cap or equivalent</p> <p>Notched lens and keyhole opening, moveable or equivalent</p> <p>Adjustable Magnifier, swing-away type, with ring adaption, Autoclave able</p> <p>Adaptor for respirator Injection Cannula/ equivalent, for positive pressure assisted ventilation system, LUERLock/equivalent, outer diameter 3.5mm, for use with Bronchoscope Models</p> <p>→ Straight Forward Telescope 0°, diameter 2.9 mm, length 30-36 cm, autoclave able, fiber optic light transmission incorporated, color Q2</p> <p>Optical Coin Forceps for Pediatric Broncho- Oesophagoscope, 2x2 teeth, for use with telescope forced controlled handle for removal of coins and flat foreign bodies or equivalent code :green Q2</p> <p>Optical Alligator Forceps for Pediatric Broncho-Oesophagoscope, for use with telescope forced Controlled handle for removal of hard foreign bodies or equivalent Q2</p> <p>Optical Forceps, with spring- action handle for controlled removal of peanuts and soft foreign bodies, for use with Telescope or equivalent Q4</p> <p>Forceps alligator, for hard foreign bodies, double action jaws, sheath diameter 1.5 mm, working length 35 or equivalent Q4</p> <p>Forceps, for peanuts and soft foreign bodies, double-action jaws, sheath diameter 1.5 mm, working length 35cm or equivalent Q4</p> <p>Rigid Suction Tube, outer diameter 3 mm, working length 35cm or equivalent</p> <p>Cotton Carrier, working length 35cm or equivalent Q10</p> <p>Sponge Holder, working length 35cm or equivalent</p> <p>Foreign Body Basket with ring handle, working length 35 cm or equivalent, LED/Xenon, HighPerformance</p> <p>LED Cold Light Fountain with one light outlet including: Q2</p> <p>Mains cord</p> <p>Fiber Optic Light Cable, with straight connector Minor deviation in sizes will be acceptable Q10</p>		
Accessories:		
All standard Accessories to execute the complete.		
Warranty:		
Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.		
Country / Origin of Manufacturer:		
USA / Europe / Japan		

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Clinical Specialty	ENT	Item No 22
Generic Name	Rigid Esophagoscope Peads with Optical Forceps	QTY 1
Clinical Purpose	Esophagoscopy is a diagnostic procedure to evaluate the esophagus or swallowing passage. Problems identified can include foreign objects, inflammation, signs of gastro esophageal reflux disease, narrowing or tumor growths. The procedure is performed under a general anesthetic in children. It can be performed with soft flexible scopes or rigid scopes depending on the situation	
TECHNICAL SPECIFICATIONS		
<p>Esophagoscope Tube, length 30 cm, size 6Esophagoscope Tube, length 30 cm, size 5 EsophagoscopeTube,length18, 5cm, size 3 Prismatic Light Deflector autoclave able, with connection to fiber optic light Telescope Guide for use with telescopes or optical forceps Telescope Bridge for connection with Telescope Straight Forward Telescope 0°, diameter 2.9mm, length 36cm, autoclaveable, fiber optic light transmission incorporated, color code: green Optical Coin Forceps for Pediatric Broncho-Esophagoscopes, 2x2 teeth, for use with telescope forced controlled handle for removal of coins and flat f lies Optical Alligator Forceps for Pediatric Broncho-Esophagoscopes,'S for use with telescope ,forced controlled handle for removal of hard foreign bodies Optical Forceps, with spring- action handle for controlled removal of peanuts and soft foreign bodies, for use with Telescope Forceps alligator, for hard foreign bodies, double action jaws, sheath diameter 1.5mm, working length 35Cm Forceps, pointed, serrated, for coins and flat foreign bodies, double-action jaws, sheath diameter 1.5 mm, working length 35 cm Forceps.for peanuts and soft foreign bodies, double- action jaws, sheath diameter 1.5mm,working length 35cm Rigid Suction Tube, outer diameter 3 mm, working length 35 cm Cotton Carrier, working length 35 cm Sponge Holder, working length 35cm Foreign Body Basket with ring handle, working length 35cm LED High-Performance LED Cold Light Fountain with one light outlet, Q2 including: Mains cord Fiber Optic Light Cable, with straight connector, diameter Q6 3.5mm, length180cm</p>		
Warranty: Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.		
Country / Origin of Manufacturer: USA / Europe / Japan		

- 3 hand pieces
Intra operative 1st stay
1st carved

Clinical Specialty	ENT	Item No 16 & 23
Generic Name	Mastoid Drill System	
Clinical Purpose	The removal of bone from the mastoid process. This process is located behind the ear canal and contains air cells which drain into the middle ear. Their removal becomes necessary if they are diseased or if a cholesteatoma, an infected skin cyst in the middle ear and mastoid, is present.	

TECHNICAL SPECIFICATIONS

MICRO SURGICAL HIGH SPEED DRILL 80,000 to 100,000rpm

Consisting Of:

Control Unit

High Speed Electronic Micro Motor 80,000 rpm or better with Cable Single / double Foot Control including connecting cable Standard Irrigation set

INTRA DRILL HANDPIECES:

INTRA DRILL HANDPIECE STRAIGHT FOR EAR QTY 02

Drill Headpiece, straight, length 7 cm or more, with rotating speed 80,000 rpm or better for use with Detachable irrigation tube use with straight shaft tungsten, carbide, stainless steel and diamond burrs.

INTRA DRILL HANDPIECE ANGLED FOR EAR QTY 02

Drill Headpiece, angled, length 7 cm or more, with rotating speed 80,000 rpm or better for use with detachable irrigation tube use with straight shaft tungsten, carbide, stainless steel and diamond burrs

DIAMOND CUTTING BURRS SET

Diamond cutting burrs length 7 cm or more, set of 15 or more (Autoclavable) diameter includes 0.6, 0.7, 0.8, 1, 1.4, 1.8, 2.3, 2.7, 3.1, 3.5, 4, 4.5, 5, 6, 7mm

TUNGSTEN CARBIDE BURRS SET

Tungsten Carbide Shaft Burrs, stainless, length 7 cm or more, set of 15 or more (Autoclavable) Diameter includes 0.5, 0.6, 0.7, 0.8, 1, 1.4, 1.8, 2.3, 2.7, 3.1, 3.5, 4, 4.5, 5, 6, 7, 8 mm

Cleaning Brushes Lubrication oil spray 5 bottles.

Part 2:

High Speed Electronic Micro Motor 80,000 rpm or better with Cable Single / double Foot Control including connecting cable Standard Irrigation set.

INTRA DRILL HANDPIECES:

Shaver Debrider hand Piece QTY 02

Attachment required 25 with different size as per Enduser requirement.

Note: Two mastoid Drills complete setup with motors with one extra hand piece along with the standard supply.

One Shaver Debrider with complete setup and motor with one extra hand piece along with the standard supply.

Accessories: Sterilization system complete

Warranty:

Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.

Country / Origin of Manufacturer:

USA / Europe / Japan

Clinical Specialty	ENT	Item No 17
Generic Name	Patient Nerve Monitor	QTY 2

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Discuss
with company
for steam details
attached:-

Clinical Specialty	ENT	Item No 24
Generic Name	Mastoidectomy Set	QTY 1
Clinical Purpose	A mastoidectomy is a procedure performed to remove the mastoid air cells. This can be done as part of treatment for mastoiditis, chronic suppurative otitis media or cholesteatoma. In addition, it is sometimes performed as part of other procedures (cochlear implant) or for access to the middle ear.	

TECHNICAL SPECIFICATIONS

Periost Knife, 13cm. Elevator Version
 Surgical Handle, No. 3, length 12.5 cm, for blades Blade No. 10, sterile, package of 100
 Blade No. 11, sterile, package of 100 Blade No. 15, sterile, package of 100
 HARTMANN Nasal Speculum, for adults, length 13 cm WEITLANER Retractor, 3x4 prongs, sharp,
 length 16 cm WEITLANER Retractor, 3x4 prongs, sharp, length 13 cm WULLSTEIN Redactor, 11 cm
 VOLKMANN Retractor, length 21 cm, 3 prongs, sharp LANGENBECK Retractor, length 21.5 cm, size
 33 mm x 14 mm FARABEUF Elevator, 18.0cm, 11mm wide.
 LEMPERT Elevator, curved, 7mm wide, length 18cm FREER Elevator, double-ended, length
 20cm. Mastoid Gouge, 14cm 3mm wide
 Mastoid Gouge, 14cm, 5mm wide
 Mastoid Gouge, 14 cm, 7 mm wide Mastoid Gouge, 14 cm, 9 mm*1
 mm wide Mastoid Chisel, 14 cm 5 mm wide Mastoid Chisel, 14 cm, 7 mm wide COTTLE
 Mallet, length 18cm
 KERRISON Rongeur, working length 11 cm, size 2 JANSEN Rongeur, bayonet, 17cm
 HOUSE Curette, large, spoon sizes 2 x 3.2 mm and 1.4 x 2.6 mm, length 15 cm LEMPERT Mastoid
 Curette, 21cm, size 0000
 SPRATT Mastoid Curette, 16.5 cm, size 0. SPRATT Mastoid Curette, 17 cm,
 size 1. HALSTEAD Mosquito Forceps, 12.5cm, curved.
 ROCHESTER-PEAN Haemostatic Forceps, straight, length 14 cm
 ROCHESTER- PEAN Haemostatic Forceps, curved, length 14cm
 OCHSNER-KOCHER Haemostatic Forceps, 1x2 teeth, straight, length 14 cm ALLIS Forceps,
 4 x5 teeth, length 15 cm T1
 ADSON Dressing Forceps, serrated, 12 cm. ADSON Tissue Forceps, 1x2 teeth 12cm.
 ADSON-BROWN Tissue Forceps, non-traumatic, fine side grasping teeth, length 12cm
 Mastoid Chisel, 14 cm 3
 Dressing Forceps, length 14.5cm, standard size
 Dressing Forceps, length 14.5cm, delicate size
 Tissue Forceps, 1x2 teeth, length 14.5 cm, standard size Tissue Forceps, 1x2 teeth, length 14.5
 cm, medium size Tissue Forceps, 1x2 teeth, length 14.5 cm, delicate size JOBSON-HORNE Probe.
 With serrated and ring end, 18 cm Secker, ball end angled 45°, 15.5 cm, size 3.
 Scissors, delicate, 10 cm, curved STEVENS Scissors, curved, 10.5 cm JOSEPH Scissors, 14cm,
 curved. METZENBAUM Scissors, curved, 14 cm. Scissors, straight, length 14.5 cm, blunt/sharp
 MAYO Scissors, curved, length 15 cm
 BARON Suction Tube, with cut-off hole, LUER, working length 7.5 cm O.D. 1 mm BARON Suction
 Tube with cut-off hole, LUER, working length 7.5 cm, O.D. 1.7 mm BARON Suction Tube, with cut-
 off hole, LUER, working length 7.5cm, O.D 2.3mm
 FERGUSON Suction Tube, with cut-off hole and stylet, LUER, working length 11 cm, 6 Fr.
 FERGUSON Suction Tube, with cut-off hole and stylet, LUER, working length 11 cm, 9
 Fr. FERGUSON Suction Tube, with cut-off hole and stylet, LUER, working length 11 cm, 12 cm.
 Fr. ZOELLNER Suction Tube, LUER-Lock, 15cm, O.D. 2.5mm.
 Suction Tip for, 4cm, O.D. 0.5mm.
 Suction Tip for, 4cm, O.D. 0.7mm.
 Suction Tip for, 4 cm, O.D. 0.9 mm. Suction Tip for, 4cm, O.D. 1.2mm.
 Needle Holder, tungsten carbide inserts, 13 cm Needle Holder, tungsten carbide inserts, 15 cm.

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BACKHAUS Towel Forceps, length 11cm DUPLAY Dressing Forceps, curved, with ratchet, length 21cm

Cup Medicine, stainless steel, 25 cc, 28 mm high, diameter 60 mm Cup Medicine, stainless steel, 60 cc, 33 mm high, diameter 70 mm Cup Medicine, stainless steel, 100cc, 30 mm high, diameter 80mm

Accessories:

Sterilization system complete consisting of standard set or as follows. Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drap

Warranty:

Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.

Country / Origin of Manufacturer:

USA / Europe / Japan



Clinical Specialty	ENT	Item No 25
Generic Name	Myringotomy Set	QTY 1
Clinical Purpose	A myringotomy, sometimes called by other names, is a surgical procedure in which a tiny incision is created in the eardrum (tympanic membrane) to relieve pressure caused by excessive buildup of fluid, or to drain pus from the middle ear	

TECHNICAL SPECIFICATIONS

Ear Speculum, 3.6 cm, O.D. 5 mm Ear Speculum, 3.6 cm O.D. 6 mm Ear Speculum, 3.6cm O.D.7.5mm Ear Forceps, very fine, serrated, working length 8 cm Ear Curette, blunt, 14.5 cm size 1 Sickle Knife, double-edged, standard model, slightly curved, length 16 cm Needle, 16.5 cm, light curve.

Pick 90°, 16cm, 0.8mm

Adaptor. For suction cannulas with cut-off hole, LUER cone 5.5 cm. Suction Cannula, straight, LUER- Lock, malleable, 10 cm, O.D. 1.0 mm Suction Cannula, straight, LUER- Lock, malleable, 10 cm, O.D. 1.3 mm Suction Cannula, straight, LUER- Lock, malleable, 10 cm, vY*1.5 mm Suction Cannula, straight, LUER- Lock, malleable, 10 cm, O.D. 2.0 mm Groumet Gun

Instrument Rack for 5 instruments with holder for ear specula, for ventilation tube set, may be used with metal case

Metal Case, perforated, lid detachable, size 20x10x4 cm

Tele-Otoscope with Straight Forward Telescopes 0°, diame fiber optic light transmission incorporated, color

rim, length 6 cm, auto-clavable,

Accessories:

Sterilization system complete consisting of standard accessories or as follows Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drapes

Warranty:

Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.

Country / Origin of Manufacturer:

USA / Europe / Japan

Clinical Specialty	ENT	Item No 26 & 36
Generic Name	ENT Unit Combined	QTY 3+1
Clinical Purpose	The ENT treatment unit with an integrated suction system, ear irrigation module, compressed air system and an innovative LED light module	

TECHNICAL SPECIFICATIONS

ENT unit combined with patient chair and stool allows the operator to manage a complete and professional activity for examination, treatment and diagnostics.

The unit shall have solid and mobile case with antistatic castors with brakes

The structure coating shall be painted with SS/Antibacterial paint with a transparent gloss layer for protection against external agents.

Drawer Module complete with instrument trays:

2 to 4 Drawers, UV lamp drawer in built

Instrument tablet:

Visualization and control of all instruments related to suction or insufflations and of the digital vacuum and pressure systems.

Suction System:

Noise less Suction system with oil or dry pump having suction capacity 30 litres /min or more

Wastage collection jar 1 litre or more

System with assorted kit of suction cannulas.

Insufflation System:

Insufflation with flow regulation system and Pulitzer olive

Integrated LED Light Sources:

Double neutral LED/Halogen light sources LED/Halogen light source with automatic switching Light intensity shall be adjustable by touch screen.

Larynx mirror quick heating

Compressed air system complete with:

Air syringe for spray olives

2 atomizers:

2 bottle holders for medicaments.

Rinsing system of suction tubes

Rinsing system of suction tubes shall be complete with automatic discharge outside ON/OFF switch and be settable by touch screen on the instrument tablet.

Endoscope supports

2 to 4 (to specify) endoscope supports: 2 long supports for flexible (clean and dirty) and 6 for rigid endoscopes (clean and dirty).

Endoscope Warmer

Timed system for simultaneous preheating of endoscope support from 37 to 38.

Head Light:

With Headband

ENT Chair

Professional chair designed for ENT examination in specialized departments that provide comfort for both patient and operator.

Pedal for all the independent movements' control (High quality motors with lifting capability and operating electrically and separately the up/down, backrest, seat and leg rest movements.

Inclination in Trendelenburg position.

Synchronized backrest-seat movement to grant security

Automatic discharge system of suction

Rigid Endoscopes 2.7MM 0° or 30°

Rigid Endoscopes 4 MM 0° or 30°

Adult Flexible Nasopharyngoscope Video

Capturing Software with camera ENT

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Microscope with articulated arm
Integrated UV compartment in drawer
Doctor's Stool

Accessories:
Sterilization system complete

Warranty:
Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.

Country / Origin of Manufacturer:

USA / Europe / Japan



Clinical Specialty	OT GERNAL SURGERY	Item No 29
Generic Name	PULSE OXYMETER	QTY 4
Clinical Purpose	A pulse oximeter is a medical device that indirectly monitors the oxygen saturation of a patient's blood (as opposed to measuring oxygen saturation directly through a blood sample) and changes in blood volume in the skin, producing a photoplethysmogram.	
TECHNICAL SPECIFICATIONS		
Non-invasive measurement of oxygen saturation and pulse rate with LCD screen. Display of oxygen saturation and pulse rate. Oxygen saturation measurement range from 0 -100%. Pulse strength perfusion indication Capability of Plethysmography. Pulse rate measurement from 20-250 bpm. Visual and audible indication of alarms. High and low alarms settings. Power of 220 V/ 50 Hz.		
ACCESSORIES:		
Complete with standard accessories		
Pediatrics		
sensor Reuseable QTY 03 each		
Warranty:		
Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.		
Country / Origin of Manufacturer:		
USA / Europe / Japan		

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Clinical Specialty	ENT	Item No 30
GENERIC NAME	Laryngoscope set with Optics	QTY 2
Clinical Purpose	Laryngoscopy is a visual examination below the back of the throat, where the voice box (larynx) containing the vocal cords is located. It is an effective procedure for discovering the causes of voice and breathing problems, pain in the throat or ear, difficulty in swallowing, narrowing of the throat (strictures or stenosis), and blockages in the airway	

TECHNICAL SPECIFICATIONS

Laryngoscope Adult Size Length 17 to 18 cm with Telescope guide tube integrated inside the lumen with integrated 15 " Telescope Length 18cm Dia 4mm autoclave able, fiber optic light transmission incorporated, (KLEINSASSER) Operating Laryngoscope for adults, large, length 17 to 18 cm
 (KLEINSASSER) Operating Laryngoscope, for adults, medium, length 17 to 18 cm (for anterior commissure)
 (KLEINSASSER) Operating Laryngoscope for children, small, length 15 cm
 (KLEINSASSER) Operating Laryngoscope for infants, small, length 13 cm

Clip for proximal illumination

Fiber Optic Light Carrier, for distal illumination, working length 14 cm, for use with Laryngoscopes and Diverticulo scopes

Fiber Optic Light Carrier for distal illumination, working length 7.5 cm, for use with Laryngoscopes (KLEINSASSER) / Laser Laryngoscope modified for CO2-LASER surgery, for children, with lateral outer channels for suction tube to remove vapor and/or for fiber optic light carrier, length 15 cm. Laryngoscope Holder and Chest Support.

Including:

Laryngoscope Holder, with adjustment wheel / chest support for adult Support Rod, movable, with metal ring, diameter 9 cm, length 34 cm.

(KLEINSASSER) Forceps, straight, with 2 mm cupped jaws, with cleaning connector, working length 23 cm

(KLEINSASSER) Forceps, curved upwards, with 2 mm cupped jaws, with cleaning connector, working length 23cm

(KLEINSASSER) Forceps, curved to right, with 2 mm cupped jaws, with cleaning connector, working length 23 cm

(KLEINSASSER) Forceps, curved to left, with 2 mm cupped jaws, with cleaning connector, working length 23 cm

(KLEINSASSER) Miniature Forceps, straight, with 1 mm cupped jaws, sheath conically reinforced from distal to proximal end, with cleaning connector, working length 23 cm

(KLEINSASSER) Miniature Forceps, curved upwards, with 1 mm cupped jaws, sheath conically reinforced from distal to proximal end, with cleaning connector, working length 23 cm (KLEINSASSER) Miniature

Forceps, curved to right, with 1 mm cupped jaws, sheath conically reinforced from distal to proximal end, with cleaning connector, working length 23 cm (KLEINSASSER) Miniature Grasping Forceps, straight, serrated, sheath conically reinforced from distal to proximal end, with cleaning connector, working length 23 cm

(KLEINSASSER) Miniature Grasping Forceps, curved to right, serrated, sheath conically reinforced from distal to proximal end, with cleaning connector, working length 23 cm

(KLEINSASSER) Scissors, straight, with cleaning connector, working length 23 cm Micro Forceps, straight, with 1 mm cupped jaws, with cleaning connector, working length 20 cm

Micro Forceps, curved upwards, with 1 mm cupped jaws, with cleaning connector, working length 20 cm Spoon Forceps, straight, with 2 mm cupped jaws, with cleaning connector, working length 23 cm, with suction channel to remove LASER vapors

(KLEINSASSER) Grasping Forceps, straight, serrated, with cleaning connector, working length 18 cm

Micro Grasping Forceps, curved upwards to right, serrated, with triangular fenestrated jaws, with cleaning connector, working length 18 cm

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(LINDHOLM) Forceps, for atraumatic retraction of true vocal cords and false vocal cords, distal, end with blunt curved blades, self-retaining, with ratchet and cleaning connector, working length 24 cm
Sickle Knife curved, delicate, 3 to 1 mm tapered shaft, total length 23 cm
(KLEINSASSER) Suction Tube, outer diameter 3 mm, working length 23 cm
(KLEINSASSER) Suction and Coagulation Cannula, outer diameter 3 mm, working length 26 cm, for use with unipolar High Frequency Cords
Unipolar High Frequency Cord, with 5 mm plug, length 300 cm, Bipolar Forceps, jaws upturned, for bipolar coagulation in larynx, working length 23 cm, for use with Bipolar High Frequency Cords Bipolar High Frequency Cord, with two 2 mm cable sockets for Bipolar Suction Forceps and Bipolar Forceps length 450 cm
High-Performance LED Cold Light Fountain, (Three) Quartz (8)
including:
Mains cord Fiber Optic Light Cable, with straight connector, diameter 3.5 mm or better, length 180 cm Ten (16)

Accessories:

Sterilization system complete consisting of standard set or as follows. Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drapes

Warranty:

Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.

Country / Origin of Manufacturer:

USA / Europe / Japan

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Clinical Specialty	OT GENERAL SURGERY	Item No 35.
Generic Name	Flexible Endoscope QTY 1	
Clinical Purpose	The use of a flexible fibre optic endoscope to evaluate upper airways (nasal passages, nasopharynx, oropharynx and larynx) , a procedure usually carried out by ENTs or allergists.	

TECHNICAL SPECIFICATIONS

CMOS/CCD Video-Rhino-Laryngoscope

Direction of view: 0°

Angle of view:

Deflection: up/down

Working length:

Outer Diameter:.

Light Source

LED/Xenon 100 watt or better Light

Source

Light Built in with Monitor or Separately both are acceptable

Monitor

Medical Graded Monitor 19" or better

75 to 85° or more

120-140°

30cm

2.5 - 3.7mm

Video Processor

Video Processor Resolution 720 x 1280 or better Built in or Separate

Output Ports: -DVI/RGB/HDMI

Case For storing Video Rhino Laryngoscope

Container for Disinfection/Sterilization Trolley or stand for Scope

Warranty:

Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.

Country / Origin of Manufacturer:

USA / Europe / Japan

Clinical Specialty	Cardiology	Item No 40
Generic Name	Cardiac Monitor	QTY 4
Clinical Purpose	In CCUs, ICUs, operating rooms, and pre and post – operative wards, a monitor that allows for the monitoring and management of patients' Hemodynamics data, such as Cardiac Rhythm, Saturation, Waveforms, Temperature, Non - Invasive Blood Pressure (NIBP).	

TECHNICAL SPECIFICATIONS

Bedside Monitor to display vital signs and other parameter for Adult / Paeds / Neonates
(The Procuring Agency and End-user to specify the requirement).

Operating Features and Characteristics:

Screen Size: At least 15" diagonal (Touch Operated) or better with non-fade LCD / TFT LCD / LED color display.

Electro-Surgical Interference Suppression / Protection.

Defibrillator Protection.

Freeze and Cascade Facility.

Waveform: Six wave forms or more.

Waveform Traces Speed: 25 & 50 mm / sec.

Parameters:

ECG

Numeric: Heart Rate

Real Time, and freeze ECG Trace

Non-Invasive Blood Pressure (NIBP):

Method: Oscillometric Principle

Numeric: Systolic, Diastolic, and Mean Pressure

Selectable auto inflate interval setting

Rising Cuff / Continuous Pressure Display

Invasive Blood Pressure fIBPI:

Temperature:

Numeric: Temperature selectable in °C / °F

Pulse Oximetry:

Numeric: 0- 100% oxygen saturation measuring range

Waveform-Plethysmograph Pulse with Pulse Strength Indication

Arrhythmia Analysis:

Arrhythmia Analysis and ST Analysis

Respiration:

Breath Rate display and settable apnea alarms

Sweep Speed: 6.25, 12.5 mm / sec or better

Other Features:

Trend Data: Graphical / Tabular with at-least 48 hours' back-up or better

Alarms:

High & Low (settable) on all parameters

Visual and audible indication of alarms

Other Parameter:

Operating Requirement: AC 220 V & 50 Hz

Built-in rechargeable battery for fully operational back-up for at least 1.5 - 2 hours or

online pure Sinewave UPS (imported) with fully operational back-up for at least 2 hours or better

Communication:

Capability to interface with LAN / WLAN for data transfer

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Accessories:

The system must be complete with all sensors, probes, cables, or any other accessories required for measuring all the above selected parameters

Type and Quantity of Reusable Cuffs (Latex Free) of all available sizes of all body contours (To be specified by the Procuring Agency and End-user)

Reusable Sensors (Type & Quantity to be specified by the Procuring Agency and Enduser)

Operational & Service Manual.

Warranty:

Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.

Country / Origin of Manufacturer:

USA / Europe / Japan

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Clinical Specialty	Anesthesia & Ventilator	Item No 41
Generic Name	SYRINGE PUMP WITH DOCKING STATION	QTY 10
Clinical Purpose	A syringe pump is a small infusion pump used to gradually administer small amounts of fluid (with or without medication) to a patient. Syringe drivers are also useful for delivering IV medications over several minutes. In the case of a medication which should be slowly pushed in over the course of several minutes, this device saves staff time and reduces errors	
TECHNICAL SPECIFICATIONS		
<p>Syringe pump for fluid administration. Flow Rates: 0.1 - 400 ml/hr. (Approx) Digital display of set parameters. Universal Syringe acceptance capability for disposable, Plastic, Size, 10, 20, 50, 60 ml. Drive Accuracy. $\pm 3\%$ Display of drug name, Infusion rate, infused volume and volume to be infused. Automatic adaptation of controls according to syringe /infusion set. Quick freed/rapid infusion facility. Rechargeable battery and mains operated 220V, 50Hz. Safety alarm audible and acoustic for occlusion end of infusion, low battery. Battery back up 3 to 4Hours. Should be compatible with docking station DOCKING STATION QTY 3 Power centralization for 3 or more devices to reduce the cable need One wire connection to main Ability to connect or disconnect one or more devices Easy front loading Fit to use for pole and rail system</p>		
<p>Warranty: Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.</p>		
<p>Country / Origin of Manufacturer: USA / Europe / Japan</p>		



Clinical Specialty	ENT	Item No 30
GENERIC NAME	Laryngoscope set with Optics	QTY 2
Clinical Purpose	Laryngeal microsurgery is removal of abnormal tissue from the vocal folds (cords) using precision micro laryngeal instruments and/or laser.	

TECHNICAL SPECIFICATIONS

(KLEINSASSER) Operating Laryngoscope, for adults, medium, length 17 to 18 cm
 (KLEINSASSER) Operating Laryngo-scope, length 17 to 18cm, adult size, large
 (KLEINSASSER) Operating Laryngoscope, for adults, medium, length 17 to 18cm (for anterior commissure)
 (KLEINSASSER) Operating Laryngo- scope, child size, length 15 cm (KLEINSASSER)
 Operating Laryngo-scope, length 13 cm, child size, small, BENJAMIN- HAVAS Clij3>6lloct\ for proximal illumination
 Fiber Optic Light Carrier, for distal illumination, working length 14 cm, for use with Laryngoscopes

MV

with wide angle
 and Diverticulo scopes
 Fiber Optic Light Carrier, for use with laryngoscopes Laryngoscope Holder, adjustment
 Consisting of:
 Holder with wheel support rod
 (KLEINSASSER) Forceps, straight, with 2 mm cupped igfl&Mctfl cleaning connector, working length 23 cm
 (KLEINSASSER) Forceps, curved upwards, with 4mm cupped jaws, with cleaning connector, working length 23cm
 (KLEINSASSER) Forceps, curved to left length 23cm
 cupped jaws, with cleaning connector, working length 23cm
 (KLEINSASSER) Miniature F from distal to proximal
 (KLEINSASSER) Arterv-Effitt cm (KLEINSASSER) Scissors, Drops, straight, with 1 mm cupped jaws, sheath conically reinforced, with cleaning connector, working length 23cm
 ps, with ratchet, with cleaning connector, working length 23 cm
 straight, with cleaning connector, working length 23 cm
 Micro Forcep with 1mm cupped jaws, with cleaning connector, working length 20cm
 Spoon Forceps, with cupped jaws, diameter 5 mm, robust model, double action jaws, sheath diameter 2.5 mm, with cleaning connector, working length 23 cm
 LINDHOLM Forceps, for atraumatic retraction of true vocal cords and false vocal cords, distal end with blunt curved blades, self-retaining, with ratchet and cleaning connector, working length 24 cm
 (KLEINSASSER) Knife sickle-shaped, curved, pointed, working length 23cm
 (KLEINSASSER) Suction Tube, outer diameter 3mm, working length 23cm

Accessories:

Accessories:

Sterilization system complete consisting of standard accessories or as follows Container Bottom
 Container Lid Wire Basket Silicone mat Wrapping Drapes

Warranty:

Specification of ENT and Urology Item Due on 27th October, 2022

Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.

Country / Origin of Manufacturer:

USA / Europe / Japan

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Clinical Specialty	General Laparoscopy	Item no 06
Generic Name	OPERATING PEADS LAPAROSCOPE 4K	QTY 01
Clinical Purpose	Laparoscope is used for the surgical procedure in which fine instruments are inserted through abdominal wall to view the organs in the abdomen or permit small scale surgery	
TECHNICAL SPECIFICATIONS		
Imaging system should have backward and forward compatibility and modularity for futures upgrade and with latest image enhancement modules for better image quality and identifications of the land marks and pathology for better outcomes of the surgery.		
The laparoscope of these specifications shall be provided or compatible with full UHD minimum of 3840 x 2160 pixels with the method of Progressive Scanning.		
Telescope		
10 mm, straight, 0° working length 290-320 mm.		
10 mm straight, 30° view working length 290-320 mm.		
5 mm straight forward 70° degree.		
5 mm forward oblique 30° degree.		
Camera Full 3CCD /3 CMOS + Monitor		
Camera control unit and video camera Head, Pal system.		
Integrated (image processing model)		
Power supply accordingly.		
Special Feature Required:		
Automatic or manual white balance		
Powerful video signal processing		
Image enhancement modes.		
Picture in picture mode control via camera head button or monitor.		
Control of peripheral i.e., light source, recording system parameter via camera head button		
Still image capturing in full HD quality (JPEG) format via camera head buttons		
Video capturing in full HD quality (MPEG 4 format) via camera head buttons		
Should have compatibility with future upgrade like 3 D or better or equivalent.		
Max. Resolution: 3840 x 2160-pixel, progressive scan		
Video Output: HDMI OR DVI OR SDI or as per manufacturer standard.		
Monitor 4K:		
4K LCD / LED 30 Inch or better with Resolution 3840x2160 from the same manufacturer. ARM or stand for monitor.		
Imported trolley should be from same manufacturer.		
XENON (300 watt) LED Light Source with all standard accessories. (If the firm will quote the xenon light source it will be compulsory to quote and supply 05 lamp)		
Light guide cable, diameter 4mm or more length minimum 200 to 300 cm.		
Electronic CO2 insufflator.		
40-50 Liter min complete in all respect with all standard accessories.		
SMOKE EVACUATOR SYSTEM OR ANTI FOGGING SYSTEM.		
Integrated or separate medical graded video recorder with storage capacity of 500GB or more from same manufacturer.		
LIST OF INSTRUMENTS REQUIRED FOR GENERAL SURGERY.		
Note: The Minor deviation in sizes and type of the instruments would be acceptable.		
The Size of Instruments Approximate. The mentioned shaped and style of instruments is reference and may be quoted their equivalent.		
LIST OF INSTRUMENTS REQUIRED FOR PEDIATRIC UROLOGY		
1. <u>Set of instruments 3-3.5mm length 20-24</u>		

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2. Trocar, size 3.5 mm, with pyramidal tip, Cannula with locking mechanism, length (3-6 cm) Qty 3
 3. Kelly Dissecting and Grasping Forceps, rotating, size (3-3.5) mm, length 20-24 cm
 4. Bipolar Kelly Grasping Forceps rotatable, with connector pin, especially suitable for dissection, double action jaws, size 3-3.5 mm, length 20-24cm,
 5. Maryland dissecting forceps, rotating, with unipolar connecting pin, size 3-3.5mm, length 20-24cm
 6. Dissecting and Grasping Forceps, Right Angle (Lahey) rotating, size (3-3.5) mm, length 20-24cm
 7. Debaky (Yohan) forceps, rotating, size 3-3.5mm, length 20-24cm
 8. Dissecting Grasping Forceps, traumatic, rotating, size (3-3.5) mm, length 20-24cm
 9. Dissecting and Grasping Forceps, a traumatic, fine serration, rotating, size 3-3.5mm, length 20-24 cm
 10. Bipolar Grasping Forceps rotatable, with connector pin, with fine traumatic serration, fenestrated, double action jaws, size 3-3.5mm, length 20-24 cm Qty 2
 11. Babcock Grasping Forceps, fenestrated, rotating, 3-3.5mm, length (20-24) cm double action jaws
 12. Multifunction grasping forceps, 1x2 teeth, size 3-3.5mm, length 20-24cm
 13. Bowel grasping forceps, two rows of traumatic teeth, size 3-3.5mm, length 20-24cm.
 14. Claw Grasping Forceps rotating, 2 x 3 teeth, single action jaws, size 5mm, length 20-24 cm,
 15. Allis forceps, rotating, size 3-3.5mm, length 20-24cm
 16. METZENBAUM Scissors, rotating, with connector pin for unipolar, size 3-3.5mm, length 20-24 cm
 17. Scissors straight, rotating, insulated, unipolar connecting pin, size (3-3.5) mm, length 20-24 cm
 18. Micro Hook Scissors, rotating, with unipolar connecting pin, size (3-3.5) mm, length 20-24 cm
 19. Coagulating and Dissecting Electrode, L-shaped for unipolar coagulation, size 3-3.5mm, length 20-24 cm
 20. Fan Retractor, dismantling, distendable, 5mm, length 20-24 cm
 21. Suction and Irrigation Tube, with lateral holes, size 3-5mm, length 20-24 cm, for use with handle
 22. Suction and coagulation cannula 3-5mm with connector pin, unipolar 20-24cm
 23. Aspiration needle 3-3.5mm, length 20-24cm
 24. Unipolar High Frequency Cord, with 5mm plug, length 300 cm, for use with HF system
 25. Bipolar High Frequency Cord, length 300 cm,
 26. Adaptor for cleaning, with Metal- handle, without ratchet
 27. Knot tier, for extracorporeal knotting, size 3-3.5mm, length 20-24 cm
 28. Verees access needle 6-8cm
 29. Needle Holder, with tungsten carbide inserts, straight handle with ratchet, jaw straight, size 3-3.5mm, length 20-24cm (Qty 02)
 30. Needle Holder, with tungsten carbide insert, straight handle with ratchet, jaws curved to left, size 3-3.5mm, length 20-24cm (Qty 02)
 31. Instrument container from same manufacturer
 32. Telescope sterilization container from same manufacturer
- B. Set of instruments 5mm, length 30-36 cm**

1. Trocar, size 5 mm, with pyramidal tip, Cannula with locking mechanism, length (5-6.5 cm) QTY 3
2. Trocar, size 10 mm, with pyramidal tip, Cannula with locking mechanism, length (6-10cm) QTY 3
3. Reducer sleeve 10mm to 5mm QTY 2
4. Kelly Dissecting and Grasping Forceps, rotating, size 5 mm, length 30-36 cm
5. Bipolar Kelly Grasping Forceps rotatable, with connector pin, especially suitable for dissection, double action jaws, size 5 mm, length 30-36cm,
6. Maryland dissecting forceps, rotating, with unipolar connecting pin, size 5mm, length 30-36cm
7. Dissecting and Grasping Forceps, Right Angle (Lahey) rotating, size 5 mm, length 30-36cm
8. Debaky (Yohan) forceps for vessels handling, rotating, size 5mm, length 30-36cm
9. Dissecting Grasping Forceps, traumatic, rotating, size 5 mm, length 30-36cm
10. Reddick-Olsen dissecting forceps, Heavy.

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11. Dissecting and Grasping Forceps, atraumatic, fine serration, rotating, size 5mm length 30-36 cm
12. Bipolar Grasping Forceps rotatable, with connector pin, with fine atraumatic serration, fenestrated, double action jaws, size 5mm, length 30-36cm. Qty 2
13. Babcock Grasping Forceps, fenestrated, rotating, 5mm, length 30-36 cm double action jaws
14. Multifunction grasping forceps, 1x2 teeth, size 5mm, length 30-36 cm
15. Bowel grasping forceps, two rows of traumatic teeth, size 5mm, length 30-36cm. Qty 2
16. Claw Grasping Forceps rotating, 2 x 3 teeth, single action jaws, size 3-3.5mm, length 30-36 cm.
17. Claw Grasping Forceps rotating, 2 x 3 teeth, single action jaws, size 10mm, length 30-36 cm,
18. Allis forceps, rotating, size 3-3.5mm, length 30-36cm. Qty 2
19. METZENBAUM Scissors, rotating, with connector pin for unipolar, size 5 mm, length 30-36 cm
20. Scissors straight, rotating, insulated with unipolar connecting pin, size 5 mm, length 30-36 cm
21. Scissors curved/angled, rotating, insulated with unipolar connecting pin, size 5 mm, length 30-36 cm
22. Micro Hook Scissors, rotating, with unipolar connecting pin, size 5 mm, length 30-36cm
23. Bipolar Scissors rotatable, with connector pin, curved blades, double action jaws, size 5 mm, length 30-36 cm
24. Coagulating and Dissecting Electrode, L-shaped for unipolar coagulation, size 5 mm, length 30-36 cm
25. Fan Retractor, dismantling, distendable, 5mm, length 30-36 cm
26. Suction and Irrigation Tube, with lateral holes, size 5mm, length 30-36 cm, for use with handle
27. Suction and coagulation cannula 5mm with connector pin, unipolar 30-36cm
28. Aspiration needle 5mm, length 30-36cm
29. Unipolar High Frequency Cord, with 5mm plug, length 300 cm, for use with HF system
30. Bipolar High Frequency Cord, length 300 cm,
31. Adaptor for cleaning, with Metal-handle, without ratchet
32. Knot tier, for extracorporeal knotting, size 5mm, length 30-36 cm
33. Verres access needle 8-10cm
34. Needle Holder, with tungsten carbide inserts, straight handle with ratchet, jaw straight, size 5 mm, length 30-36cm. Qty 2
35. Needle Holder, with tungsten carbide insert, straight handle with ratchet, jaws curved to left, size 5mm, length 30-36cm (Qty 02)
36. Biopsy forceps 5mm, length 30-36cm
37. Fan Retractor 5mm (3-5 blades)
38. Thread manipulator 5mm
39. Knot pusher
40. Clip applicator 5-10 mm (medium, large)
41. Vascular clamp (Stansky/bulldog) with applicator (small, medium, large)
42. Instrument container from same manufacturer
43. Telescope sterilization container from same manufacturer

Accessories:

- i) Online UPS imported with 30 min backup to be provided locally as per manufacturer recommendations.
- ii) CO₂ Cylinder 240CFT with complete necessities (to be supplied locally) certified by respective agency.
- iii) Imported storage boxes for instruments and optics.
- iv) Imported disinfection Boxes.
- v) Standard Cleaning Set as manufacturer recommendations for cleaning of tubular shafts and other instruments

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Warranty:

Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.

Country / Origin of Manufacturer:

USA / Europe / Japan

Trainings:

One doctor foreign attachment at manufacture's site and one Biomedical Engineer comprehensive service training at manufacturer's site.

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Specification of ENT and Urology Item Due on 27th October, 2022

Clinical Specialty	Radiology	Item No 7
Generic Name	C-arm (Portable fluoroscopy)	QTY 01
Clinical Purpose	Can be used in theatres for interventional procedures and on spot guidance for implants/prosthesis placement	
TECHNICAL SPECIFICATIONS		
C-arm, X-ray unit mobile for radiography and fluoroscopy. High frequency, power output of 2KW or more. 40" to 110kV with one shot fluoroscopy facility of 6mA or more. X-ray tube with stationary anode or better. Dual focal spots of 0.6 and 1.5 mm. Automatic Fluoro dose control Collimator : Remote control of collimator, iris and blades diaphragms motorized with x-ray grid TV camera : High sensitivity, CCD camera, 1024 x 1024 pixels with last image hold Display Digital video memory 100000 images or more Noise reduction filter, last image hold, pulsed fluoroscopy Edge enhancement, image inversion to be provided Real time digital image rotation Fluoroscopy footswitch: One cassette holder 24x30cm Laser localizer lights cross beam type Size of Image intensifier should be 9" or more. DSA software should be provided. Accessories: All Standard accessories(Display screens key board trolley) 5 lead apron light weight with hanger's and stand.		
Warranty: Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.		
Country / Origin of Manufacturer: USA / Europe / Japan Dual Quality certification Required FDA 510 K /CE/MHLW		

Clinical Specialty	Urology	Item no 9
Generic Name	INTRACORPOREAL LITHOTRIPTER (COMBINE UNIT OF TWO ENERGIES I.E., PNEUMATIC, ULTRASONIC) 50 pieces QTY 01	
Clinical Purpose	Advanced auto adaptative algorithm delivers precise, constant ultrasonic energy for fine fragmentation and dusting of urinary stones. Breakthrough electromagnetic technology generates real ballistic energy for powerful and coarse fragmentation of large and hard urinary stones. Wide hollow probe and precise suction guarantee continuous removal of even large urinary stone fragments.	

TECHNICAL SPECIFICATIONS

Synergy of 3 modalities in a single-probe (Ballistic impacts for powerful fragmentation / ultrasounds for fine dusting / smart suction to remove large stone fragments).

Independent generation of ballistic impacts and ultrasounds that can be used independently or simultaneously.

Possibility to adjust the power and frequency (1-12 Hz) of the impacts, the power of the ultrasounds and the low rate of the suction.

Auto-adaptive algorithm allowing precise and constant generation and propagation of 100% the ultrasounds.

Clinically-proven fastest stone clearance. Two times faster stone fragmentation compared to competitive dual-energy in a single-probe lithotripters, and three times faster than the Combined mode of Lithoclast (Pneumatic and Ultrasonic).

Largest lumen available on the market (8.6 mm² compared to 7.8 mm² on probes of competitive dual-energy in a single-probe lithotripters) allowing the removal of large stone fragments up to 3.3mm of diameter without grasping baskets.

Reduced to nearly zero retropulsion effect for more accurate stone control, thanks to 8x smaller downward ballistic probe tip displacement compared to Combined mode of Lithoclast (Pneumatic and Ultrasonic) (clinically-proven).

Integrated peristaltic pump to streamline suction rate, avoiding the need of external suction system, optimizing the endoscopic vision and reducing the risk of organ collapse due to under pressure in the kidney.

Disposable Stone Catcher enfranchising from using additional stone retrieval consumables, while allowing sterile stone fragments collection for analysis without any treatment interruption.

Extended range of disposable probes compatible with most endoscopic options, including mini and micro nephroscopes to suit individual patients' needs by addressing all type of stones throughout the urinary tract.

RFID recognition of the probes for an automatic set of best treatment parameters on the console

Footswitch activation of the suction and the delivery of energies, for hand-free operations.

Record of data of last 5 treatments

FIDMII display option to View the console screen

Touch Screen Console

Integrated cooling system to avoid over heating.

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ACCESSORIES:

LITHOCLAST Main Unit

Foot pedal

Flanpiece Kit

Support Stone Catcher

Suction Bag

Electrical cord 6m

FIDMI cord 10m

Filling Bottle

De-ionised water bottle

Torque Wrench

Cleaning rod for Probes

Imported original Cart

Lithoclast Probes disposable (50 probes at end user Choice)

Available Sizes (compatible with URS, Mini PCNL, & Standard PCNL)

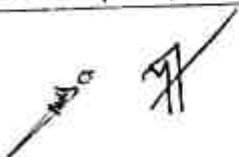
- Lithoclast probe 0 3.9 x 350
- Lithoclast probe 0 3.9 x 440
- Lithoclast probe 0 3.4 x 340
- Lithoclast probe 0 3.4 x 445
- Lithoclast probe 0 1.9 x 341
- Lithoclast probe 0 1.5 x 440
- Lithoclast probe 0 1.1 x 425
- Lithoclast probe 0 1.1 x 520
- Lithoclast probe 0 1.1 x 625

Warranty:

Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.

Country / Origin of Manufacturer:

USA / Europe / Japan



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Specification of ENT and Urology Item Due on 27th October, 2022

Clinical Specialty	Urology	Item No 10
Generic Name	THULIUM FIBER LASER 60 WATT	QTY 01
Clinical Purpose	Used for Stone, BPH and Tissue Treatment	

TECHNICAL SPECIFICATIONS

Thulium fiber laser uses long thin and thulium doped silica fiber as the active laser medium. Multiple diode lasers are pumping energy through the fiber and excited the thulium ions. Photons are emitted at 1940nm wavelength and directed at the operational field via an outgoing laser fiber. There are two operating modes to choose from the continuous and pulsed mode. Furthermore TFL can operate within different energy frequency and pulse shape settings. A highly efficient pumping mechanism allows obtaining high powers while generating small amounts of heat. Consequently there is a significantly smaller cooling apparatus in the machine compared to other laser systems, reducing the overall weight of a TFL system. Thanks to the thin gain medium and more uniform spatial profile, smaller surgical fibers can be employed. More effective stone dusting with high frequency and better clearance and suction possibilities. A safe alternative to treat soft tissue and BPH with better hemostasis. Low maintenance requirements, reducing long term costs and reducing down time.

Wavelength	1940nm \pm 20 nm
Power max	Nominal max power output 60 w
Pulse energy	0.02-6j
Operating mode	Pulse and continuous mode
Pulse duration	Depending on peak power(100us-continuous)
Repetition rate	1-2500HZ
Beam transmission	Optical fiber system
Aiming beam	Laser diode, green 532 nm (adjustable) <5mW, Class 3R
Cooling	Air
Housing	Tower format
Power supply	110-240VAC, 50/60 Hz 850VA
Pedal	Double foot switch with mode switching
Interface	7" touch display, 1280x800 resolution

Accessories:

1x foot pedal	2xset of safety goggles	1xfiber stripper
1xfiber cutter	1xinterlock connector	1xblast shield
1xfluid bag hook	1xpower supply cable	Smart fiber 200um (set of 5 fibers)
Smart fiber 272um (set of 5 fibers)	Smart fiber 365um (set of 5 fibers)	Smart fiber 550um (set of 5 fibers)
Smart fiber 800um (set of 5 fibers)	Smart fiber 1000um (set of 5 fibers)	

Warranty:

Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.

Country / Origin of Manufacturer:

USA / Europe / Japan

Clinical Specialty	Urology	Item: 11
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Specification of ENT and Urology Item Due on 27th October, 2022

Generic Name	EXTRACORPOREAL SHOCKWAVE LITHOTRIPTER MODULAR TYPE/MOBILE UNIT		QTY 01
Clinical Purpose	Extracorporeal shock wave lithotripsy is a minimally-invasive treatment of kidney stones and biliary calculi using an acoustic pulse. It is also reported to be used for salivary stones and pancreatic stones.		
TECHNICAL SPECIFICATIONS			
Shockwave Lithotripter will be a Modular system, capable of treating the urinary stones with other special urological applications by using outline/ inline/free line localization system of Ultrasound and X-Ray. It can also be used for diagnostic purposes. The system should be top of the line and latest. The detail of system configuration is as under:			
Shockwave generator			
Shockwave generator	Electromagnetic		
No. of Shockwave System:	One		
Triggering Method	Auto & manual		
Selection of Energy	Variable		
Energy Density	Min 0.8J/ml/min ² or better		
Penetration depth of waves	Min. 120mm		
Focal Distance	Min 140mm or better		
Focal spot size:	70mm ² or better		
Pressure at Focus:	Min 50MPa		
Rate of Shockwaves:	Variable up to 120 / minute or more		
Water system:	Closed loop, integrated		
Control	Main console / Remote		
IMAGING / LOCALIZATION MODES			
Localization system	X-Ray and Ultrasound		
a) X-Ray Image Intensifier	Inline / free line localization/Outline		
Type:	Integrated Isocentric C-arm		
X-ray Generator:	High Frequency inverter type Output		
power generator	2 KW or more		
Size of I.R.:	23cm		
Pickup Tube	CCD		
Fluoroscopy	Min 3.0 mA and 120 kV		
X-ray tube focal Spot	Dual 0.3 to 1.5mm Anode		
(any two focal spots in between the given range)	40KHU or more		
Heat Storage capacity	LIH		
Memory:	43cm or more		
Monitor:			
b) Ultrasound	Trolley Mounted		
Type:	Multi frequency, Convex 3.5Mhz.		
Transducer:	256 gray levels		
Resolution	30 cm/ more		
Monitor Size:	24cm		
Depth			
Diagnostic X-Ray:			
The X-ray system will be used for fluoroscopy. The radiation protection measures / accessories must be provided with the system.			
PROCEDURE TABLE: -			
Special motorized table suitable for litho & Endo urological and diagnostic procedure Tilt able and Complete with leg holders and douche tray.			
Height	Adjustable		

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Weight Bearing Capacity	Min 180 Kg
Movements:	Four way movements
Patients posing	Automatic / Manual
Tabletop:	Radio translucent

Complete with relevant accessories. Lead Aprons (Qty 5 ,Medium)

OPERATING CONSOLE:

Control:

Control of all functions must be available at the operating console.

Data storage and analysis:

The data will be stored in the main computer system or on separate PC through dedicated software MOD / CD /DVD writing system or USB recording (In case of separate PC, the system must be supplied by the manufacturer of Lithotripter)

Communication Software:

Adjustable

Min 180 Kg

Four way movements

Automatic / Manual

Radio translucent

DICOM-3

POWER REQUIREMENT: -

Voltage: Three / Single phase, 50Hz

Site Preparation

Bidder Will be responsible for arrangement of all installation requirements, console, Electric DB, Cable trays / trench, lead shielding, UPS Installation for room finishing / preparation.

Accessories:

If any for validation of equipment and checking.

Warranty:

Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.

Country / Origin of Manufacturer:

USA / Europe / Japan

Trainings:

One doctor foreign attachment at manufacture's site and one Biomedical Engineer comprehensive service training at manufacturer's site.




Specification of ENT and Urology Item Due on 27th October, 2022

Clinical Specialty	Urology	Item No42,43,44,55&56
Generic Name	NEONATAL UROLOGY BASIC SET	
Clinical Purpose	Pediatric urology is a surgical super specialty of urology & pediatric surgery dealing with the disorders of children's genitourinary systems (boys and girls) from birth to adolescence. This supra specialty concerned with anatomy, physiology, clinical recognition and treatment of various congenital & acquired diseases of Genitourinary tract in children.	

TECHNICAL SPECIFICATIONS

CYSTOSCOPE SET FOR NEONATES QTY 2

Telescope 0° Degree (1.2-1.9mm)
 Cystoscope Sheath 7.0 -8.5 Fr
 Pediatric Biopsy Forceps Flexible (Compatible with sets 3 Fr)
 Button Electrode (Compatible with sets)
 Cold knife Triangular 3 Fr (compatible with set)
 Hook electrode 3 Fr
 HF Cable

CYSTOSCOPE SET FOR INFANTS & CHILDREN QTY 2

Telescope 0° Degree (2.7mm)
 Cystoscope Sheath (11.0Fr - 14Fr)
 Adapter with 1 Instrument port
 Insert with Deflector
 Operating (Compact) cysto-urethroscope 5°- 12° Degree (7.5 - 12 Fr) with straight working channel
 Grasping Forceps Flexible 3-5 Fr
 Biopsy Forceps Flexible 3-5 Fr
 Cold knife Triangular 3 Fr (compatible with set)
 Hook electrode 3-5 Fr
 Button Electrode 3-5 Fr
 HF Cable

RESECTOSCOPE FOR NEONATES QTY 2

Telescope 0° Degree (1.9 mm)
 Resectoscope Sheath 8-9 Fr
 Instrument port
 Working Element
 Cutting Loop
 Hook electrode
 Coagulating electrode
 Operating (Compact) cysto-urethroscope 5°- 7° Degree (4.5/6.5 Fr) with straight working channel

RESECTOSCOPE FOR INFANTS & CHILDREN QTY 2

Telescope 30° Degree (2.7 mm)
 Resectoscope Sheath 11-13 Fr
 Instrument port
 Telescope Bridge compatible
 Working Element with electrode attachment
 Cutting Loop
 Hook electrode
 Coagulating electrode
 Grasping Forceps 3-5 Fr
 Endoscopic Micro scissors 5 Fr
 Bladder syringe compatible 50-100 ml
 Accessories:
 Sterilization Container
 Protection Tube.

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OPTICAL URETHROTOME PAEDS QTY 1

Telescope 0° Degree (1.9 mm)

Urethrotome Sheath 8.0Fr to 11Fr Instrument port compatible with sheath

Working Element

Set of 4-5 Cold Knife (Straight, round, sickle & hook)

Protection Sheath.

Accessories:

Sterilization Container.

Protection Tube

Warranty:

Warranty of all accessories is included in 05 years contract. Comprehensive warranty of all parts including consumable items for 05 years.

Country / Origin of Manufacturer:

USA / Europe / Japan

Specification of ENT and Urology Item Due on 27th October, 2022

Clinical Specialty	Urology	Item 45
Generic Name	PEDIATRIC UROLOGY BASIC SET	
Clinical Purpose	Pediatric urology is a surgical super specialty of urology & pediatric surgery dealing with the disorders of children's genitourinary systems (boys and girls) from birth to adolescence. This supra specialty concerned with anatomy, physiology, clinical recognition and treatment of various congenital & acquired diseases of Genitourinary tract in children.	
TECHNICAL SPECIFICATIONS		
CYSTOSCOPE & RESECTOSCOPE FOR ADOLESCENT Telescope 0° & 30° Degree (2.7 mm) (Length 250mm – 335mm) Cystoscope sheath 14-15 Fr (Compatible with telescope) Resectoscope Sheath 14-15 Fr (Compatible with telescope) Telescope Bridge compatible Instrument port Working Element with electrode attachment Cutting Loop Hook electrode Coagulating electrode Grasping Forceps 5-7 Fr Cold knife (Straight, round, sickle & hook) Endoscopic Micro scissors 5-7 Fr Bladder syringe compatible 50-150 ml		
Accessories: Sterilization Container. Protection Tube		
Warranty: Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.		
Country / Origin of Manufacturer: USA / Europe / Japan		




Specification of ENT and Urology Item Due on 27th October, 2022

Clinical Specialty	Urology	Item 47
Generic Name	MINI PCNL	QTY 02
Clinical Purpose	Percutaneous nephrolithotomy (PCNL) is a minimally-invasive procedure to remove stones from the kidney by a small puncture wound (up to about 1 cm) through the skin. It is most suitable to remove stones of more than 2 cm in size and which are present near the pelvic region. It is usually done under general anesthesia or spinal Anesthesia	
TECHNICAL SPECIFICATIONS		
Mini PCNL Consist of telescope 7-12 degree or better eye piece. Nephroscope /telescope Size 7.5 to 12 Fr or better. Instrument channel 6.5 to 7.5 fr for instrument and irrigation for mini Nephroscope Continuous. Irrigation Nephroscope Sheaths 11-21 Fr. Minimum 3 sizes operating sheath 14-21 with Dilators compatible with the Nephroscope and all accessories stone grasping forceps. 2 or 3 prong stone grasper. Grasping forceps with alligator Jaw. ✓ Compatible suction irrigation pump.		
Accessories: Standard Accessories to execute the functioning task and sterilization process if any.		
Warranty: Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.		
Country / Origin of Manufacturer: USA / Europe / Japan		

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Specification of ENT and Urology Item Due on 27th October, 2022

Clinical Specialty	Urology	Item 49 & 50
Generic Name	SEMI RIGID URS SET	QTY 2 Each
Clinical Purpose	URS is endoscopy of ureter and pelvis that is used to break the stones	
TECHNICAL SPECIFICATIONS		
1.Uretero-roscope Autoclavable, Semi Rigid Tip size 4-7.5. Fr, Angle: 5-6 degree Working Length: 25-57 cm. Instrument Channel with lateral offset eye piece or Equivalent Silicone 5 pieces / package Rubber cap for instrument channel 3-4 Fr or better Flexible cleaning brush for instrument channel Grasping Forceps (Compatible with sets) qty 2 Biopsy Forceps(Compatible with sets) qty 1 2or 3 prong forceps (Compatible with Set) qty 2 Sterilization Tray compatible with sets		
2. Uretero-roscope Autoclavable, Semi Rigid Tip size 6-9Fr, Angle: 5-12 degree Working Length: 43cm Instrument Channel with lateral offset eye piece or Equivalent Silicone automatic valve, 0 3.9 mm, 5 pieces / package Rubber cap for instrument channel Flexible cleaning brush for instrument channel Grasping Forceps (Compatible with sets) qty 2 Biopsy Forceps(Compatible with sets) qty 1 2or 3 prong forceps (Compatible with Set) qty 2 Sterilization Tray compatible with sets		
Accessories: Stone Basket,		
Warranty: Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 05 years.		
Country / Origin of Manufacturer: USA / Europe / Japan		

Specification of ENT and Urology Item Due on 27th October, 2022

Clinical Specialty	Item No 53
Generic Name	LOW END DOPPLER QTY 1
Clinical Purpose	It is immediately available imaging modality with its main use in indoor patients especially in ICU/CCU settings, in patients who cannot be transported to department, in emergency situations or when ionizing radiations are contra indicated

TECHNICAL SPECIFICATIONS

Image Quality: Digital Ultrasound scanner with digital imaging parameters and annotation library, CrosXB and speckled reduction imaging or equivalent beam former. System should be capable to handle multi frequency probes from 3.0 MHz to 18.0 MHz or above.

Probes as standard:

1. Multi frequency LINEAR transducer of frequency range from 4 - 11MHz or more
2. Multi frequency Convex Probe with center frequency between 2-6 MHz or better for Abdomen, Obs & Gynae and deep view studies) Vascular Bundle (Software) Biopsy adppter for any probe B-Mode angle linear steering variable Independent for B Mode and color Doppler M-Mode, Color Doppler needle recognition designed and combination there of M. Mode sweep: 4 speed or more. Gray scale: 256 or more Sensitivity gain time: 6-12 steps/continuously variable Overall gain control in STEPS /CONTINUOUS Depth: 30 cm or more Focusing system: 3 steps and dynamic Adjustable acoustic power Frame rate: 500 frame / sec or more Tissue Harmonics: Tissue Harmonic imaging Cine memory of 500 frames/ 150Mb minimum. Post processing: Image inversion, edge/echo enhancement correlation / persistence/Dynamic Range / Gamma Curve. Focusing system up to 4-8 or more transmit focal zone. Image magnification 8x (minimum) in real time and freeze mode, pan zoom and scroll caliper calculation. Min.4 distance measurements per screen, Trace, length measurements, ANGLE MEASUREMENT, Spectral / Doppler, CWD, basic cardiac and Advanced Vascular Measurements, Auto-trace function.

Area, Circumference And Compound Volume, Histogram, OBS/ Gynae measurements Monitor: 15" LCD / TFT or bigger---2D image display. Full screen split and select screen formats simultaneous display B/W, color and spectral image depth 30 cm or more. Single probe connector and three probe connector with original trolley. Data management JPEG and MPEG4 file formats, cine loop capture, patient data management and archiving via removable SD card or flash drive. On board image review application, USB data transfer to a computer and DVI port for attaching second monitor. Built in drive: USB and integrated SSD,HDD Video ports : INPUT and OUTPUT USB Needle enhancement software /Must be available Operating Voltage 220 V AC, 50 HZ. Docking cart with three probe ports and built in battery packed with minimum battery life of one hour. Built in Trolley System should be included. Anesthesia application, enhanced parameters for clear needle and anatomy visualization , adjustment of depth and gain, power Doppler and color modes ,auto optimization of image, onboard annotation library, application for vascular access or equivalent, regional nerve blocks and pain management. Easy to clean, fluid resistant with integrated battery pack, one latch docking system with trolley cart, quick transducer disconnect and universal mounting connection. Keyboard: Alpha numeric with built in track ball / Touch pad. Freeze facility; built in keyboard complete with foot switch. Simplified user interface, automatic image optimization on screen /key board for data entry, caliper measurements, one touch patient ID biopsy guideline. System must be fully digital-

Specification of ENT and Urology Item Due on 27th October,2022

digital beam former, dynamic transmitted focusing, dynamic digital aperture. DICOM compatibility: DICOM 3.0 compatible System weight be as low as possible (6kg or less).

ACCESSORIES:

Thermal Printer 256 -Gray scale (Sony, Mitsubishi or equivalent)

2. UPS: on line with sine waves 2 KVA with thirty minutes back up time. (IMPORTED) 3. 50 High Density / High Glossy thermal paper Rolls 4. Gel: 20 liter

FUTURE UPGRADES:

The unit should have the capability for up gradation of future software (shall be provided free of cost within the warranty period).

OPTIONAL:

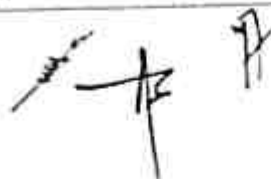
Endovaginal/ Endocavitary probe Echo probe Hockey-stick Probe

Warranty:

Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.

Country / Origin of Manufacturer:

USA / Europe / Japan



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Specification of ENT and Urology Item Due on 27th October, 2022

Clinical Specialty		Item No 57
Generic Name	MAGNIFYING OPERATING LOOPS	QTY 4
Clinical Purpose	Use in fine surgery especially surgery on nerves, tendons and small vessels	
TECHNICAL SPECIFICATIONS		
TYPE A Binocular alilean loupes with fatigueless view. Magnification: 2.5x - 3.0x Working distance: 550-300 mm. Field of view: 115-70 mm. Titanium or sport frame designed specifically to use with loupes in different colors. With LED light Source		
Warranty: Warranty of all accessories is included in 03 years contract. Comprehensive warranty of all parts including consumable items for 03 years.		
Country / Origin of Manufacturer: USA / Europe / Japan		




Specification of ENT and Urology Item Due on 27th October, 2022