

SPECIAL INSTRUCTIONS FOR BIDDERS

NOTE: For **specifications** please check approved PVMS against each advertised item. Approved PVMS attached.

Country of Manufacturer in all case will be **USA/ Europe/ Japan**

WARRANTY:

03 years comprehensive warranty of all parts, accessories and consumables of all advertised items except below mentioned items where 05 years comprehensive warranty of all parts, accessories and consumables will be applicable.

1. Functional endoscopic sinus surgery complete set (fess) 5 years
2. Syringe pump with docking station
3. Ventilator with Humidifier (HFO)
4. Co₂ laser for ENT
5. Mastoid drill system
6. Operating microscope for ENT

TRAININGS: (CO₂ LASER FOR ENT)

one doctor foreign attachment at manufacture`s site and one biomedical engineer comprehensive service training at manufacturer`s site.

**SPECIALIZED HEALTH CARE &
MEDICAL EDUCATION DEPARTMENT**

GOVERNMENT OF THE PUNJAB



Health Department

**PRODUCT VOCABULARY OF
MEDICAL STORES (PVMS)**

ENT EQUIPMENT

UPDATED 2022.

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APPROVED PVMS (SEP 30, 2022)

Clinical Specialty	ENT
Generic Name	EAR SURGERY SET
Clinical Purpose	To repair hearing loss by replacing a middle earbone with a Prosthesis
Technical Specifications	
<p>FISCH-Elevator, double ended, one side elevator, blunt, other side scalpel handle No. 7, WULLSTEIN Elevator, 18cm</p> <p>FISCH Dure-Elevator, 17cm, 5 mm wide</p> <p>FISCH Periosteal Elevator, sharp, angled, length 21 cm WEITLANER Retractor, 2 x 3 prongs, blunt, length 11 cm WEITLANER Retractor, 3x4 prongs, sharp, length 13 cm HARTMANN Ear Forceps, very fine, serrated, working length 8cm</p> <p>FISCH-HARTMANN Ear Forceps, serrated, delicate, 1.2 mm x 8 mm, working length FISCH Ear Forceps, very fine, smooth, 0.4x3.5 mm, working length 8cm</p> <p>Posigator- Forceps, straight, with spring, smooth, 4mm, Working length 8cm Ear Forceps, very fine, serrated, working length 8cm, curved right</p> <p>Ear Forceps very fine, serrated, working length 8cm, curved left Ear Forceps, very fine, serrated, working length 8cm, curved up wards. WULLSTEIN Ear Forceps, very fine, oval cupped jaws, working length 8 cm, 0.6 mm WULLSTEIN Ear Forceps, very fine, oval cupped jaws, working length 8cm, 0.9mm WULLSTEIN Ear Forceps, very fine, oval cupped jaws, working length 8cm, 0.9 mm, curved right.</p> <p>WULLSTEIN Ear Forceps, very fine, oval cupped jaws, working length 8cm, 0.9 mm, curved upwards. HOUSE-DIETER Malleus Nipper, working length 8cm, up biting.</p> <p>FISCH-DIETER Malleus Nipper, up biting, very delicate, tip 0.8 mm wide, working length 8cm WULLSTEIN Scissors, working length 9 cm, delicate, straight</p> <p>WULLSTEIN Scissors, working length 9 cm, delicate, curved upwards WULLSTEIN Scissors, Working length 9cm, delicate, curved left.</p> <p>WULLSTEIN Scissors, working length 9 cm, delicate, curved right. WULLSTEIN Scissors, working length 8cm, very delicate, straight. FISCH Cruotomy Scissors, Working length 7.5cm, curved right. FISCH-BELLUCCI Micro Ear Scissors, beaked scissors blades, blades 7 mm, working length 8 cm</p> <p>HOUSE-BELLUCCI Scissors, Working length 8 cm, very delicate.</p> <p>Ear Hook, without ball end, 15.5 cm, size 1 BUCK Curette, sharp, 14.5 cm, size 0</p> <p>BUCK Curette, sharp, 14.5cm, size 00</p> <p>PLESTER Knife, round, vertical, 16cm, standard size 3.5 x 2.5mm</p> <p>PLESTER Knife, round, vertical, 16 cm, medium size 4.0 x 2.0 mm.</p> <p>PLESTER Knife, round, vertical, 16cm, large size 4.5 x 2.5mm.</p> <p>PLESTER Sickle Knife, double-edged, standard model, slightly curved length 16cm</p> <p>PLESTER Sickle Knife, double edge, 16 cm, medium curved.</p> <p>PLESTER Sickle Knife, double edge 16cm, strongly curved.</p> <p>PLESTER Sickle Knife, double edge, length 16 cm, curved, very delicate KLEY Knife. Footplate, 16cm Sickle Knife, extra delicate, shaft slightly curved, length 18 cm SEIFFERT probe for salivary duct, very delicate, silver, length 18 cm ROSEN Elevator, 16cm</p> <p>BEALES Soft Tissue Elevator, curved, 1.5 mm wide, length 16cm</p> <p>Hughes Elevator Dissector, extra small, 1.1mm wide, length 16cm</p> <p>HOUSE Elevator, tip angled 15°, 12 mm long, 1.0mm wide, length 16cm</p> <p>BEHRBOHM Dissector, for dissection in the area of paranasal sinuses, skull base and temporal bone, sharp, flat long spatula, tip angled 15°, with round handle, size 2 mm, length 17 cm</p> <p>BEHRBOHM Dissector, for dissection in the area of paranasal sinuses, skull base and Temporal bone, sharp, slightly curved spatula, with round handle, size 3 mm, length 17cm</p>	

BEHRBOHM Dissector, for dissection in the area of paranasal sinuses, skull base and temporal bone, sharp, round spatula, tip angled 45°, with round handle, size 3 mm, length 17 cm Mirror. For Antrum and Attic Inspection. Stainless steel.

HÖHMANN Micro Mirror for internal auditory meatus and cerebellopontine angle, metal, stainless steel, angled 45°, oval, size 2.5 mm x 5 mm, length 16 cm Seeker, ball end angled 45°, 15.5 cm, size 3.

Seeker, delicate, angled 25°, with ball end O.D. 0.6 mm, length 16 cm Seeker, delicate, angled 25°, with ball end 1 mm O.D., length 16 cm

Seeker, delicate, angled 25°, with ball end 1.5 mm O.D., length 16 cm

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 HOUSE Curette, medium, spoon sizes 1 x 1.8 mm and 2 x 2.8 mm, length 15 cm

HOUSE Curette, angled, extra small, spoon sizes 0.6 x 0.8 mm and 0.8 x 1 mm, length 17 cm

HOUSE Curette, straight, extra large, spoon sizes 2.3 x 3.5 mm and 2.7 x 4.3 mm, length 15 cm

HOUSE Curette, large, spoon sizes 2.8 x 3.2 mm and 2.6 x 3.5 mm, length 16 cm

HOUSE-BABIGHIAN Curette, toothed, extra large, spoon sizes 2.4 x 3.4 mm and 2.6 x 4 mm, length 16 cm

WULLSTEIN Needle, 16.5 cm, strong long curve. WULLSTEIN Needle, 16.5 cm, strong short curve. WULLSTEIN Needle, 16.5 cm, light curve.

WULLSTEIN Needle, 16.5 cm, straight. PLESTER Guide, 15.5 cm

PLESTER Hook, 15.5 cm, retrospective, 2 mm, to granulate the underside of the tympanic membrane.

Hook, footplate, 16 cm, 0.2 mm. PLESTER Hook, foot plate, 16 cm, 0.6 mm. FISCH Hook, footplate, curved up, 0.2 mm, length 16 cm

FISCH Hook, foot plate, curved down, 90°, 0.2 mm, length 16 cm SHEEHY-HOUSE Chisel, foot plate, straight, 0.6 mm wide, length 16 cm HEERMANN Hook, reinforced, 16 cm, retrospective, 0.8 mm.

Protection Tube, metal, 6 cm, for ear instruments Pick 90°, 16 cm, 0.4 mm

Pick 90°, 16 cm, 5.0 mm

FISCH Micro Raspatory, double curved, right, length 16 cm FISCH Micro Raspatory, curved, right, length 16 cm DALCHOW Micro Raspatory, width 1.5 mm, curved, right, length 16 cm

CRABTREE Dissector Pick, flattened tip 90°, 0.5 mm wide, 1.5 mm long, length 16 cm LEMPERT Elevator, sharp, curved right, width 1.5 mm, length 15.5 cm

THOMASSIN Dissector, double-ended, 18 cm, tips curved right and left

DRAF Micro Elevator, sharp, curved 90°, 0.5 mm wide, round handle, length 16.5 cm FISCH Neurectomy Knife, 16 cm

FISCH Measuring Rod, length 16 cm

FISCH Measuring Rod, curved, length 16 cm Round Knife 0°, straight, 16 cm diameter: 0.1 mm. Round Knife 0°, straight, 16 cm, diameter: 2.3 mm.

Round Knife 0°, straight, 16 cm, diameter 3.0 mm

Round Knife, angled 25°, length 16 cm, diameter 1.0 mm Round Knife 45°, 16 cm, Diameter: 1.0 mm.

Round Knife 90°, 16 cm, diameter: 1.0 mm. SCHUKNECHT Wire Bending Die

FISCH-McGEE Wire Crimper, working length 8 cm.

FISCH-McGEE Wire Crimper, working length 8 cm, curved right FISCH-Mc GEE Wire Crimper, working length 8 cm, curved left Vein Press, LUBECK model, diameter 38 mm

Knife, round, 45°, diameter 3 mm, length 17.5 cm

BABIGHIAN Elevator, slightly curved, blunt, 3 mm wide, length 17.5 cm

BABIGHIAN Micro Elevator, curved, blunt, 1 mm wide, length 17.5 cm

Metal Tray for sterilizing and storage of 14 straight and 6 angled BABIGHIAN instruments perforated, bottom part with holder, lid

with silicon bridges and handle, external dimensions (w x d x h) 285 x 175 x 36 mm Round Knife 90°, bayonet-shaped, curved upwards, diameter: 1.5 mm, length 18.5 cm Round Knife 90°, bayonet-shaped, curved downwards, diameter: 1.5 mm, length 18.5cm Tenotome, sickle knife, curved downwards, bayonet-shaped, delicate, length 18,5cm
Accessories: Sterilization system complete consisting of standard accessories or following Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drapes
Optional (If any):

APPROVED PVMS (SEP 30, 2022)

Clinical Specialty	ENT
Generic Name	FUNCTIONAL ENDOSCOPIC SINUS SURGERY COMPLETE SET (FESS)
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 endoscopy to restore drainage of the paranasal sinuses and ventilation of the nasal cavity
Technical specifications	
<p><u>Hand Instrument Set For Fess</u> 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 17.5 cm to 18 cm, autoclavable, Fiber optic light transmission incorporated, Color code: black 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</p> <p><u>SHAVER SYSTEM FOR FESS</u> 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, with proportional function Silicone Tubing Set, for irrigation, sterilizable Clip Set, for use with Tubing Set Connecting Cable, length 100 cm Single Use Tubing Set, sterile, package of 3 Shaver Hand piece, for use ENT oscillation mode range from 3000 to 10000 Suction Shaver Blade with integrated 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, oval cutting window, 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</p>	

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 functions for 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 flexible endoscopes as well as reuseable and
 single use flexible video endoscopes
 Complete documentation of the procedure is possible
 Patient data entry, store images and videos in internal memory, transfer of Videos and images on
 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:

- Image sensor: CMOS chip
- Progressive scan (full frame) for Integrated zoom lens
- $f = 16$ mm or better
- Control buttons: 3 (2 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 3G-
 SDI, 1x Comp, 1x S-Video, 1x RS232. CE label, class I.
 Certified to: ANSI/AAMI ES60601-1, CAN/CSA C22.2 NO.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:
 1 x 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 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 (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.

ideo signal inputs: 1 x DP 1.2A, 1 x HDMI 2.0 Video outputs: 1 x DP 1.2A, 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.

Classification: CE, MDD, CSA. Special Features:

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

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 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. Possible on internal memory (2 TB, FIFO) Network transfer via SMB3 security encrypted DICOM Protocol or sFTP possible

SUCTION IRRIGATION UNIT (same manufacturer)

Line voltage: 100-240 VAC, 50/60 Hz.

Separately available and at any 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:

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

<p>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 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</p> <p>Motor For Drill Hand Pieces Features Self Cooling , Brushless Autoclavable, Torque 4Ncm or more motor and straight shaft burrs connecting cable</p> <p>ACCESSORIES: Sterilization system complete consisting of standard accessories or following. Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drapes</p>	
Optional Items	
1.	DCR Intranasal Drill to be use with shaver system
2.	DCR Burrs
3.	4 K Camera for Functional Endoscopic Sinus Surgery
<p>"Full Modular 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 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.</p> <p>The system must comprise of following</p> <p>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</p> <ul style="list-style-type: none"> • Connections: - 1 x DVI-D, 2xdisplay port 1.2 output 1 x12G/3G-SDI output, 4 USB 	

Connection (2 x front, 2 back)

- Max. Resolution: - 3840 x 2160 p
- Power Supply: - 100-120 VAC, 50/50 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 contains 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

- 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 Scope, 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: 1 x 1 / 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

<p>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 operations. Patient data import via keyboard, query HL7 and DICOM work list. Save USB storage media through 2.0 and 3.0, network drives, FTP, via DICOM or HL7 ORU/MDM. Network transfer via SMB3 security encrypted DICOM Protocol or sFTP possible</p>
Accessories:
<p>Sterilization system complete consisting of standard accessories or following. Container Bottom, Container Lid Wire Basket, Silicone mat Wrapping Drapes</p>

Clinical Specialty	ENT
Generic Name	Rigid Bronchoscope Adult with Optical Forceps
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>Universal Bronchoscope, Size 8.5 to 12 mm, outer diameter 8-12 mm, inner diameter 7-10mm, length 36-43cm, with Fiber Optic Light Carrier</p> <p>Universal Bronchoscope, size 6.5 to 10 mm, outer diameter 7-10 mm, inner diameter 6-9 mm, length 36-43 cm, with Fiber Optic Light Carrier</p> <p>Glass Window Plug Rubber Telescope Guide FLUVOG Adaptor with sliding glass window plug, sealing cap, notched lens and key hole opening, movable or equivalent</p> <p>Injection Cannula or equivalent, for positive pressure assisted ventilation system, LUER-Lock or equivalent, outer diameter 3.5mm, for use with</p> <p>Adjustable Magnifier, swing-away type, with ring adaption, autoclave able Adaptor for respirator</p> <p>Straight Forward Telescope 0°, diameter 5 to 5.5 mm, length 49-50 cm, autoclave able. Fiber optic light transmission</p> <p>Optical Forceps, alligator, for hard foreign bodies, large jaws, with spring-action handle for use with telescopes or equivalent</p> <p>Optical Forceps, for peanuts and soft foreign bodies, with spring-action handle, for use with telescopes or equivalent</p> <p>Optical Forceps, universal, for biopsy, for removal of foreign bodies and denatured tissue for use with telescopes or equivalent</p> <p>Forceps, alligator, for hard foreign bodies, double-action jaws, sheath diameter 2.5mm, working length 50cm or equivalent</p> <p>Forceps, pointed, serrated, for coins and flat foreign bodies, double-action jaws, sheath diameter 2.5 mm, working length 50 cm or equivalent</p> <p>Forceps, for peanuts and soft foreign bodies, double-action jaws, jaw width 7 mm, sheath diameter 2.5 mm, working length 50 cm or equivalent</p> <p>Rigid Suction Tube, length: 50cm Cotton Carrier, working length 50cm Sponge Holder, with spring handle, working length 50 cm Foreign Body Basket, with ring handle, working length 50cm Xenon/LED, High-Performance LED Cold Light Fountain with one light</p>	

Including: Mains cord.

Fiber Optic Light Cable, with straight connector Minor deviation in sizes is acceptable

Accessories:

Sterilization system complete consisting of standard set or as follows. Container Bottom

Container Lid Wire Basket Silicone mat

Wrapping Drapes

Optional(If any):

APPROVED PVMS (SEP 30, 2022)

Clinical Specialty	ENT
Generic Name	Rigid Bronchoscope Paeds with Optical Forceps
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 mm, 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</p> <p>Injection Cannula/ equivalent, for positive pressure assisted ventilation system, LUER-Lock/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 code :green</p> <p>Optical Coin Forceps for Pediatric Broncho- Oesophagoscope, 2 x 2 teeth, for use with telescope forced controlled handle for removal of coins and flat foreign bodies or equivalent</p> <p>Optical Alligator Forceps for Pediatric Broncho-Oesophagoscope, for use with telescope forced Controlled handle for removal of hard foreign bodies or equivalent</p> <p>Optical Forceps, with spring- action handle for controlled removal of peanuts and soft foreign bodies, for use with Telescope or equivalent</p> <p>Forceps alligator, for hard foreign bodies, double action jaws, sheath diameter 1.5 mm, working length 35 or equivalent</p> <p>Forceps, for peanuts and soft foreign bodies, double-action jaws, sheath diameter 1.5 mm, working length 35cm or equivalent</p>	

<p>Rigid Suction Tube, outer diameter 3 mm, working length 35cm or equivalent Cotton Carrier, working length 35cm or equivalent</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, High-Performance LED Cold Light Fountain with one light outlet including:</p> <p>Mains cord</p> <p>Fiber Optic Light Cable, with straight connector Minor deviation in sizes will be acceptable</p>
<p>Accessories:</p> <p>Sterilization system completes consisting of standard set or as follows. Container Bottom</p> <p>Container Lid Wire Basket Silicone mat Wrapping Drapes</p>
<p>Optional(If any):</p>

APPROVED PVMS (SEP 30, 2022)

Clinical Specialty	ENT
Generic Name	Direct Laryngoscope Set With Optics
Clinical Purpose	Laryngoscope 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	
<p>Laryngoscope Adult Size Length 17 to 18 cm with Telescope guide tube integrated inside the lumen with integrated 70/90 Dig Telescope Length 18cm Dia 4mm autoclave able, fiber optic light transmission incorporated,</p> <p>(KLEINSASSER) Operating Laryngoscope for adults, large, length 17 to 18cm</p> <p>KLEINSASSER Operating Laryngoscope, for adults, medium, length 17 to 18 cm (for anterior commissure)</p> <p>(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 Diverticulosopes</p> <p>Fiber Optic Light Carrier for distal illumination, working length 7.5 cm, for use with Laryngoscopes</p> <p>(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 15cm</p> <p>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 34cm (KLEINSASSER) Forceps, straight, with 2 mm cupped jaws, with cleaning connector, working length 23cm</p> <p>(KLEINSASSER) Forceps, curved upwards, with 2 mm cupped jaws, with cleaning connector, working length 23cm</p> <p>(KLEINSASSER) Forceps, curved to right, with 2 mm cupped jaws, with cleaning connector, working length 23cm</p> <p>(KLEINSASSER) Forceps, curved to left, with 2 mm cupped jaws, with cleaning connector, working length 23 cm</p> <p>(KLEINSASSER) Miniature Forceps, straight, with 1 mm cupped jaws, sheath conically reinforced from distal to proximal end, with cleaning connector, working length 23cm</p> <p>(KLEINSASSER) Miniature Forceps, curved upwards, with 1 mm cupped jaws, sheath conically reinforced from distal to proximal end, with cleaning connector, working length 23cm</p>	

(KLEINSASSER) Miniature Forceps, curved to right, with 1 mm cupped jaws, sheath conically reinforced from distaltoproximalend, with cleaning connector,workinglength23cm
(KLEINSASSER) Miniature Grasping Forceps, straight, serrated, sheath conically reinforced from distalto proximalend, with cleaning connector, working length 23 cm
(KLEINSASSER) Miniature Grasping Forceps, curved to right, serrated, sheath conically reinforced from distaltoproximalend, with cleaning connector, working length 23cm
(KLEINSASSER)Scissors, straight, with cleaning connector, working length 23cm
Micro Forceps, straight, with 1 mm cupped jaws, with cleaning connector, working length 20cm
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 23cm, with suction channel to remove LASER vapors
(KLEINSASSER)Grasping Forceps, straight, serrated, with cleaning connector, working length 18cm
Micro Grasping Forceps, curved upwards to right, serrated, with triangular fenestrated jaws, with cleaning connector, working length 18cm
(LINDHOLM)Forceps, for a traumatic 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 3mm,working length 23cm
(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 5mm plug, length 300cm,
Bipolar Forceps, jaws up turned, for bipolar coagulation in larynx, working length 23cm, 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 450cm
High-Performance LED Cold Light Fountain, including: Mains cord Fiber Optic Light Cable, with straight connector, diameter 3.5mm or better, length 180cm
Accessories: Sterilization system complete consisting of standard set or as follows.Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drapes
Optional(If any):

Clinical Specialty	ENT
Generic Name	Esophagoscope Adult with Optical Forceps
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. It can be performed with soft flexible scopes or rigid scopes depending on the situation.
Technical Specifications	
<p>Oval Operating Esophagoscope. Length: 50cm. Size:12x16</p> <p>Esophagoscope, oval, for distal and proximal illumination, length 40 cm, O.D. 12 mm x 16 mm, for use with fiber optic light carrier and/or prismatic light deflector</p> <p>Oval Operating Esophagoscope.Length:30cm.Size:8x12</p> <p>Fiber Optic Light Carrier for use with esophagoscopes, length 50 cm Fiber Optic Light Carrier for use with esophagoscopes, length 40 cm Fiber Optic Light Carrier for use with esophagoscopes, length 30cm</p> <p>Adjustable Magnifier, swing-away type, with ring adaption, autoclaveable Handle</p> <p>Straight Forward Tele- scope 0°, diameter 5.5 mm, length 53 cm, autoclave able. Fiber optic light transmission Incorporated. Color code: Green</p> <p>Esophagoscope Tube, size11, outer diameter 12mm, for use with fiber optic light transmission working length 50 Cm</p> <p>Tube-insert, with instrument channel and anti-Fog-device, for use with esophagoscope-tube and straight forward Telescope</p> <p>Window for Esophagoscope</p> <p>Rubber insufflations bulb,with detachable tube,withLUER-lock/equivalent connector, Including: Rubber bulb Rubber tube Optical Forceps, for peanuts, big and soft foreign bodies, double-action jaws, working length 55cm</p> <p>Optical Forceps, alligator, for hard foreign bodies with large jaws, double-action jaws, working length 55 cm</p> <p>Telescope Guide, for use with esophagoscopes, length 50cm</p> <p>Forceps, alligator, for hard foreign bodies, double-action jaws, sheath diameter 2.5 mm working length 55cm</p> <p>Forceps, for peanuts and soft foreign bodies, double action jaws, sheath diameter 2.5mm, working length 55cm</p> <p>Rigid Suction Tube, outer diameter 4 mm, working length 55 cm Cotton Carrier, working length 55 cm.</p>	

Sponge Holder, spring handle, working length 55cm
Foreign Body Basket, with ring handle, working length 50 cm
LED, High-Performance LED Cold Light Fountain with one light outlet, including:
Mains cord Fiber Optic Light Cable, with straight connector, diameter 3.5mm, length 180cm
Accessories: Sterilization system complete consisting of standard set or as follows. Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drapes
Optional(If any):

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Clinical Specialty	ENT
Generic Name	RIGID ESOPHAGOSCOPE PEADS WITH OPTICAL FORCEPS
Clinical Purpose	Esophagoscopy is a diagnostic procedure to evaluate the esophagus or swallowing passage. Problem identified can include foreign objects, inflammation, signs of gastroesophageal 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 6 Esophagoscope Tube, length 30 cm, size 5 Esophagoscope Tube, length 18, 5cm, size 3 Prismatic Light Deflector autoclave able, with connection to fiber optic light cable Rubber Telescope Guide for use with telescopes or optical forceps Telescope Bridge for connection with Telescope</p> <p>Straight Forward Telescope 0°, diameter 2.9mm, length 36cm, autoclaveable, fiber optic light transmission incorporated, color code: green</p> <p>Optical Coin Forceps for Pediatric Broncho-Esophagoscopes, 2 x 2 teeth, for use with telescope forced controlled handle for removal of coins and flat foreign bodies</p> <p>Optical Alligator Forceps for Pediatric Broncho-Esophagoscopes, for use with telescope ,forced controlled handle for removal of hard foreign bodies</p> <p>Optical Forceps, with spring- action handle for controlled removal of peanuts and soft foreign bodies, for use with Telescope</p> <p>Forceps alligator, for hard foreign bodies, double action jaws, sheath diameter 1.5mm, working length 35Cm</p> <p>Forceps, pointed, serrated, for coins and flat foreign bodies, double-action jaws, sheath diameter 1.5 mm, working length 35 cm</p> <p>Forceps, for peanuts and soft foreign bodies, double- action jaws, sheath diameter 1.5mm,working length 35cm</p> <p>Rigid Suction Tube, outer diameter 3 mm, working length 35 cm Cotton Carrier, working length 35 cm Sponge Holder, working length 35cm</p> <p>Foreign Body Basket with ring handle, working length 35cm</p>	

LED High-Performance LED Cold Light Fountain with one light outlet, including:
Mains cord Fiber Optic Light Cable, with straight connector, diameter 3.5mm, length180cm
Accessories: Sterilization system completes consisting of standard set or as follows. Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drapes
Optional(If any):

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Clinical Specialty	ENT
Generic Name	Video Rhinolaryngoscope
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:	75 to 85° or more
Deflection: up/down	120-140°
Working length:	30cm
Outer Diameter.:	2.5 - 3.7mm
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	
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	
Accessories:	
Optional (If any):	

Clinical Specialty	ENT
Generic Name	ANTRAL WASHOUT SET
Clinical Purpose	Antral lavage is a surgical procedure in which a cannula is inserted into the opening of the maxillary sinus via The inferior meatus to allow irrigation and drainage of the sinus.[1] It is also called proof puncture as the presence of an infection can be proven during the procedure. Upon presence of infection, it can be considered as therapeutic puncture, irrigation of the maxillary sinus through its natural ostium or through a puncture of the inferior meatus.
Technical Specifications	
<p>Nasal Speculum, blade length 30mm, length 13 cm</p> <p>Nasal Speculum, for adults, 15 cm, with set screw and adaption for Flexible Tension Arm , right blade 65mm long and 15 mm wide, left blade 50mm long and with 3 mandrels</p> <p>Nasal Speculum, for children, length 13cm</p> <p>Nasal Speculum, with fiber optic light carrier, blade length 40 mm, length 13.5 cm Illuminated Nasal Speculum with fiber optic light carrier. 13.5cm, 75 mm.</p> <p>Suction Tube, angular, conical, LUER, with grip plate, outer diameter 3.5mm, working length 11cm</p> <p>Suction and Irrigation Tube, cylindrical, suction tube outer diameter 1mm, irrigation tube outer diameter 1 mm, working length 9.5 cm</p> <p>Suction and Irrigation Tube, cylindrical, suction tube outer diameter 2.5 mm, irrigation tube outer diameter 2 mm, working length 9.5cm</p> <p>Nasal Probe, curved, working length 11cm, total length 18cm</p> <p>Cotton Applicator, standard model, triangular, serrated, diameter 1.3 mm, length 15cm</p> <p>Nasal Dressing Forceps, bayonet-shaped, length 16.5 cm</p> <p>Nasal Dressing Forceps, bayonet-shaped, length 20cm</p> <p>Nasal Dressing Forceps, angular, working length 10cm</p> <p>Nasal Dressing Forceps, standard size, working length 11cm</p> <p>Forceps, with oval, fenestrated, cupped jaws, straight, width 2.5mm, working length 12.5cm</p> <p>Antrum Cannula LUER-Lock, long curved, with olive diameter 2.7 mm, without grip plate, outer diameter 1.5 mm, length 9cm</p> <p>Antrum Trocar, LUER-Lock, with lateral holes, outer diameter 2 mm, working length 10 cm</p> <p>Antrum Trocar, LUER-Lock, with lateral holes, outer diameter 2 mm, working length 10 cm</p> <p>Antrum Cannula, length 12.5cm, with cut-off hole, O.D.: 2.5mm, LUER-lock, short curved</p>	
<p>Accessories:</p> <p>Sterilization system complete consisting of standard set or as follows.</p> <p>Container, Bottom Container, Lid Wire Basket , Silicone mat Wrapping Drapes</p>	
Optional (If any):	

Clinical Specialty	ENT
GenericName	ANTERIOR SKULL BASE SET
Clinical Purpose	Skull base surgery is a highly specialized set of surgical procedures performed to treat various conditions that affect the base of the skull. This form of surgery is very challenging, dealing with complex cases and lesions that lie in close proximity to vital neurologic structures
Technical Specifications	
<p>Nasal Forceps, end of sheath 25° upturned, with straight jaws, width 3 mm, with Cleaning connector, working length 13cm</p> <p>Nasal Forceps, end of sheath 25° upturned, through-cutting, with straight jaws, BLAKESLEY shape, width 3mm, with cleaning connector, working length 13cm</p> <p>Nasal Forceps, end of sheath 25° upturned, jaws 45° upturned, width 3 mm, with cleaning connector, working length 13 cm</p> <p>Antrum Grasping Forceps, jaws curved down wards, fixed jaw curved 90°, movable jaw backward opening 120°, with cleaning connector, working length 10cm</p> <p>Sphenoid Punch, tip curved 30°, through-cutting, reversible, size 1.6 x 2 mm, working length 17 cm Front allostiumseeker curved, double ended</p> <p>Elevator, double-ended angulated semi-sharp shovel blade, blunt end slightly curved, length 26cm</p> <p>Elevator, double-ended angulated semi-sharp shovel blade, blunt end slightly curved, length 26cm</p> <p>Elevator, double-ended semi-sharp and blunt, length 26 cm Hook, 90°, blunt, length 25 cm, with round handle Round Knife, vertical, 3.5x2.5mm length 25cm, with round handle Suction Elevator, curved, length 25cm, with mandarin</p> <p>Suction Tube, without cut-off hole, LUER, diameter 2mm, working length 15cm</p>	
<p>Accessories:</p> <p>Sterilization system complete consisting of standard set or as follows. Container Bottom Container Lid Wire Basket Silicone mat</p> <p>Wrapping Drapes</p>	
Optional (If any):	

Clinical Specialty	ENT
Generic Name	Basic Rhino Plasty Set
Clinical Purpose	Plastic surgery on the nose, known familiarly as a nose job. Rhinoplasty is a facial cosmetic procedure that is usually performed to enhance the appearance of the nose. During this type of rhinoplasty, the nasal cartilage and bones are modified, or tissue is added.
Technical Specifications	
<p>Surgical Handle, length 14 cm, for Blades: Blade size. 15, non-sterile, package of 100 Blade, size11, non-sterile, package of 100</p> <p>Miniature Blade, Size. 64, round, sterile, package of 25 Nasal Knife, curved, roundly tipped blade, length 14 cm Nasal Knife, rounded edge, length 14cm</p> <p>Cotton Applicator, standard model, triangular, serrated, diameter 1.3 mm, length 15 cm Scissors, extra delicate, curved, length 10cm</p> <p>Scissors, curved, length 10.5 cm Scissors, curved, length 14 cm Scissors, angled, length 10cm</p> <p>Dorsal Scissors, angular, serrated blades, slender, working length 6.5 cm Chisel, flat, graduated, straight, width 4mm, length 18.5 cm</p> <p>Chisel, flat, graduated, straight, width 7 mm, length 18.5 cm Chisel flat, graduated, straight, width 9mm, length 18.5cm Cross bar Osteotome, graduated, double-edged grinding, straight, width 6mm, length 18.5cm Crossbar Chisel, graduated, single-edged grinding, curved, width 6 mm, length 18.5 cm Chisel, straight, with rounded guard, straight, length 18 cm</p> <p>Chisel, slightly curved, with rounded guard on left side, length 18 cm Chisel slightly curved, with rounded guard right side, length 18 cm Retractor, narrow (standard model), length 14cm</p> <p>Knife Guide and Retractor, one side with two pronged nostril retractor, other side with flat retractor, with duct for guide of cut, length 19cm</p> <p>Knife Guide and Retractor, made of wire, one side with nostril retractor, other side with flat retractor, length 18 cm</p> <p>Retractor, two prongs, sharp prong on right, blunt prong on left, width 10mm, length 14.5cm</p> <p>Retractor, two prongs, sharp prong on left, blunt prong on right, Width 10mm, length 14.5cm</p> <p>Hook, one prong, large curve, length 16.5cm</p> <p>AUFRIEHT Nasal Retractor, width of retractor blade 8 mm, length of retractor blade 40 mm, length 16.5 cm</p> <p>Suction Raspatory, with stylet, length 19.5cm</p> <p>MASING Elevator, double-ended, graduated, sharp and blunt, length 22.5cm</p> <p>JOSEPH- MASING Elevator, slightly curved, bayonet, 21 cm.</p> <p>MCKENTY Raspatory, width 5mm, length 14.5 cm COTTLE</p> <p>Raspatory, double-ended, for tunneling, length 22.5cm</p> <p>COTTLE Lower Lateral Forceps, bayonet-shaped, with set screw, serrated tips and teeth on the inside, length 15cm</p> <p>ADSON-BROWN Tissue Forceps, a traumatic, fine side grasping teeth, length 12 cm</p>	

<p>Nasal Rasp, double-ended, fine, length 21.5cm</p> <p>Nasal Rasp , double-ended, coarse (rasp), length 21.5cm WALSHAM Septum Straightening Forceps, dismantling, length 21cm</p> <p>COTTLE Metal Mallet, length 18cm</p> <p>JOSEPH Nasal Saw, cross wise toothed, bayonet-shaped, right, length 18.5cm JOSEPH Nasal Saw, cross wise toothed, bayonet-shaped, left, length 18.5 cm COTTLE Nasal Speculum, blade length 55 mm, length 13cm</p> <p>KILLIAN-STRUYCKEN Nasal Speculum, standard model, blade length 75 mm, length 13.5 cm</p> <p>KILLIAN-STRUYCKEN Nasal Speculum, standard model, blade length 90 mm, length 13.5 cm</p> <p>BLAKESLEY Nasal Forceps, straight, size 1, working length 11 cm</p> <p>BLAKESLEY Nasal Forceps, straight, size 3,working length 11cm</p> <p>WATSON-WILLIAMS Nasal Forceps, straight, with serrated jaws, working length 11 cm</p> <p>COTTLE Bone Crusher, with clip, crusher size 5 x 1.5 cm</p> <p>MASING Needle Holder, ear forceps shape, intra nasal, smooth jaws, working length 8cm</p> <p>NEIVERT-MASING Needle Holder, thumb ring upturned, one jaw with groove, length 13cm</p> <p>Needle Holder, extra delicate, slight spring action, length 17cm</p> <p>FRAZIER Suction Tube, with cut-off hole and stylet, angled, outer diameter 7 Fr./2mm, working length 10cm, total length17.5cm</p> <p>FRAZIER Suction Tube, with cut-off hole and stylet, angled, outer diameter 9 Fr./3mm, working length 10 cm, total length 17.5cm</p> <p>Suction Tube, curved, outer diameter 5 mm, length 16.5 cm COTTLE Columella Clamp, length 11cm KAZANJIAN Forceps, length 20 cm</p> <p>JANSEN-MIDDLETON Septum Forceps, angular, through-cutting, working length 10cm</p>
<p>Accessories:</p> <p>Sterilization system complete consisting of standard set or as follows. Container Bottom</p> <p>Container Lid Wire Basket Silicone mat Wrapping Drapes</p>

Clinical Specialty	ENT
Generic Name	Mastoidectomy Set
Clinical Purpose	Amastoidectomy is a procedure performed to remove the mastoid air cells. This can be done as part of treatment for mastoiditis, chronic supportive 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	
<p>Periost Knife.13cm.Elevator Version</p> <p>Surgical Handle, No. 3, length 12.5 cm, for blades Blade No.10,sterile,package of 100 Blade No. 11, sterile, package of 100 BladeNo.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 Retractor,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</p> <p>Mastoid Gouge,14cm,5mm wide Mastoid Gouge, 14 cm, 7 mm wide Mastoid Gouge, 14 cm, 9 mm wide Mastoid Chisel, 14 cm 3 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 1.6 x 2.6 mm, length 15 cm LEMPERT Mastoid Curette. 21cm, size0000 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, 1 x 2 teeth, straight, length 14 cm ALLIS Forceps, 4 x5 teeth, length 15 cm ADSON Dressing Forceps, serrated, 12 cm. ADSON Tissue Forceps,1x2 teeth12cm. ADSON-BROWN Tissue Forceps,non-traumatic,fine side grasping teeth, length 12cm</p> <p>Dressing Forceps, length 14.5cm, standard size Dressing Forceps, length 14.5cm,delicate size</p> <p>Tissue Forceps, 1 x 2 teeth, length 14.5 cm, standard size Tissue Forceps, 1 x 2 teeth, length 14.5 cm, medium size Tissue Forceps, 1 x 2 teeth, length 14.5 cm, delicate size JOBSON-HORNE Probe. With serrated and ring end, 18 cm Seeker, ball end angled 45°, 15.5 cm, size3. 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 length7.5cm,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</p>	

<p>Fr.ZOELLNER Suction Tube, LUER-Lock, 15cm,O.D.2.5mm. Suction Tip for , 4cm, O.D.0.5mm.</p> <p>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. 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</p>
<p>Accessories: Sterilization system complete consisting of standard set or as follows .Container Bottom Container LidWire Basket Silicone mat Wrapping Drapes</p>
<p>Optional (if any)</p>

Clinical Specialty	ENT
Generic Name	Microlaryngeal Instrument
Clinical Purpose	Laryngeal microsurgery is removal of abnormal tissue from the vocal folds (cords) using precision micro laryngeal instruments and/or laser.
Technical Specifications	
<p>(KLEINSASSER) Operating Laryngoscope, for adults, medium, length 17 to 18</p> <p>(KLEINSASSER) Operating Laryngo-scope, length 17 to 18cm, adult size, large.</p> <p>(KLEINSASSER) Operating Laryngoscope, for adults, medium, length 17 to 18cm (for anterior commissure)</p> <p>(KLEINSASSER) Operating Laryngo- scope, child size, length 15 cm (KLEINSASSER) Operating Laryngo-scope, length 13 cm, child size, small. BENJAMIN- HAVAS Clip, short, for proximal illumination</p> <p>Fiber Optic Light Carrier, for distal illumination, working length 14 cm, for use with Laryngoscopes and Diverticulo scopes</p> <p>Fiber Optic Light Carrier, for use with laryngoscopes Laryngoscope Holder, with wide angle adjustment</p> <p>Consisting of:</p> <p>Holder with wheel support rod</p> <p>(KLEINSASSER) Forceps, straight, with 2 mm cupped jaws, with cleaning connector, working length 23 cm</p> <p>(KLEINSASSER) Forceps, curved upwards, with 2 mm cupped jaws, with cleaning connector, working length 23cm</p> <p>(KLEINSASSER) Forceps, curved to left, with 2mm cupped jaws, with cleaning connector, working length 23cm</p> <p>(KLEINSASSER) Miniature Forceps, straight, with 1 mm cupped jaws, sheath conically reinforced from distal to proximal end, with cleaning connector, working length 23cm</p> <p>(KLEINSASSER) Artery Forceps, with ratchet, with cleaning connector, working length 23 cm</p> <p>(KLEINSASSER) Scissors, straight, with cleaning connector, working length 23 cm</p> <p>Micro Forceps, straight, with 1mm cupped jaws, with cleaning connector, working length 20cm</p> <p>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</p> <p>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</p> <p>(KLEINSASSER) Knife sickle-shaped, curved, pointed, working length 23cm</p> <p>(KLEINSASSER) Suction Tube, outer diameter 3mm, working length 23cm</p>	
<p>Accessories:</p> <p>Sterilization system complete consisting of standard accessories or as follows Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drapes</p>	
Optional(If any):	

Clinical Specialty	ENT
Generic Name	Middle Ear Micro Ear Surgery 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	
<p>HARTMANN Nasal Speculum, for adults, length 13cm PLESTER Elevator, 18 cm, 8mm wide. LEMPERT Raspatory, width 3 mm, length 19 cm Tissue Forceps, 1 x 2 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, length 13cm Surgical Handle, size 3, length 12.5 cm, for Blades Blade, size 15, non-sterile, package of 100 Blade size 11, non-sterile, package of 100 Blade size 10, non-sterile, package of 100 Scissors, curved, sharp/blunt, length 14.5cm ROCHESTER-PEAN Haemostatic Forceps, straight, length 14cm Needle Holder, tungsten carbide inserts, length 13 cm HALSTEAD "Mosquito" Artery Forceps, straight, length 12.5 cm HALSTEAD "Mosquito" Artery Forceps, curved, length 12.5 cm BACKHAUS Towel Forceps, length 9 cm GUILFORD-WRIGHT Wire Cutter, serrated, length 10 cm SCHUKNECHT Wire Bending Die HARTMANN Ear Speculum, standard model, outer diameter 5mm, length 3.6cm</p> <p>Instrument Guard, teflon, autoclavable, for micro forceps and micro scissors with working length 8cm, length 11.5cm</p> <p>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 x 4.5 mm, working length 8cm FISCH 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 Mc 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</p>	

<p>PLESTER Hook, 15.5 cm, retrospective, 2 mm, to granulate the underside of the tympanic membrane.</p> <p>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, 16cm, retrospective, 0.8mm.</p> <p>Pick 45°, 16 cm, 0.5 mm KLEY Knife. Footplate, 16cm Hook, footplate, 16cm, 0.2mm.PLESTERHook, footplate, 16 cm, 0.6mm. FISCH Perforator, 16cm, diameter: 0.3mm.</p> <p>PLESTER Guide, 15.5 cm Pick 45°, 16cm, 1.0mm</p> <p>PLESTER Knife, round, vertical, 16 cm, standard size 3.5 x 2.5 mm Round Knife 45°, 16 cm, diameter: 2.0 mm.</p> <p>PLESTER Sickle Knife, double-edged, standard model, slightly curved, length 16cm</p> <p>WULLSTEINNeedle.16.5cm, light curve.</p> <p>Pick90°,16cm,0.4mm</p> <p>Pick90°,16cm,0.6mm</p> <p>Pick90°,16cm,0.8mm</p> <p>Pick90°,16cm,1.0mm</p>
<p>Accessories:</p> <p>Sterilization system complete consisting of standard accessories or as follows Container</p> <p>Bottom Container LidWire Basket Silicone mat</p> <p>Wrapping Drapes</p>
<p>Optional(If any):</p>

Clinical Specialty	ENT
Generic Name	Middle Ear Surgery Tympanoplasty and Stapedotomy 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.
Technical Specifications	
<p>Retractor, 2 x 2 prongs, length 13 cm Scissors, curved, length 15 cm "Mosquito" Artery Forceps, micro-model, curved, length 12.5 cm Scissors, extra delicate, curved, sharp/sharp, length 10.5 cm Suction and Irrigation Tube, conical, suction tube outer diameter 3.2 mm, irrigation tube outer diameter 2 mm, working length 9.5 cm</p> <p>Suction and Irrigation Tube, cylindrical, suction tube outer diameter 2.5 mm, irrigation tube outer diameter 2 mm, 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>Surgical Handle, Fig. 3, length 12.5 cm, for Blades</p> <p>Dual Purpose Scalpel Handle, elevator on one side, scalpel handle no. 7 on the other side, length 16 cm</p> <p>Double Curette, medium, spoon sizes 1 x 1.8 mm and 2 x 2.8 mm, length 15 cm Jeweler Forceps, fine, pointed, soft spring-action, length 11 cm Tissue Forceps, 1 x 2 teeth, slender, soft spring-action, length 13 cm Forceps, serrated, soft spring-action, length 15 cm Raspatory, width 10 mm, length 16 cm Raspatory, curved, width 4 mm, length 16.5 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 2.2 mm, 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, length 16 cm Pick,45°, size 0.5 mm, length 16 cm</p> <p>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 16cm</p> <p>Pick,90°, size 1.5mm, length 16cm</p> <p>Pick,90°, size 2 mm, length 16cm</p> <p>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 0.6mm, length 16cm Anterior Footplate Elevator, tip angled upwards 90°, 0.2 mm,length16 cm</p> <p>Anterior Footplate Elevator, tip angled downwards 90°, 0.2 mm, length 16cm</p> <p>Caliper, angled shaft, diameter 0.4 mm, marker pin at 10 mm, length 16 cm</p> <p>Caliper, angled shaft, diameter 0.6 mm, marker pin at 10 mm, length16 cm</p> <p>Measuring Rod, length 16 cm, Marker pins at 3 mm, 4 mm,5 mm</p> <p>Ear Forceps, extra delicate, oval cupped jaws, 0.9 mm, working length 8cm</p> <p>Ear Forceps, extra delicate, oval cupped jaws, 0.6 mm, working length 8 cm</p> <p>Ear Forceps, round cupped jaws, diameter 2mm,working length 8 cm Ear Forceps, extra delicate, serrated, 1 x 4.5 mm, working length 8cm</p> <p>Ear Forceps, extra delicate, serrated, 0.4 x 3.5 mm, working length 8 cm</p> <p>Ear Forceps, extra delicate, smooth, 1 x 4.5 mm, working length 8cm</p> <p>Micro Scissors, extra delicate scissor blades, with thin shaft, blade length 3mm,working length 8cm Micro Scissors, extra delicate scissor blades, blade length 3mm, working length 8cm 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, workinglength7.5cm 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): 275x175x36mm Wire mash tray for cleaning, sterilization, transport and storage of Instruments, Including hole plate walls and fold away handles. External dimensions (WXDXH): 480x 250x60mm.</p>
<p>Accessories:</p> <p>Sterilization system complete consisting of standard accessories or as follows Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drapes</p>
<p>Optional(If any):</p>

Clinical Specialty	ENT
Generic Name	Myringotomy Set
Clinical Purpose	Amyringotomy, sometimes called by other names, is a surgical procedure in which a tiny incision is created in the ear drum (tympanic membrane) to relieve pressure caused by excessive buildup of fluid, or to drain pus from the middle ear
Technical Specifications	
<p>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</p> <p>Sickle Knife, double-edged, standard model, slightly curved, length 16 cm Needle.16.5 cm, light curve.</p> <p>Pick90°,16cm,0.8mm</p> <p>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,O.D.1.5 mm Suction Cannula, straight, LUER- Lock, malleable, 10 cm,O.D.2.0 mm Groumet Gun</p> <p>Instrument Rack for 5 instruments with holder for ear specula, for ventilation tube set, may be used with metal case</p> <p>Metal Case, perforated, lid detachable, size20x10x4 cm</p> <p>Tele-Otoscope with Straight Forward Telescopes 0°, diameter 3 mm, length 6 cm, auto-clavable, fiber optic light transmission incorporated, color code: green</p>	
<p>Accessories:</p> <p>Sterilization system complete consisting of standard accessories or as follows:</p> <p>Container Bottom Container LidWire Basket Silicone mat</p> <p>Wrapping Drapes</p>	
Optional(If any):	

Clinical Specialty	ENT
Generic Name	Nasal Bone Fracture Reduction Set
Clinical Purpose	Nasal bone fractures are among the most common facial bone fractures restore the patient's appearance through reduction of the nasal fracture Acute Pain in Children. Surgical Evolution in the Treatment of Mandibular
Technical Specifications	
<p>Nasal Speculum, with set rack, blade length 40 mm, length 15 cm</p> <p>Nasal Speculum, with set screw, blade length 40mm,length 15cm</p> <p>Nasal Speculum, 15 cm, with set screw, with adaption for flexible tension arm 723018, 40 mm.</p> <p>Nasal Dressing Forceps, standard size, working length11cm</p> <p>Nasal Scissors, cutting blades curved upwards, to cut the anterior part of the middle turbinate in case of narrow nose and to prevent postoperative synechia, with cleaning connector, working length 13cm</p> <p>Nasal Scissors, straight, with cleaning connector, working length 13 cm Septum Forceps, straight, working length 9 cm Septum Forceps, straight, working length 11cm</p> <p>Elevator double-ended, semi sharp and blunt, graduated, length 20cm</p>	
<p>Accessories:</p> <p>Sterilization system complete consisting of standard accessories or as follows Container</p> <p>Bottom Container Lid Wire Basket Silicone mat</p> <p>Wrapping Drapes</p>	
Optional(If any):	

Clinical Specialty	ENT
Generic Name	Nasal Endoscope
Clinical Purpose	The nasal endoscope is a medical device consisting of a thin, rigid tube with fiber optic cables for bringing in light. The endoscope is then connected to a light source and a video camera to project magnified images on a screen. These endoscopic images can be captured and recorded for documentation for each patient
Technical Specifications	
Straight Forward Telescope 0°, enlarged view, diameter 4mm, length 17.5 to 18.75cm, autoclaveable, fiber optic light transmission incorporated, color code: green	
Forward Oblique Telescope 30°, enlarged view, diameter 4mm, length 17.5 to 18.75cm, autoclaveable, fiber optic light transmission incorporated, color code: red	
Forward-Oblique Telescope 45°, enlarged view, diameter 4mm, length 17.5 to 18.75cm, autoclaveable, Fiber optic light transmission incorporated, Color code: black	
Straight-Oblique Telescope 70°, enlarged view, diameter 4 mm, length 17.5 to 18.75cm, autoclaveable, Fiber optic	
Straight Forward Telescope 0°, enlarged view, diameter 2.7 mm, length 17.5 to 18.75 cm, autoclavable, fiber optic light transmission incorporated,	
Forward-Oblique Telescope 30°, enlarged view, diameter 2.7 mm, length 17.5 to 18.75 cm autoclavable, fiber optic light transmission incorporated,	
Accessories: Sterilization and storage container system complete set for endoscopes	
Optional(If any):	

Clinical Specialty	ENT
Generic Name	NASAL SPLINT
Clinical Purpose	Nasal septal splint with integral airway. Provides septal support and allows nasal breathing post-operative through integral airway.
Technical Specifications	
Nasal Splint, aluminum, padded, with self-adhesive underside, small, size 56 x 30 mm, package of 10 Nasal Splint, 64 x 36 mm, package of 10	
External Nasal Splint, Aluminum, padded, with self-adhesive underside, large, with forehead extension, size 83 x 77mm, Package of 5	
Nasal Splint, 66 x 45 mm, package of 10	
Accessories: Sterilization Container system complete set	
Optional (If any):	

APPROVED PVMS (SEP 30, 2022)

Clinical Specialty	ENT
Generic Name	Image Guided Optical (Navigation) System
Clinical Purpose	Image-guided surgery is the general term used for any surgical procedure where the surgeon employs tracked surgical instruments in conjunction with preoperative or intra operative images in order to indirectly guide the procedure image guided surgery systems use cameras or electromagnetic fields to capture and relay the patient's anatomy and the surgeon's precise movements in relation to the patient, to computer monitors in the operating room. Image-guided surgery and CAS in ENT commonly consists of navigating preoperative image data such as CT or cone beam CT to assist with locating or avoiding anatomically important regions such as the optical nerve or the opening to the frontal sinuses. For use in middle-ear surgery there has been some application of robotic surgery due to the requirement for high- precision actions.
Technical Specifications	
<p>Navigation System Configuration: Navigational Panel Unit(Optical) Consisting of: 1xNavigationPanel 1xOpticalMouse 1xNavigation Camera 1xElectronicBox 1xDockingAdaptor 1xMobile Stand 1xDaDataCable 1xVideoCable 1xNavigationCameraCable 1xHeadbandforNavigation 1xPatientTracker 1xCaseNavigation 1xNavigationProbe 1x Mains Cord Mobile cart</p> <p>The system should have total surgical control in sterile field on a fingertip with a touch screen monitor, stylus pen or a mouse The system should have provision of the Rapid Data Transfer via CD- RW/DVD/USB/Network/PACS. The system should have at least one VGA video output enabling plug-n-play image routing to a second monitor. The system should be supplied with navigated instruments, tracker references for instruments and a patient and dedicated sterilization trays that are reusable and steam sterilizable (autoclave able) ENT Navigation Software and navigated instruments support interventions intra nasal sinuses</p>	

<p>(FESS and trans nasal approaches - endoscopic, microscopic, VITOM surgeries) and skull base (including lateral approaches)</p> <p>The system should be plug and play with user friendly system software to control setup, registration and navigation The system shall complete ENT and skull base surgery, navigation and its application package The system should enable CT/MRI/DVT data import utilizing DICOM interface The system should enable automatic image fusion of different modalities(CT and MRI)</p> <p>The software should enable the assignment of multiple Risky Structures / regions of interest in sagittal, coronal and axial views.</p> <p>The system should preferably warn the surgeon by color change and/or audible signal when approaching defined risky structures</p> <p>The navigated instruments are reusable and autoclaveable The navigated instruments are dedicated for navigation with added fixations for the optical trackers. The navigation of the instruments should not require any disposables</p> <p>The real instrument's geometry is visualized</p> <p>The system should enable visualization of both position and orientation of navigated instruments</p> <p>The navigated system should have snapshot storage function for documentation purpose</p> <p>Navigated Instruments:</p> <p>Optical Navigated Suction Tube, curved upwards, for left and right-handed use, with cut-off hole, outer diameter 3mm, length 16.5cm</p> <p>Optical Navigated Suction Tube, curved to left, for left and right-handed use, with cut-off hole, outer diameter 3 mm, length 16.5cm</p> <p>Optical Navigated Suction Tube, curved to right, for left and right-handed use, with cut-off hole, outer diameter 3 mm, length 16.5cm</p> <p>Optical Navigated Frontal Sinus Probe</p> <p>Optical Tool Tracker, for optically navigated instruments, with 3 fix-mounted glass spheres, autoclaveable, dimensions: 70 x 50 x 14mm</p> <p>Wire Tray for Navigation Probe and Patient Tracker, incl. lid, silicone mat and fixing system for cleaning, sterilization and storage for one Navigation Probe and one Patient Tracker</p> <p>External Dimensions (w x d x h): 240 x 250 x 70 mm and Wire tray for suction tube and tool Tracker.</p> <p>Optical Navigated Suction Tube, straight, for right-handed use, with cut-off hole, 9 Fr., working length 9cm, total length 16cm</p> <p>Navigated Suction Tube, curved upwards, for right-handed use, outer diameter 3mm, length 16.5cm</p> <p>Optical Navigated Suction sinus Probe for use of optical tracker.</p>
<p>Accessories:</p> <p>Sterilization system complete</p>
<p>Optional(If any):</p>

Clinical Specialty	ENT
Generic Name	Neck Dissection Set
Clinical Purpose	The neck dissection is a surgical procedure for control of neck lymph node metastasis. This can be done for clinically or radiologically evidently lymph nodes or as part of curative surgery where risk of Occult nodal metastasis is deemed sufficiently high.
Technical Specifications	
<p>Forceps, length 20 cm, light model, straight</p> <p>Dressing Forceps, curved, with ratchet, length 21 cm Forceps, length 20 cm, large curve Sound, length 16.5 cm</p> <p>Tongue Depressor, length 19 cm Elevator, double-ended, length 20 cm. Elevator, double-ended, delicate, 20 cm.</p> <p>Dissector, length 23.5 cm, 11.5 mm wide (standard size) Elevator, 19.5 cm, 9 mm wide</p> <p>Bulbous Sound, length 14.5 cm, diameter 1.5 mm Grooved Director, length 14.5 cm</p> <p>Retractor, 3x3 prongs 13 cm</p> <p>Retractor. With adjustable swivel arms, 3x3 prongs, semi-sharp, length 17 cm Nasal Speculum, 13.5 cm, standard plate, 75 mm Laryngectomy</p> <p>Scissors, double-action, length 21.5 cm</p> <p>Suction Tube, with cut-off hole and stylet, LUER, working length 11 cm, 9 Fr.</p> <p>Suction Tube, with cut-off hole and stylet, LUER, working length 11 cm, 12 Fr. Suction Tube, with cut-off hole and stylet, LUER, working length 11 cm, 15 Fr. Forceps, length 20 cm Nasal Cutting Forceps, working length 11 cm, round, size 2.</p> <p>Cup Medicine, stainless steel, 60 cc, 33 mm high, diameter 70 mm Cup Medicine, stainless steel, 100 cc, 30 mm high, diameter 80 mm</p> <p>Suction Tube, with big holes, central hole \varnothing 4.0 mm, side holes 2.0 mm, Length 29 cm, standard model</p> <p>Retractor, length 17 cm, 1 prong, sharp Retractor, length 17 cm, 2 prongs, sharp Retractor, length 21 cm, 2 prongs, sharp Retractor, length 21 cm, 2 prongs, blunt Retractor, length 21 cm, 4 prongs, sharp Retractor, length 21 cm, 4 prongs, blunt Retractor, length 21 cm, 6 prongs, sharp Retractor, length 21 cm, 6 prongs, blunt</p> <p>Retractor, length 21 cm, 30 mm x 12 mm, 4 prongs, blunt, curved backwards, for retraction of V. jugular is during neck-surgery.</p> <p>Thymus Retractor, length 20.5 cm Retractor, length 21.5 cm, size 33 mm x 14 mm</p> <p>Retractor, length 21.5 cm, size 60 mm x 20 mm, oval blade Dressing Forceps, length 14.5 cm, medium size</p> <p>Dressing Forceps, length 14.5 cm, delicate size</p> <p>Tissue Forceps, 1 x 2 teeth, length 14.5 cm, standard size Tissue Forceps, 1 x 2 teeth, length 14.5 cm, medium size Tissue Forceps, 1 x 2 teeth, length 14.5 cm, delicate size Forceps, serrated, length 20 cm</p> <p>Tissue Forceps, non-traumatic, length 16 cm.</p>	

<p>Tissue Forceps, serrated, length 20 cm, standard, 1x 2 teeth, 3.5 mm wide Bipolar Forceps, insulated, tips curved, blunt, tips 1 mm, length 16 cm Bipolar Forceps, insulated, tips curved, blunt, tips 2 mm, length 19 cm Bipolar High Frequency Cord length 300cm</p> <p>Ball Electrode, 4 mm Spatula Electrode, straight</p> <p>Handle for use with electrodes, without buttons, for use with AUTOCON 50/200/350, with integrated connecting cord length 300 cm.</p> <p>Activation of the high frequency surgery unit is performed with two-pedal foot-switch Forceps, standard size, length 19 cm, slightly curved</p> <p>HandleNo.4,</p> <p>Surgical Handle, No. 3, length 12.5 cm, for blades Blade No.10,sterile,package of 100</p> <p>BladeNo.11,sterile,package of 100</p> <p>Redon Guide Needle, angulated, with lancet tip, 10 Fr. Ligature Needle, length 20 cm, blunt, curved to right Ligature Needle, length 20cm, blunt, curved to left</p> <p>Needle Holder, tungsten carbide inserts, 13 cm. Needle Holder, tungsten carbide inserts,15 cm.</p> <p>Needle Holder, tungsten carbide inserts, slender, length 18 cm Forceps, length14.5cm</p> <p>Dressing Forceps, serrated, 12 cm. Tissue Forceps,1 x2 teeth 12cm.</p> <p>Tissue Forceps, non-traumatic, fine side grasping teeth, length 12 cm Mosquito Forceps, 12.5 cm, curved.</p> <p>Mosquito Forceps, 1 x 2 teeth, 12.5 cm, curved. Towel Forceps, length 11cm</p> <p>Dissecting Forceps, without ratchet, 14 cm, straight. Haemostatic Forceps, 1 x 2 teeth, straight, length 14 cm Haemostatic Forceps, straight, length 14 cm Haemostatic Forceps, straight, length 16cm</p> <p>Forceps, 4x5 teeth, length 15cm</p> <p>Hook Forceps, 4 x 4 teeth, length 15.5 cm Dissecting Scissors, delicate tips, curved, 15 cm.</p> <p>METZENBAUM Scissors, curved, length 18cm.</p> <p>METZENBAUM-LAHEY Scissors, curved, delicate, 15cm. METZENBAUM Scissors,curved,14cm.</p> <p>STEVENS Scissors,curved,10.5cm</p> <p>JOSEPH Scissors, 14 cm, curved.Scissors,delicate,10cm,curved</p> <p>Scissors,curved,length14.5cm,blunt/sharp</p> <p>Scissors,straight,length14.5cm,blunt/sharp</p>
<p>Accessories:</p> <p>Sterilization system complete consisting of standard accessories or as follows Container</p> <p>Bottom Container LidWire Basket Silicone mat</p> <p>Wrapping Drapes</p>
<p>Optional(If any):</p>

Clinical Specialty	ENT
Generic Name	Otoplasty Set
Clinical Purpose	Otoplasty also known as cosmetic ear surgery is a procedure to change the shape, position or size of the ears. You might choose to have otoplasty if you're bothered by how far your ears stick out from your head. You might also consider to plasty if your ear saremiss happen due to an injury or birth defect.
Technical Specifications:	
<p>Otoplasty Set</p> <p>Surgical Handle, No. 3, length 12.5 cm, for blades : Blade No.15, non-sterile, package of 100. Blade No. 11, non-sterile, package of 100. JOSEPH Scissors, 14 cm, curved. COTTLE Scissors, curved, 10.5cm.</p> <p>Scissors,curved,length14.5cm,blunt/sharp</p> <p>Tissue Forceps, delicate, 1 x 2 teeth, length 10 cm, straight Tissue Forceps,7 x 8 fineteeth,11cm. Dressing Forceps, length 14.5cm,medium size</p> <p>Tissue Forceps,1x2teeth,length 14.5cm,medium size</p> <p>STANDARD Cotton Applicator,triangular, serrated, 13 cm, Diameter: 1.1 cm COTTLE Nasal Knife, with rounded edge,14 cm</p> <p>FREER Elevator,double-ended,length20cm.</p> <p>FREER JOSEPH Elevator, double- ended, delicate, 20 cm.FREER Raspatory, curved, width 4mm, length 18cm</p> <p>Single Tenaculum, 16.5 cm, large curve. Double Hook, sharp, 15 cm, 5 mm wide. Retractor, length 17cm, 2 prongs, blunt</p> <p>Cup Medicine, stainless steel, 25 cc, 28 mm high, diameter 60mm Needles,Hypodermic,LUER-Lock, size 1,0.90mmx40mm (20G),dozen</p> <p>Needles, Hypodermic, LUER-Lock, size 12, 0.70 mm x 32 mm (22 G), dozen Tonsil-Syringe,"ULTRA- ASEPT", glass barrel interchangeable, LUER-Lock, 5cc.Spare Barrel "ULTRA-ASEPT", 5 cc.</p> <p>FERGUSON Suction Tube, with cut-off hole and stylet, LUER, working length 11 cm, 10 Fr.FERGUSON Suction Tube, with cut-off hole and stylet, LUER, working length 11 cm, 8 Fr.HALSTEAD Mosquito Forceps, 12.5cm, curved.</p> <p>Dissecting Forceps, without ratchet, 14 cm, straight. ROCHESTER-PEAN Haemostatic Forceps, straight, length 14 cm BACKHAUS Towel Forceps, length 11 cm</p> <p>Needle Holder, tungsten carbide inserts, 13cm.</p> <p>Bipolar Coagulating Forceps, insulated, tips curved, tips 0.5 mm, length 16 cm, for use with bipolar high frequency cord</p> <p>Bipolar High Frequency Cord length 300cm</p>	
<p>Accessories:</p> <p>SterilizationsystemcompleteconsistingofstandardaccessoriesorasfollowsContainerBottom Container Lid</p> <p>Wire Basket</p> <p>Silicone mat</p> <p>Wrapping Drapes</p>	
Optional (If any):	

Clinical Specialty	ENT
Generic Name	Septoplasty Set
Clinical Purpose	Septoplasty is a surgical procedure to correct a deviated septum a displacement of the bone and cartilage that divides your two nostrils. During septoplasty, your nasal septum is straightened and repositioned in the middle of your nose.
Technical Specifications	
<p>Nasal Speculum, for adults, length 13cm Nasal Speculum, blade length 55mm, length 13cm</p> <p>Nasal Speculum, standard model, blade length 55 mm, length 13.5 cm Nasal Speculum, standard model, blade length 90 mm, length 13.5 cm Nasal Speculum, standard model, blade length 75mm, length 13.5cm</p> <p>Nasal Forceps 45° upturned, size 2, working length 11 cm</p> <p>Nasal Dressing Forceps, serrated, working length 10.5cm</p> <p>Suction Tube, with cut- off hole and stylet, LUER, 9Fr.,working length 11cm Chisel, flat, graduated, straight, width 4mm,length 18.5cm</p> <p>Chisel, flat, graduated, straight, width 7 mm, length 18.5 cm. Needle Holder, tungsten carbide inserts, length 13 cm Elevator, double-ended, semi sharp and blunt, length 20cm</p> <p>Suction Tube, with cut-off hole and stylet, LUER, 9 Fr., working length 11 cm Suction Tube, with cut-off hole and stylet, LUER, 10 Fr., working length 11 cm Suction Tube, with cut- off hole and stylet, LUER, 12Fr., working length 11cm</p> <p>Suction Tube, with cut-off hole and stylet, LUER,15Fr.,working length 11cm</p>	
<p>Accessories:</p> <p>Sterilization system complete consisting of Container Bottom and Lid</p> <p>Wire Basket</p> <p>Silicone mat and Wrapping Drapes</p>	
Optional(If any):	

Clinical Specialty	ENT
Generic Name	Septum Surgery Set
Clinical Purpose	Deviated Septum Surgery. During septoplasty, a surgeon, working through the inside of the nose, makes a small incision in the septum and then removes the excess bone or cartilage required. To even out the breathing space of the nostrils
Technical Specifications	
<p>Nasal Speculum, for adults, length 13 cm Nasal Speculum, 13cm, 55mm. Nasal Speculum.13.5cm, 55 mm.</p> <p>Nasal Speculum, 13.5 cm, standard pattern, 75 mm Nasal Speculum, 13.5 cm, standard pattern, 90 mm Scissors, curved, 10.5cm.</p> <p>Scissors, delicate, 10 cm, curved Scissors, 14cm, curved. Scissors, angled, 10cm.</p> <p>Nasal Forceps, straight size 1, working length 11 cm. Nasal Forceps, size 3 working length 11 cm, size 3.</p> <p>Nasal Forceps, straight, working length 9.5cm</p> <p>Nasal Scissors, medium standard model, working length 9.5 cm Nasal Forceps, 45° upturned, working length 11cm, size 2.</p> <p>Nasal Dressing Forceps, working length 10.5cm.</p> <p>Suction Tube, with cut-off hole and stylet, LUER, working length 11cm, 9Fr.</p> <p>Bipolar Forceps, insulated, angled, pointed, length 16 cm Tongue Depressor, length 19cm</p> <p>Columella Clamp, length 11cm.</p> <p>Tissue Forceps, non-traumatic, fine side grasping teeth, length 12 cm Tissue Forceps, 7x 8 fine teeth, 11 cm.</p> <p>Dressing Forceps, delicate, 10cm</p> <p>Tissue Forceps, delicate, 1 x 2 teeth, length 10 cm, straight Forceps, length 16.5 cm Lower Lateral Forceps, with set screw, bayonet, 15cm.</p> <p>Cotton Applicator, tri- angular, serrated end, 15 cm, diameter: 1.3 mm. Nasal Knife curved, roundly tipped blade, 13.5 cm.</p> <p>Nasal Knife, with rounded edge, 14 cm</p> <p>Retractor, narrow (standard model), length 14 cm Elevator, 14.5cm, 4mm.</p> <p>Elevator, heavy, for elevating nasal fractures, 17 cm. Chisel, flat, graduated, straight, 18.5 cm, 4 mm wide. Chisel, flat, graduated, straight, 18.5 cm, 7mm wide. Mallet, length 18cm Suction Elevator with stylet, length 19.5 cm.</p> <p>Elevator, double-ended, blunt, graduated, for tunneling, 22.5 cm. Elevator, double-ended, graduated, sharp and blunt, 22.5 cm</p> <p>Needle Holder, delicate, light- weight, 17 cm. Needle Holder, tungsten carbide inserts, 13 cm.</p> <p>Scissors, curved, length 14.5 cm, blunt/sharp Towel Forceps, length 11cm</p> <p>Nasal Snare, 25 cm.</p> <p>Nasal Snare Wires, for cut and formed, length 10 cm, standard size, diameter 0.3 mm, package of 25.</p> <p>Cup Medicine, stainless steel, 100 cc, 30 mm high, diameter 80 mm Bipolar High Frequency Cord length 300cm</p>	
<p>Accessories:</p> <p>Sterilization system complete consisting of Container Bottom</p> <p>Container Lid Wire Basket Silicone mat</p> <p>Wrapping Drapes</p>	
Optional (If any):	

Clinical Specialty	ENT
Generic Name	Special Rhinoplasty Set
Clinical Purpose	Rhinoplasty is the most frequently performed cosmetic surgical procedure. The change can be made by adding or removing bone or cartilage, grafting tissue from another part of the body, or implanting synthetic material to alter the shape of the nose
Technical Specifications	
<p>Double Hook, 2 sharp points, strong curved, with octagonal handle, special matte finish, length 16.5cm, 2 mm wide</p> <p>Ala-Dilator, for preparation and cutting of cartilage, with distance markings width 5 mm x 8mm, length 9.5 cm</p> <p>Nasal Retractor, blade size 8mm x 40 mm, length 16.5cm</p> <p>Nasal Retractor, with side protector, special matte finish, length 16.5 cm</p> <p>Elevator, slightly curved, sharp, special matte finish, length 17.5cm, 4mm wide</p> <p>Scissors, angular, delicate, serrated blade, length 9.5cm.</p> <p>Suction Tube, with cut-off hole and stylet, special matte finish, 8Fr., working length 11cm, O.D. 2.5mm</p> <p>Angular Scissors, serrated blades, delicate, working length 6.5 cm. Cartilage Graft Forceps, with slit, length 15cm</p> <p>Needle Holder, tungsten carbide inserts extra delicate, 15cm.</p> <p>Osteotome. With rounded corners and finger grip stabilizer, length 16.5 cm, 12 mm wide</p> <p>Osteotome. With rounded corners and finger grip stabilizer, length 16.5 cm, 14 mm wide</p> <p>Osteotome. With rounded corners and finger grip stabilizer, length 16.5 cm, 16 mm wide</p> <p>Osteotome, flat, with enlarged distal finger grip plate, width 2 mm, length 19cm</p> <p>Nasal Rasp, tungsten carbide inserts, 20.5 cm, double-ended, blades size 3-4, coarse and medium.</p> <p>Nasal Rasp, tungsten carbide inserts, 20.5cm, double-ended, blades size 5-6, medium and fine.</p> <p>Nasal Rasp, tungsten carbide inserts, 20.5 cm, double-ended, blades size 7-8, medium and fine. Rongeur, slender, straight, 15.5 cm</p> <p>Nasal Hump Forceps, double action, curved blades, length 20cm.</p> <p>Septum Morcelizer, double action, straight, special matte finish, length 20 cm</p> <p>Grid, for preparation of cartilage and bone grafts, graduated, size 50 x 90 mm</p> <p>Honeycomb stone, 10x4 cm</p> <p>Metal Tray, to prepare crushed pieces for re implantation in the nose, with hole for towel forceps size 10 cm x 15 cm</p>	
<p>Accessories:</p> <p>Sterilization system complete consisting of Container Bottom</p> <p>Container Lid Wire Basket Silicone mat</p> <p>Wrapping</p> <p>Drapes</p>	
Optional (If any):	

Clinical Specialty	ENT
Generic Name	SMR SET
Clinical Purpose	A Sub mucus resection of the septum (SMR) is performed where there is only a small bump in the septum. This is simply cut away to leave a straighter septum. Sometimes a septoplasty/SMR is performed to allow easier access through the nose for sinus surgery
Technical Specifications	
<p>Nasal Speculum, for adults, length 13 cm Nasal Speculum, 13 cm, 55mm. Nasal Speculum, 13.5 cm, standard pattern, 90 mm Scissors, curved, 10.5cm. Nasal Forceps size 3, working length 11cm, size 3.</p> <p>Nasal Scissors, medium standard model, working length 9.5 cm Nasal Dressing Forceps, working length 10.5cm. Suction Tube, with cut-off hole and stylet, LUER, working length 11 cm, 9 Fr. Lower Lateral Forceps, with setscrew, bayonet, 15cm. Chisel, flat, graduated, straight, 18.5 cm, 4 mm wide. Mallet, length 18 cm Suction Elevator with stylet, length 19.5 cm. Needle Holder, delicate, light-weight, 17cm</p>	
<p>Accessories:</p> <p>Sterilization system complete consisting of Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drapes</p>	
Optional (If any):	

Clinical Specialty	ENT
Generic Name	Co2 Laser for ENT
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 Highdegree of precision in cutting combined with an excellent coagulation effect.
TECHNICAL SPECIFICATIONS	
<p>Consisting of:</p> <p>Mobile console with keypad/ color touch panel</p> <p>Multi user system for storage of user programs 25W or better power output</p> <p>Operation modes including continuous wave, pulse mode Single pulse upto 5s/500Hz variable Pulse repetition</p> <p>Beam delivery through free moving articulated arm with seven joints and 3600 rotation Low noise cooling system</p> <p>Hand piece 4"/5"/6" with standard set of tips Nasal Hand piece with standard set of probes</p> <p>Micromanipulator with 200 to 500 mm zoom type focusing Foot switch</p> <p>5 protective goggles Smoke evacuator</p>	
<p>Accessories:</p> <p>Sterilization system complete</p>	
Optional(If any):	

Clinical Specialty	ENT
Generic Name	Flexible Nasopharyngoscope for ENT
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	: 3.8mm or less
Working Length	: 300mm 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 and Storage system complete	
Optional (If any):	

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Clinical Specialty	ENT
Generic Name	PORTABLE FLEXIBLE NASOPHARYNGOSCOPE FOR ENT
Clinical Purpose	A diagnostic procedure that examines the nasal passage ways and pharynx with an instrument outfitted with an optical system.
Technical Specifications	
Shaft Diameter :3.8mm or less Working Length :300mm Field of View :70 Degree or Better Angulation sup/down:100 or better Depth of view :5-50 mm or better Portable Rechargeable LED Light Source with 90 min or more backup	
Accessories:	
Sterilization and storage system complete	
Optional(If any):	

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Clinical Specialty	ENT
Generic Name	ENT Unit Combined
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	
<p>ENT unit combined with patient chair and stool allows the operator to manage a complete and professional activity for examination, treatment and diagnostics.</p> <p>The unit shall have solid and mobile case with antistatic castors with brakes</p> <p>The structure coating shall be painted with SS/Antibacterial paint with a transparent gloss layer for protection against external agents.</p> <p>Drawer Module complete with instrument trays: 2 to 4 Drawers, UV lamp drawer in built</p> <p>Instrument tablet: Visualization and control of all instruments related to suction or insufflations and of the digital vacuum and pressure systems.</p> <p>Suction System: Noise less Suction system with oil or dry pump having suction capacity 30 litres /minor more Wastage collection jar 1 litter or more System with assorted kit of suction cannulas.</p> <p>Insufflation System: Insufflation with flow regulation system and Pulitzer olive included</p> <p>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.</p> <p>Larynx mirror quick heating</p> <p>Compressed air system complete with: Air syringe for spray olives 2 atomizers: 2 bottle holders for medicaments.</p> <p>Rinsing system of suction tubes Rinsing system of suction tubes shall be complete with automatic discharge outside ON/OFF switch and timing shall be settable by touch screen on the instrument tablet.</p> <p>Endoscope supports 2 to 4 (lospecify) endoscope supports: 2 long supports for flexible (clean and dirty) and 6 for rigid endoscopes (clean and dirty).</p> <p>Endoscope Warmer Timed system for simultaneous preheating of endoscope support from 37 to 38.</p> <p>Head Light: With Headband</p> <p>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</p>	

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 Microscope with articulated arm Integrated UV compartment in drawer Doctor's Stool
Optional (If any):

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Clinical Specialty	ENT
Generic Name	General Surgery Set for ENT
Clinical Purpose	ENT surgeons diagnose and treat conditions of the ears, nose, throat, head and neck, and undertake some cosmetic procedures
Technical Specifications	
<p>Description</p> <p>Foerster sponge hold.forc.,serrat.jaws backhaus towel holding forceps,110mm scalpelhdl.no.3</p> <p>Scalpelhdl.no.4</p> <p>Mayo dissect.scissors cvd.170mm metzenbaum dissect.scissors cvd.145mm metzenbaum dissect.scissors cvd.200mmop.scissors, str.,bl/sh,145mm dissecting forceps,std.pattern,145mm dissect.forceps w/o t.std.patt.200mm tissue forceps,std.patt.,1x2 t.,145mm dissect.forceps std.patt.1x2t.200mm cushing dissect.forceps str.200mm halsted mosquito forceps str.125mm crileartery forceps cvd.140mm</p> <p>Peanartery forceps str.140mm</p> <p>Kocher-ochsn artery forc.1x2t.str.160mm kocher-ochsn.artery forc.1x2t.str.200mm mikulicz peritoneum forceps cvd.205mm overholt forceps # 0 cvd215mm</p> <p>Overholt forceps # 1 cvd 209mm all is intestinal forceps 4x5 t.155mm hegar-mayo needle holder,150mm hegar-mayo needle holder 200mm</p> <p>Deschamps ndlf/rt-hndbltng-hk215mm direct or w/tongue str145mm</p> <p>Double-ended probe 1.5mm 145 mm cushing vein retractor 10x13mm 203mm senn- miller rector. Sh. 8x7/18x5.5mm farabeuf rtrctrs23x16/28x16-20x16/24x16 volkmann retr4-prgsemi-s8.5x19222mmkocher-langenbeckretr41x11mm216mm</p> <p>Kidney tray stainless steel 250mm</p> <p>laboratory dish 0.16L</p>	
<p>Accessories:</p> <p>Sterilization system complete consisting of Container Bottom</p> <p>Container Lid Wire Basket Silicone mat Wrapping Drapes</p> <p>Identification Labels</p>	
Optional(If any):	

Clinical Specialty	ENT
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	
<p>MICRO SURGICAL HIGH SPEED DRILL 40,000 to 100,000rpm</p> <p>Consisting Of:</p> <p>Control Unit</p> <p>High Speed Electronic Micro Motor 40000 rpm or better with Cable Single / double Foot Control including connecting cable Standard Irrigation set</p> <p>INTRA DRILL HANDPIECES:</p> <p>INTRA DRILL HANDPIECE STRAIGHT FOR EAR</p> <p>Drill Handpiece, straight, length 7 cm or more, maximum rotating speed 80,000 rpm or better for use with Detachable irrigation tube use with straight shaft tungsten, carbide, stainless steel and diamond burrs</p> <p>INTRA DRILL HANDPIECE ANGLED FOR EAR</p> <p>Drill Handpiece, angled, length 7 cm or more, maximum rotating speed 80,000 rpm or better for use with detachable irrigation tube use with straight shaft tungsten, carbide, stainless steel and diamond burrs</p> <p>DIAMOND CUTTING BURRS SET</p> <p>Diamond cutting burrs length 7 cm or more, set of 14 or more (Autoclavable)</p> <p>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, 7 mm</p> <p>TUNGSTEN CARBIDE BURRS SET</p> <p>Tungsten Carbide Shaft Burrs, stainless, length 7 cm or more, set of 14 or more (Autoclavable)</p> <p>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</p> <p>Cleaning Brushes Lubrication oil spray</p>	
Accessories:	
Sterilization and storage system complete	
Optional (If any):	

Clinical Specialty	ENT
Generic Name	Tonsilectomy Instruments Set
Clinical Purpose	A tonsillectomy is a surgical procedure to remove the tonsils. Tonsils are two small glands located in the back of your throat. Tonsils house white blood cells to help you fight infection, but sometimes the tonsils themselves become infected
Technical Specifications	
SCALPEL HANDLE #3 WITH MEASURE 125MM SCALPEL HANDLE #4 135MM SCALPEL HANDLE #7 ENGLISH NO.5 160MM YANKAUER SUCTION CANNULA 2.0MM 285MM MCIVOR BLADE F/TONGUE DEPR FRAME 25X55MM MCIVOR BLADE F/TONGUE DEPR FRAME 25X62MM MCIVOR BLADE F/TONGUE DEPR FRAME 25X75MM MCIVOR FRAME F/TONGUE DEPRESSOR TC METZENBAUM SCISSORS STR 180MM TC METZENBAUM SCISSORS CVD 180MM BACKHAUS TOWEL CLAMP 90MM BACKHAUS TOWEL CLAMP 110MM BACKHAUS TOWEL CLAMP 135MM FOERSTER SPONGE FCPS SMOOTH STR 245MM FOERSTER SPONGE FCPS SMOOTH CVD 245MM TC CRILE-WOOD NDL HLD RSTR SERR 145MM TC CRILE-WOOD NDL HLD RSTD SERR 185MM TC CRILE- WOOD NDL HLD RSTD SERR 200MM BARNHILL ADENOID CURETTE #1 200MM BARNHILL ADENOID CURETTE #2 200MM BARNHILL ADENOID CURETTE #3 200MM BARNHILL ADENOID CURETTE #4 200MM LOVE NERVE ROOT RETRACTOR STR 220MM ADENOTOME LA FORCE SIZE 1 ADENOTOME LA FORCE SIZE 2 ADENOTOME LA FORCE SIZE 3 WEDER TONGUE DEPRESSOR FEN SM 125MM WEDER TONGUE DEPRESSOR FEN LRG 125MM WHITE TONSIL SEIZING FORCEPS 180MM WHITE TONSIL SEIZING FORCEPS 235MM EVE TONSIL SNARE 280MM SNARE WIRE 0.5MM DIA BRUENINGS TONSIL SNARE 10 290MM FISHERTON SILK KNIFE 235MM TONSIL DISSECTOR/PILLAR RETR 6MM 215MM TONSIL DISSECTOR/PILLAR RETR 10MM 215MM KIDNEY TRAY STAINLESS STEEL 250MM KIDNEY TRAY 275MM 750ML LABORATORY DISH 1.0 L LABORATORY DISH 2.5L DOUGHTY MOUTH GAG COMPLETE SET DAVIS BOYLE MOUTH GAG COMPLETE SET DOYEN MOUTH GAG COMPLETE SET CHEEK RETRACTOR NEGUS FORCEP STRAIGHT ARTERY FORCEP TONSIL NEEDLE TEETH GUARD	
Accessories: Sterilization system complete consisting of Container Bottom Container Lid Wire Basket Silicone mat Wrapping Drapes Identification Labels	
Optional (If any):	

Clinical Specialty	ENT
Generic Name	Video Otoscope System
Clinical Purpose	Video-otoscope is a small endoscope connected to a digital camera for examining the outer ear and eardrum
Technical Specifications	
Video Otoscope Complete with USB port, integrated lighting, with same brand monitor Multiuse ear speculum of different sizes Single-use earspeculum for video otoscope, pack of 100 pieces or more	
Accessories:	
<ul style="list-style-type: none"> • Sterilization and storage system complete 	
Optional (If any):	

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Clinical Specialty	ENT
Generic Name	Storboscope
Clinical Purpose	An instrument for studying periodic motion or determining speeds of rotation by shining a bright light at intervals so that a moving or rotating object appears stationary. A lamp made to flash intermittently, especially for this purpose
Technical Specifications	
Motion Frequency: 0 to 2.5 Hz Phase Shift: 0 to 360 or better Triggeable frequency:- up to 1400 Hz or Less Light source LED/ Xenon Telescope 70 and 90 degree 18cm Foot Padel	
Accessories: <ul style="list-style-type: none"> • Sterilization and storage system complete 	
Optional(If any):	

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Clinical Specialty	ENT
Generic Name	Patient Nerve Monitor
Clinical Purpose	Patient Nerve Monitoring Systems. Intra operative NIM nerve monitoring system enable surgeons to identify, confirm, and monitor motor nerve function to help reduce the risk of nerve damage during various procedures, including ENT and General surgeries
Technical Specifications	
Facial Nerve Monitor Recurrent Laryngeal Nerve Specialize Endotracheal Tube	
Accessories:	
<ul style="list-style-type: none"> Sterilization and storage system complete 	
Optional(If any):	

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Clinical Specialty	ENT
Generic Name	Operating Microscope for ENT
Clinical Purpose	For high quality imaging and brilliant illumination with microscopes for ear, nose and throat
Technical Specifications	
<p>Floor mounted stand with counterbalanced arm and motorized balancing Microscope body with linear motorized zoom (1:6) or better</p> <p>Motorized fine focusing</p> <p>Adjustable speed for focus and zoom</p> <p>Continuously variable focal length 225 to 600 mm without changing front lens</p> <p>Binocular tilt able 0o to 180o with IPD adjustment</p> <p>Coaxial illumination Variable spot illumination Eyepieces 10X/12.5X with diotric adjustment</p> <p>Fully apochromatically corrected optics with high light transmission Dust cover Sterilization protective caps for all drive knobs</p> <p>LED/Xenon illumination with controllable intensity 180 Watt or better Waterproof foot control panel Stereo co-observation attachment with inclination with straight binocular tube Beam splitter</p> <p>HD camera attachment</p> <p>Recorder with hard drive and 30" LCD / LED screen</p>	
OPTIONAL:	

Clinical Specialty	ENT
Generic Name	ENT LED Microscope for OPD
Clinical Purpose	For detail and better examination of ear in OPD
Technical Specifications	
<p>Smooth one hand movement</p> <p>Fine adjustable ball joint system or better Focal length F=250mm or better</p> <p>Eye piece lens 10x/ 12.5x with dioptic adjustment</p> <p>Coating of eyepiece lens 4 layer anti –reflection coating</p> <p>Minimum interpupillary distance 50mm to 75 mm</p> <p>Total magnification 3.75x, 6.25x, 10x</p> <p>Effective visual field 44mm dia. (3.75x), 31mm dia (6.25x), 20mm dia (10x)</p> <p>Light source LED 3W or better</p> <p>Color temperature 5000K or better</p> <p>LED light intensity 13500lux or better</p> <p>LED life time 20,000 hours or better</p> <p>Power source AC 220V, 50 Hz single phase</p> <p>With standard accessories</p>	
ACCESSORIES:	
<p>Optional(If Any)</p> <p>CCD Camera Attachment with beam splitter</p>	

Clinical Specialty	ENT
Generic Name	Flexible Nasopharyngoscope for ENT with Channel (To Take Biopsy)
Clinical Purpose	The flexible nasopharyngoscope for ENT with working channel helps the surgeon in suctioning out the nasal secretion as well as to take biopsy sample from upper airway
Technical Specifications	
Shaft Diameter:	3.8 mm or less
Working Channel inner Diameter:	2.1 mm or less
Working Length:	300 mm or more
Angle of View:	70 Degree or Better
Angulations up/down:	100 or better
Direction of view:	0 Degree
Depth of view	5- 50 mm or better
Biopsy Forceps Grasping Forceps	Cleaning Brush
Fiber Optic Light Cable	
Accessories:	
Sterilization and storage system complete	
Optional(If Any)	

Clinical Specialty	ENT
Generic Name	ENT HEAD LIGHT WITH LED LIGHT SOURCE
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	
Accessories:	
Sterilization and storage system complete	
Optional(If Any)	

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Clinical Specialty	ENT
Generic Name	HEAD LIGHT WITH RECHARGEABLE BATTERY
Clinical Purpose	Head Light used during inspection and surgery of Ear Nose and Throat
Technical Specifications	
Power of light	5W to 10W
Working time	4-6 hours
Light life	50000 hours or better
Illumination	100000 (one lac) Lux or better
Led color temperature	5000 K or better
Working length	40 cm or better
Light spot size	Adjustable
Battery charger USB Connecting cable	
Light weight Rechargeable battery box	
Accessories:	
Sterilization and storage system complete	
Optional(If Any)	

Clinical Specialty	ENT
Generic Name	Rhinomanometry Diagnostic
Clinical Purpose	For objective evaluation of nasal obstruction
Technical Specifications	
<p>System should be PC- module with USB 2.0 interface</p> <p>System requirements should be Core-i5 5th Generation, USB 2.0 Port, Windows 10 or above (32/64 BA)</p> <p>Method should be anterior self-breathing</p> <p>Airflow should be 0 - 900 ml /s in- and expiration Pressure difference should be 0-50 daPa</p> <p>Function control should be two measuring-bars in the display Averaging should be max. 5 flow-curves</p> <p>Pressure calibration should be automatic before start, manual Visualization should be diagram and numeric values</p> <p>Automatic calculation of should be pressure in daPa flow in ml /sec incl. total-flow Percentage, resistance-coefficients, Point 2-5 at 75, 150 and 300 daPa</p> <p>Power supply should be 100-240 V, 50/60 Hz</p> <p>Application should be Proof of allergies after provocation, Diagnostics at handicapped nose-breathing, Function control after nose operation, Control after dispensation of medicine</p> <p>Accessories should be 12 nose-plugs (olives), 2 flow-probes, 2 sets of hoses, foot pedal, probe holder, USB cable, power supply, installations-CD, manual</p>	
<p>Accessories:</p> <p>Should be 12 nose-plugs (olives), 2 flow-probes, 2 sets of hoses, foot pedal, probe holder, USB cable, power supply, installations-CD, manual</p>	
<p>Optional (If any):</p> <p>Face-half mask</p>	

**SPECIALIZED HEALTH CARE AND
MEDICAL EDUCATION DEPARTMENT**

GOVERNMENT OF THE PUNJAB



Health Department

**PRODUCT VOCABULARY MEDICAL STORE
(PVMS) OF UROLOGY EQUIPMENT**

Volume - II, 2021

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APPROVED PVMS

Clinical Specialty	Urology
Generic Name	ADULT BASIC UROLOGY SET
Clinical Purpose	<p>Urology also known as genitourinary surgery, which is the branch of medicine that focuses on surgical and medical diseases of the male, female urinary tract system and female reproductive organs.</p> <p>The organs under the domain of urology include kidneys, adrenal glands, ureters, urinary bladder, urethra, and the male reproductive organs testes, epididymis, vas deferens, seminal vesicles, prostate and penis</p>
TECHNICAL SPECIFICATIONS	
<p>Cystoscope With Accessories (For Adults) Telescope 30° Degree, 4mm, Autoclavable length 30cm Cystoscope-Urethroscope Sheath 19 to 25 Fr, with Obdurate Cystoscope-Urethroscope Sheath 17 to 20 Fr, with Obdurate Telescope Bridge with 1 Lockable instrument channels Grasping Forceps Compatible Double action jaws, Flexible Length 30 to 40 cm</p> <p>Resectoscope With Accessories (For Adults) Telescope 25°- 30° Degree, 4mm, Autoclavable length 30cm Working element active / passive. Resectoscope sheath, including connecting tubes for in and outflow 26Fr, Rotatable inner tube with ceramic insulation Outer Sheath 26 FR Inner Sheath 24 FR Standard Obturator Visual Obturator Unipolar High Frequency cord, with 4mm plug, Length 300cm Glass syringe 100ml to 150ml Cutting Loop Urethrotome (For Adults) Telescope 0° - 12° Degree, 4mm, Autoclavable length 30cm Working element active/ passive. Urethrotome Sheath, 21-22Fr, with channel for Fusiform Boogies Obturator, for Urethrotome sheath, 21-22Fr Supplementary Sheath, half round to insert a balloon catheter to slip on Urethrotome sheath Set of 4-5 Cold knife Stone Punch (For Adults) Stone working element Sheath for working element Obturator for Sheath Ellick evacuator Camera as per end user choice defined separately in PVMS Urology</p>	
<p>Accessories Nil</p>	
<p>Optional (If Any) Nil</p>	

Clinical Specialty	Pediatric Urology
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 Genito-urinary tract in children.
TECHNICAL SPECIFICATIONS	
CYSTOSCOPE SET FOR NEONATES 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 Telescope 0°/30°/70° Degree (1.2mm, 1.9mm, 2.7mm) Cystoscope Sheath (9.0Fr - 14Fr) Adopter 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 Telescope 0° 30° Degree (1.9 mm) Resectoscope Sheath 8-9 Fr Instrument port Working Element Cutting Loop Hook electrode Coagulating electrode RESECTOSCOPE FOR INFANTS & CHILDREN Telescope 0° 30° Degree (1.9-2.7 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
Camera and Tower as per end user choice defined separately in PVMS Urology
Accessories: Nil
Optional (if any): Operating (Compact) cysto-urethroscope 5° – 7° Degree (4.5/6.5 Fr) with straight working channel Injection Needle 3 Fr Foreign Body optical Forceps 14 Fr Optical Forceps (rigid) 14 Fr Optical Biopsy forceps 14 Fr

Clinical Specialty	Pediatric Urology
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 Genito-urinary tract in children.
TECHNICAL SPECIFICATIONS	
OPTICAL URETHROTOME PAEDS 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	
CYSTOSCOPE & RESECTOSCOPE FOR ADOLESCENT Telescope 0° 30° Degree (2.7 mm) Cystoscope sheath 14-15 Fr Resectoscope Sheath 14-15 Fr 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 Camera and Tower as per end user choice defined separately in PVMS Urology	
Accessories: Nil	
Optional (if any): Nil	

Clinical Specialty	Pediatric Urology
Generic Name	URS PEDIATRIC SEMI RIGID
Clinical Purpose	URS is endoscopy of ureter and pelvis that is used to break the stones.
TECHNICAL SPECIFICATIONS	
<p>URS 4.5-7.3 Fr, 5⁰ – 6⁰, Length 25-57cm, working channel 3-4 Fr or better Silicone automatic valve, ø 3.9 mm, 5 pieces / package</p> <p>Rubber cap for instrument channel</p> <p>Flexible cleaning brush for instrument channel Grasping Forceps (Compatible with sets) Biopsy Forceps (Compatible with sets)</p> <p>Insert Aid</p> <p>Camera and Tower as per end user choice defined separately in PVMS Urology</p>	
Accessories:	
Nil	
Optional (if any):	
Nil	

Clinical Specialty	Pediatric Urology
Generic Name	PEDIATRIC MINI PCNL SET
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	
<p>Consist of telescope 7-12 degree or better eye piece</p> <p>Operating Sheath Size 7.5 to 12 Fr or better</p> <p>Instrument channel 6.5 to 7.5 fr for instrument and irrigation for mini Nephroscope</p> <p>Continuous irrigation Nephroscope Sheaths 11-21 Fr or better</p> <p>Minimum 3 sizes operating sheath with Dilators compatible with the Nephroscope and all accessories stone grasping forceps,</p> <p>2 / 3 prong stone grasper</p> <p>Grasping forceps with alligator Jaw</p> <p>Compatible suction irrigation pump</p> <p>Camera as per end user choice defined separately in PVMS Urology</p>	
Accessories:	
Nil	
Optional (if any):	
Nil	

Clinical Specialty	Pediatric Urology
Generic Name	PEDIATRIC MICRO PCNL SET
Clinical Purpose	This is further miniaturization of Mini PCNL and it is done always with LASER technology (stone dusting).
TECHNICAL SPECIFICATIONS	
Semi rigid optic/Telescope modular PCNL 10,000 pixel / 120° Optic shifter Micro PCNL Sheath 7.8 Fr or less Pump for grasping stone Sterilization Container Compatible suction irrigation pump (All accessories must be compatible with sheath size of the manufacturer) Nephroscope Catheter – Needle Disposable (set of 6) <u>Required Parameter:-</u> - Outer diameter: 4.6 Fr - Working channel: 3.6 Fr - Working length: 152mm Fiber Nephroscope. <u>Required Parameter:-</u> - Working length: 850mm - Working channel: 0.8mm - Field of view: > 80 degree - Direction of view: 0 - Resolution: 10000 pixel - Sterilization Methods: Ethylene Oxide Gas & Low Temp Plasma	
Accessories:	
Nil	
Optional (if any):	
Nil	

Clinical Specialty	Urology
Generic Name	URS SEMI RIGID SET
Clinical Purpose	URS is endoscopy of ureter and pelvis that is used to break the stones.
TECHNICAL SPECIFICATIONS	
<p>Uretero-roscope, Autoclavable, SemiRigid Tip size 6-9Fr, Angle: 5-12 degree Working Length: 43cm Instrument Channel with lateral offset eye piece or Equivalent Silicone automatic valve, ø 3.9 mm, 5 pieces / package Rubber cap for instrument channel Flexible cleaning brush for instrument channel Grasping Forceps (Compatible with sets) Biopsy Forceps (Compatible with sets) 2-3 prong forceps (Compatible with Set) Sterilization Tray compatible with sets Camera as per end user choice defined separately in PVMS Urology</p>	
Accessories: <ul style="list-style-type: none"> Stone Basket 	
Optional (if any): Nil	

Clinical Specialty	Urology
Generic Name	VIDEO FLEXIBLE URS ADULT
Clinical Purpose	Endoscopy means looking inside and typically refers to looking inside the body for medical reasons using an endoscope, an instrument used to examine the interior of a hollow organ or cavity of the body. Unlike most other medical imaging techniques, endoscopes are inserted directly into the organ.
TECHNICAL SPECIFICATIONS	
Flexible Video URS Set with Chip on tip Comprising of: Cleaning brush (pack of 10 pcs) Adapter Leakage tester Pressure equalization valve / clamping element Pack of 20 with container TECHNICAL DATA Distal tip: cylindrical, atraumatic, Sheath diameter: 8.5 to 9.9 Fr or better Number of working channels: 2 Channel or 1 Channel with two port bridge. Angulations: 270° or better Upward/Downward, Viewing angle: 80° or more Working length: 60 – 70 cm Camera as per end user choice defined separately in PVMS Urology	
Accessories: Ureteric access sheath different size (Compatible)	
Optional (If Any): Nil	

Clinical Specialty	Urology
Generic Name	FIBEROSCOPE FLEXIBLE URS
Clinical Purpose	Endoscopy means looking inside and typically refers to looking inside the body for medical reasons using an endoscope, an instrument used to examine the interior of a hollow organ or cavity of the body. Unlike most other medical imaging techniques, endoscopes are inserted directly into the organ.
TECHNICAL SPECIFICATIONS	
Uretero-Fiberscope Deflection of distal tip view 270° / -270° Direction of 0° Angle of view 85° or better working channel inner 3.6Fr Sheath Size 7.5Fr – 8.5Fr or better working length 70 - 67cm Approx. Carrying Case Pressure compensation cap / ETO cap Leakage tester, Bulb and manometer cleaning brush, flexible for working channel Diameter 1.2-1.8mm, Double action jaw (Grasper), flexible Biopsy forceps Compatible, Double action jaw, flexible Stone basket, Sterile, Disposable, 2.5Fr Coagulation electrode, 3Fr, Unipolar Guide wire, 3Fr, with ball end, sterile, package of 10 Sealing for instrument ports Package of 10 (Single Use) Cleaning adaptor for instrument ports Camera as per end user choice defined separately in PVMS Urology	
Accessories: Nil	
Optional (If Any): Nil	

Clinical Specialty	Urology
Generic Name	VIDEO CYSTOSCOPE URETHROSCOPE
Clinical Purpose	Cystoscopy is endoscopy of the urinary bladder via the urethra. It is carried out with a Cystoscope.
TECHNICAL SPECIFICATIONS	
Video Cysto-Urethroscope Sensor steerable Specification: Working channel inner Diameter 6-6.5Fr Direction of view 0° Deflection: UP: 210 Deg, Down: 140 Deg Angle of view 120° Sheath size 16Fr Working length 37cm-40 Cm Carrying case Grasping forceps Biopsy forceps, Compatible Pressure compensation cap Leakage tester Cleaning brush Adaptor Coagulation electrode, unipolar, 4Fr., length 73cm Unipolar high frequency cord, with 4mm plug, length 300cm Sealing for instrument ports and package of 10, single use recommended cleaning brush for instrument ports Trolley imported Plastic container for flexible endoscopes, suitable for gas and hydrogen peroxide sterilization Camera as per end user choice defined separately in PVMS Urology	
Accessories:	
Nil	
Optional (If Any):	
Nil	

Clinical Specialty	Urology
Generic Name	CYSTO-URETHRO-FIBERSCOPE
Clinical Purpose	Cystoscopy is endoscopy of the urinary bladder via the urethra. It is carried out with a Cystoscope.
TECHNICAL SPECIFICATIONS	
Instrument channel 4 – 7 Fr or Above Direction of view: 0° Angle of view 100 to 110° or Better Working length 37cm – 45 Cm Approx. Outer Diameter: 14Fr to 16Fr or above Deflection: UP: 210 Deg, Down: 120 Deg or better Carrying case Grasping Forceps, Compatible Biopsy forceps, Compatible Pressure compensation Cap Leakage tester cleaning brush Stone basket, 5Fr. Coagulation Electrode, Unipolar, 4Fr. Sealing for instrument ports package of 10, recommended cleaning adaptor for instrument ports Camera as per end user choice defined separately in PVMS Urology	
Accessories:	
Nil	
Optional (If Any):	
Nil	

Clinical Specialty	Urology
Generic Name	MOBILE VIDEO CYSTOSCOPE URETHEROSCOPE
Clinical Purpose	Cystoscopy is endoscopy of the urinary bladder via the urethra. It is carried out with a Cystoscope. Mobile cystoscope is needed for easily move from one theater to another.
TECHNICAL SPECIFICATIONS	
Working channel inner	Diameter 6-6.5Fr
Direction of view	0°
Deflection:	UP: 210°, Down: 120°
Angle of view	120°
Sheath size	14-16.5Fr or above
Working length	37cm-40 Cm
Carrying case	
Grasping forceps	
Biopsy forceps, Compatible Pressure compensation cap Leakage tester	
Cleaning brush Endoscope / Light guide Adaptor	
Coagulation electrode, unipolar, 4Fr., length 73cm	
Unipolar high frequency cord, with 4mm plug, length 300cm	
Sealing for instrument ports and package of 10, Cleaning brush for instrument ports	
Plastic container for flexible endoscopes, suitable for gas and hydrogen peroxide sterilization	
Compatible 7" or better Monitor	
Should have availability of Built-in / External Recording and Still image	
Built-in Light Source LED miniature type	
Accessories:	
Nil	
Optional (If Any):	
Nil	

Clinical Specialty	Urology
Generic Name	BIPOLAR RESECTOSCOPE WITH ENUCLEATION
Clinical Purpose	Bipolar resection of Prostate is beneficial for patients with cardiac problems. The organs under the domain of urology include the kidneys, adrenal glands, ureters, urinary bladder, urethra, and the male reproductive organs (testes, epididymis, vas deferens, seminal vesicles, prostate, and penis).
TECHNICAL SPECIFICATIONS	
Straight forward oblique telescope 120 - 300, enlarged view, Ø4mm, Autoclavable at 134°C, Incorporated fiber optic light transmission Compatible adaptors Working element set including Working element active/passive Cutting loop, Bipolar coagulation electrode Bipolar High frequency cord for electro surgical unit high end. Length 300cm or more, for use with bipolar resectoscope Resectoscope sheath, including connecting tubes for in-and outflow, 24/26Fr. Oblique beak, rotatable inner tube with ceramic insulation Visual Obturator, for use with sheaths 24/26Fr. Cutting loop, bipolar, 24/26Fr., for use with telescope	
Bipolar Diathermy High Frequency 430 KHZ \pm 20% Maximum high Frequency power 320W or Better Output Modes & Power 8 Hemostatic Modes Must have presets modes for all specialty Selection of loops must indicate by diathermy unit Software upgradable True bipolar system (Current must be go back from loops) PureCut: 300W BlendCut: 200W PulseCut Slow: 150W PulseCut fast: 150W SoftCoag: 120W ForcedCoag: 120W SprayCoag: 120W BipolarCut: 100W SalineCut: 100 to 200w BiSoftCoag: 120W AutoCoag: 120W HardCoag: 120W RFCoag: 220W	
Accessories: Nil	
Optional (If Any): Nil	

Clinical Specialty	Urology
Generic Name	PNEUMATIC / ELECTRO KINETIC / ULTRASONIC INTRACORPOREAL LITHOTRIPSY SYSTEM
Clinical Purpose	It is used for fragmentation of urinary stones
TECHNICAL SPECIFICATIONS	
<p>Pneumatic Intracorporeal Lithotripsy System User Mode Set as a single shot or continuous shot Output Energy 0-10 bar adjustable continuous or better Average Pressure 4 to 5 bars Working Air Pressure 0-8 bar compressed medical air Frequency of use Max. 15 Hz or better Electrical foot pedal Power supply cable Compressed air supply tube Set of connectors for exhaust Spare fuses Pneumatic Hand piece kit Standard Probe of all sizes Ø 0.8 mm , length 640 mm or equivalent Ø 1.0 mm , length 640 mm or equivalent Ø 1.2 mm , length 640 mm or equivalent Ø 1.5 mm , length 640 mm or equivalent Ø 2.0 mm , length 450 mm or equivalent Probe covers for each probe Sterilization Methods ETO or autoclave Original Trolley Medical Compressor Optional</p> <p style="text-align: center;">OR</p> <p>Electro kinetic Intracorporeal Lithotripsy System Highest security for tissue with short stroke Precise working through low-vibration hand piece Single and continuous pulses controlled by footswitch Handle with Integrated rod Autoclavable: self-contained unit handle/rod Low-vibration: secure and sensitive handling possible Handles with 3 different integrated rods 3 intensities, microprocessor controlled 250, 500 and 950 mJ selectable Centered micro spark plasmas to keep distances to the tissue and facilitate targeting Endoscope protection through rounded edges at the tip of the probe No breaking problem compared to laser fiber Electrical foot pedal Power supply cable</p>	

Electro kinetic Hand piece kit
 Standard Probe of 5 different sizes
 Highly flexible probes but keep their position
 Precisely worked probe tip for reproduceable shock waves
 Original Trolley

OR

Ultrasonic Intracorporeal Lithotripsy System

A Powerful Solution with its unique microcontroller-based algorithm
 sophisticated design that transmits more energy to the probe
 The system can also fragment and aspirate stones simultaneously
 Plug-and-play system that saves time
 Self-calibrate within a few seconds before beginning a procedure
 Variety of semi-flexible and rigid probes
 Single-piece design creates a larger suction channel
 Connector prevents probes from bending during a procedure
 Dual-Function Footswitch to fragment
 hard and soft stones using side-by-side
 Standard Probe of 5 different sizes
 Cleaning rod
 Power cord
 Original Trolley

Accessories:

Nil

Optional (if any):

Nil

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Clinical Specialty	Urology
Generic Name	INTRACORPOREAL LITHOTRIPTER (COMBINE UNIT OF TWO ENERGIES I.E., PNEUMATIC, ULTRASONIC)
Clinical Purpose	It is used for fragmentation of urinary stones; the combine unit gives more power
TECHNICAL SPECIFICATIONS	
<p>Consisting Of: Dual foot pedal, Compressed air connection, Pneumatic hand piece, ultrasound hand pieces stone catcher and a selection of a Pneumatic and Ultrasound, Probes</p> <p>Technical specification of Pneumatic Lithotripter</p> <p>Pneumatic + Ultrasound</p> <p>1 x Main control unit including: 1 x holder for stone fragment catcher 1 x Electric foot pedal: 1 x Spare tube for the pneumatic hand piece without connector 1 x spare fuses 1 x stone catcher Autoclavable, reusable: 1 x Ultrasound hand piece set: 1 x Pneumatic hand piece set including: 20 x pneumatic probes: (5 each or End user to specify) 5 x Probe, 2.0 mm, length 425 mm: 5 x Probe, 1.0 mm, length 605 mm: 5 x Probe, 0.8 mm, length 605 mm: 5 x Pneumatic probe 1.0 mm, length 570 mm: 20 x Ultrasound probes, Ø 3.3 x 403 mm: 1 x Vacuum/Suction set incl.: 1 x Suction/vacuum System body: 1 x Suction set for Suction/vacuum System (silicone tubing with 2 connecting pieces): 1 x Suction/vacuum System tube set including: 1 x Suction tube for Suction/vacuum System, Ø 4.0 mm, length 353 mm (to be combined with pneumatic probe): 1 x Suction tube for Suction/vacuum System, Ø 3.5 mm, length 380 mm: 1 x Length adapted pneumatic probe, Ø 1.6 mm, length 453 mm 1 x Suction tube for Suction/vacuum System, Ø 1.6 mm, length 595 mm: 1 x Length adapted pneumatic probe, Ø 0.8 mm, length 668 mm. 1 x roller clamp (set of 2) for adjustment of suction flow in connection. 1 x Compressed air tube 3.0 m for the compressor: 1 x main cord Europe for power supply: 1x Intra corporeal lithotripter pump 1 x Medical Air Compressor 1 x Imported Cart 1 x Double reusable suction jar set of 2 jars with equal capacity Shock Pulse Handpiece Double Paddle Footswitch Nose Cone Cleaning Stylet Small & Large Probe Wrench</p> <p>Generator Specifications: Voltage: 90–264 VAC Frequency: 50/60 Hz Electro-medical: Class I, Type BF Frequency: 19,500 Hz - 21,500</p>	

Transducer with Nose Cone

Diameter: 2 in (4.8 cm)

Length: 7.7 in (19.6 cm)

Weight: 0.99 lbs (0.45 kg)

Cable Length: 10 ft (3 m) Validated Lifetime: 100 Reuses

Integrated probes of both ultrasonic + high frequency bursts of mechanical wave energies to delivered simultaneously from a single probe with suction control

Lithotripsy Probes Set Reusable: 3 different sizes

Accessories:

Nil

Optional (if any):

Nil

Note:

The variation in specifications according to the type of source quoted by the bidders will be acceptable as per respective manufacturer standard specifications.

Clinical Specialty	Urology
Generic Name	PCNL SET (ADULT)
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	
Percutaneous Nephroscope Set for Adult PCNL Set Broad View Telescope with Parallel eye piece, 0/6/12/20/25/30 Deg. With compatible Instrument channel and instruments Sealing cap Sheath 20FR to 27 FR. Or better, automatic locking mechanism distal tip straight, with swiveling irrigation connector Obturator Hollow Telescope dilator 9-27 Fr. Consisting of: 1 hollow guide rod 6 Fr. And telescope Dilator 30 Fr. Compatible Stone grasping forceps, and Two / Three-pronged stone grasper Compatible suction irrigation pump Camera as per end user choice defined separately in PVMS Urology	
Accessories: PCNL needle Set of Teflon dilator	
Optional (If Any): Nil	

Clinical Specialty	Urology
Generic Name	MINI PCNL
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 Operating Sheath 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 / 3 prong stone grasper grasping forceps with alligator Jaw Compatible suction irrigation pump Camera as per end user choice defined separately in PVMS Urology	
Accessories Nil	
Optional (If Any) Nil	

Clinical Specialty	Urology
Generic Name	MICRO PCNL
Clinical Purpose	This is further miniaturization of Mini PCNL.
TECHNICAL SPECIFICATIONS	
Micro PCNL SET Semi rigid optic/Telescope modular PCNL 10,000 pixel / 120° Optic shifter Micro PCNL Sheath 7.8 Fr or less Pump for grasping stone Sterilization Container Compatible suction irrigation pump Camera as per end user choice defined separately in PVMS Urology	
Accessories: <ul style="list-style-type: none"> • Standard sets of reusable instruments. 	
Optional (If Any): Nil	

Clinical Specialty	Urology
Generic Name	HOLMIUM: YAG MEDICAL LASER 30 - 35 WATT.
Clinical Purpose	Used for stone and strictures.
TECHNICAL SPECIFICATIONS	
<ul style="list-style-type: none"> • Tower/ Desktop type • Laser source Ho: YAG Wave lengths 2.1micron • Energy per pulse 3 or better joules. • Frequency/Repetition rate 5-25 hertz or better • Aiming beam Green 500-550nm(adjustable),3R. • User Interface: Touch screen or better. • Fiber Detection: Without RFID (open System) • Electrical requirements. 110-230 VAC, single phase; 50/60 Hz • Cooling system: Air-cooled/ Integrated cooling (Water to heat exchanger) • Activation: Footswitch 	
Accessories: <ul style="list-style-type: none"> • Laser fiber stripper and cutter. Qty-10 each • Footswitch • Laser Safety Glasses Qty-5 • Online ups with the backup of up to 10-15min. • Over 15 times reusable laser fiber, length 3 m, optical core 200-272 μm, 365 - 400μm, 550-800 μm. QTY – 5 of each type. 	
Optional (if any): Nil	

Clinical Specialty	Urology
Generic Name	HOLMIUM: YAG MEDICAL LASER 50 - 90 WATT
Clinical Purpose	Holmium is well absorbed in water, highly effective in the fragmentation of calculi and ablation of hard tissue, it also provides an excellent hemostasis in soft tissue surgery.
TECHNICAL SPECIFICATIONS	
<p>Average Power: 50 watt to 90watt (depends upon quoted power)</p> <p>Tower type</p> <p>Laser source Ho: YAG Wave lengths 2.1micron</p> <p>Energy per pulse up to 4.5 joules or better.</p> <p>Frequency/Repetition rate 5-30 hertz or better</p> <p>Aiming beam Green (adjustable) ,500-550nm, 3R, Continuous or blinking mode.</p> <p>Display 7 inch or better</p> <p>User Interface: Touch screen.</p> <p>Fiber Detection: Without RFID (open System)</p> <p>Electrical requirements. 110-230 VAC, single phase/ 3 Phase; 50/60 Hz</p> <p>Cooling System: Integrated cooling (Self-contained water to air heat exchanger)</p> <p>Activation: Footswitch</p>	
<p><u>ACCESSORIES:</u></p> <ul style="list-style-type: none"> • Laser fiber striper and cutter Qty-10 each • Laser Safety Glasses Qty-3 • Online ups with the backup of up to 10 min on full load • Footswitch • Over 15 times reusable laser fiber, length 3 m, optical core 200-272 µm, 365 - 400µm, 550-800 µm. QTY – 5 of each type. • Protective Case/Cover for Laser Machine 	
<p><u>OPTIONAL (IF ANY):</u></p> <p>Nil</p>	

Clinical Specialty	Urology
Generic Name	HOLMIUM: YAG MEDICAL LASER 100 - 130 WATT.
Clinical Purpose	Holmium is well absorbed in water, highly effective in the fragmentation of calculi and ablation of hard tissue, it also provides an excellent hemostasis in soft tissue surgery.
TECHNICAL SPECIFICATIONS:	
Tower type Average Power: 100 watt to 130watt (depends upon quoted power) Laser source: Ho: YAG Wave lengths 2.1micron Energy per pulse: 2- 4.5 joules or better. Frequency/Repetition rate: up to 60 hertz or better Aiming beam: Green diode 500-550nm, 3R, Continuous or blinking mode. Display: 8 inch or better User Interface: Touch screen or tap button with lcd . Fiber Detection: Without RFID (open System) Electrical requirements: 110-230 VAC, single phase or 3 phase ; 50/60 Hz Cooling System: Integrated cooling, (Self-contained water to air heat exchanger) Activation: Footswitch	
ACCESSORIES:	
<ul style="list-style-type: none"> • Laser fiber stripper and cutter Qty-10 each • Laser Safety Glasses Qty-3 • Online ups with the backup of up to 10 min on full load • Footswitch • Over 15 times reusable laser fiber, length 3 m, optical core 200-272 µm, 365 - 400µm, 550-800 µm. QTY – 5 of each type. • Protective Case/Cover for Laser Machine 	
OPTIONAL (IF ANY):	
<ul style="list-style-type: none"> • Morcellator (as per PVMS specifications) 	

Clinical Specialty	Urology
Generic Name	HOLMIUM: YAG MEDICAL LASER 140 WATT AND ABOVE.
Clinical Purpose	Holmium is well absorbed in water, highly effective in the fragmentation of calculi and ablation of hard tissue, it also provides an excellent hemostasis in soft tissue surgery.
TECHNICAL SPECIFICATIONS	
Tower type Average Power: 140watt and onwards (depends upon quoted power) Laser source: Ho: YAG Wave lengths 2.1micron Energy per pulse: 2- 5 joules or better. Frequency/Repetition rate: up to 100 hertz or better Aiming beam: Green diode 500-550nm, 3R, Continuous or blinking mode. Display: 8-inch LCD or better User Interface: Touch screen. Electrical requirements: 110-230 VAC, single phase or 3 phase ; 50/60 Hz Cooling System: Integrated cooling, (Self-contained water to air heat exchanger) Activation : Footswitch	
<u>ACCESSORIES:</u> <ul style="list-style-type: none"> • Laser fiber striper and cutter Qty-10 each • Laser Safety Glasses Qty-3 • Online ups with the backup of upto 10 min on full load • Footswitch • Over 15 times reusable laser fiber, length 3 m, optical core 200-272 µm, 365 - 400µm, 550-800 µm. QTY – 5 of each type. • Protective Case/Cover for Laser Machine 	
<u>OPTIONAL (IF ANY):</u> <ul style="list-style-type: none"> • Morcellator (as per PVMS specifications) 	

Clinical Specialty	Urology
Generic Name	DIODE LASER 150- OR ABOVE
Clinical Purpose	Used for vaporization of prostate, Palliative, curative treatment of malignant and Benign tumors, especially of benign prostate Enlargement Surgical tissue preparations such as resection, Extirpation, ablation and coagulation
TECHNICAL SPECIFICATIONS	
Wavelength: 980nm Peak energy at fiber tip: 150 W or above Peak energy at fiber tip pulsed: 20 W or better. Pulse interval: 250 μ s – 5s or better Aiming beam: 632 nm adjustable in 3 intensity levels. Warning Signal: Optical Acoustical: Volume Adjustable or other Dose mode: variable by time, applied energy or pulses Emission Mode: Continuous (CW) Pulse (PM) single (SM), Quasi Continuous (QCW). Fiber Detection: Without RFID (open System) Memory Function: Programmable hot memory keys for storage of treatment parameters User Interface: Color Touch Screen Laser cooling system: Air Cooled/ water cooled	
Accessories: <ul style="list-style-type: none"> • Laser fiber stripper and cutter Qty-10 each • Laser Safety Glasses Qty-3 • Over 10-time Reusable fiber with ball, flat, twister tip (sterile) 10 Pieces each • Foot pedal • Online ups with 10 min Back up 	
<u>Optional (if any):</u> Nil	

Clinical Specialty	UROLOGY
Generic Name	ELECTRONIC OPERATING TABLE FOR UROLOGY
Clinical Purpose	Operating Tables used to conduct the different kind of surgical interventions of patients, the dedicated tables provide all the positions required by the surgeon.
TECHNICAL SPECIFICATIONS	
<p>Table top (Radiolucent) with antistatic mattress, 5-6 sections and equipped with X-ray cassette holder. Sturdy table for minimum patient weight of 450 Kg or better in normal position. Table must be compatible to be connected with C-ARM and fully radiolucent</p> <p>TABLE TOP IS ARRANGED AS:</p> <ul style="list-style-type: none"> • Head plate • Back plate • Seat plate • Two separate let plates • Base of the table stainless steel/ABS cover, 4 swivel castors • Sliding table top up to 300mm or better <p>MOVEMENT (Remote Controlled):</p> <ul style="list-style-type: none"> • Up and down movement height range: <u>700-1000 mm</u> • Trendelenburg/Reverse Trendelenburg -30° / 30° • Lateral tilt 20° / - 20° or better • Back plate: up <u>70° – 90° / Down 40° – 50°</u> • Leg plate: <u>up 18° / Down 90°</u> • Kidney bridge position • Operating Voltage: 220V, 50Hz with battery backup • Electric / Manual override in case of electric supply failure (<i>Procuring agency to specify</i>) <p>Note: In case of battery backup, firm will be responsible for replacement of batteries free of cost for 05 years</p> <p>STANDARD ACCESSORIES:</p> <ul style="list-style-type: none"> • Arm rest with clamp • Fixation strap • Anesthesia screen • Adjustable bottle holder rod • Shoulder support • U Shape head rest for general surgery • Flex, Reflex • Knee crutches with pads • Liquid basin • Gel Pad • Accessories trolley <p>Any other accessory to be defined by the end-user</p>	

Clinical Specialty	Urology
Generic Name	URODYNAMIC SYSTEM
Clinical Purpose	Urodynamic testing or Urodynamic is a study that assesses how the bladder and urethra are performing their job of storing and releasing urine.
TECHNICAL SPECIFICATIONS	
Wired / Wireless Video Urodynamic System should be able to perform following Cystometry Uroflowmetry Pressure Flow Studies Urethral Pressure Profile Video Urodynamic EMG	
SYSTEM CONTENT	
Main Module with 3 each Pressure Channel or more	
Wired / Wireless USB Module	
Wired / Wireless Uroflow Transducer	
Wired / Wireless Peristaltic Pump	
Wired / Wireless EMG	
Wired / Wireless Remote Controller	
Standard Software CD	
Urine Beaker	05
Funnel	02
Starter Kit Disposable	
(i) Pump Tubing	10
(ii) Measuring Tubing	10
(iii) EMG Electrode	10
(iv) Disposable Pressure Transducer	10
(v) Cystometry Double Lumen Catheter	30
(vi) Rectal Double Lumen Catheter	30
Basic Urology Table for Investigation	
Wired / Wireless UPP Puller	
Video Urodynamic	
Urination Chair	
<u>ACCESSORIES:</u>	
<ul style="list-style-type: none"> Laser Jet Color Printer Computer with monitor Core i7, Ram 8 GB, Hard Drive 1 TB Accessories with EMG 	
<u>OPTIONAL (IF ANY):</u>	
<ul style="list-style-type: none"> DICOM 	

Clinical Specialty	Urology
Generic Name	EXTRACORPOREAL SHOCKWAVE LITHOTRIPTER INTEGRATED TYPE
Clinical Purpose	Extracorporeal shockwave lithotripsy (ESWL) is a non-invasive treatment of kidney stones and biliary calculi (stones in the gallbladder or in the liver) using an acoustic pulse. It is also reported to be used for salivary stones and pancreatic stones
TECHNICAL SPECIFICATIONS	
Shockwave Lithotripter will be a complete dedicated integrated 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 SYSTEM:	
Type Shockwave generator:	Electromagnetic
No. of Shockwave System:	One
Triggering Method:	Auto & Manual
Selection of Energy	Variable
Energy Density minimum	0.4 mJ/mm ² or better
Energy Density Maximum	2.5mj/mm ² or more
Penetration depth of waves:	Min. 170mm or more
Focal Pressure:	73 Mpa or better
Rate of Shockwaves:	Variable up to 120 / minute or more
Water system:	Closed loop, integrated (fixed)
Control:	Both through main console and remote via touch screen monitor
IMAGING / LOCALIZATION	
Modes:	X-Ray and Ultrasound
Localization system	Inline /freeline localization/Outline
Automatic Stone positioning	
a) X-Rays Image Intensifier / FPD	
Type:	Integrated isocentric C-arm
X-ray Generator:	High Frequency inverter type
Output power generator	15KW or more
Size of I.I / FPD:	23cm / 21x21cm
Pickup Tube	CCD /FPD
Continuous Fluoroscopy	12.5MA or more
Pulsed Fluoroscope	up to 100MA or better
Digital Radiography KV	40 – 120KV
Digital Radiography MA	100MA or more
Automatic KV and MA control for optimal image quality.	
X-ray tube focal Spot	Dual 0.3 / 0.6 mm Anode
Heat Storage capacity	300KHU or more
Memory:	LIH
Monitor:	43cm or more
b) Ultrasound	
Type:	Trolley Mounted
Transducer:	Multi frequency, Convex 3.5MHz (I.O to specify)

Resolution	256 gray levels
Monitor Size	30 cm or more
Depth	24cm
DIANOSTIIC X-RAY: The X-ray system will be used for fluoroscopy. The radiation protection measures / accessories must be provided with the system. LCD Medical Grade (Dual) 46 cm or more X-Ray, Ultrasound and stone phantoms for calibration	
PROCEDURE TABLE: - Type: Integrated special motorized table Height: Adjustable Movements: Four-way movements Patients positioning: Automatic Table top: Radio translucent Complete with relevant accessories. Lead Aprons (Size and Qty. I.O to Specify) Suitable for Litho & Endo urological and diagnostic procedure. Tilttable, Complete with leg holders and douche tray.	
OPERATING CONSOLE: Control: Control of all functions must be available at the operating console & on table. 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 Communication Software: DICOM-3 Computable UPS must provide with the supplied machine	
POWER REQUIREMENT: - Voltage: Three phase / one 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: Nil	
Optional (if any): Nil	
Note: The variation in specifications according to the type of source quoted by the bidders will be acceptable as per respective manufacturer standard specifications.	

Clinical Specialty	Urology
Generic Name	EXTRACORPOREAL SHOCKWAVE LITHOTRIPTER MODULAR TYPE/MOBILE UNIT
Clinical Purpose	Extracorporeal shock wave lithotripsy is a non-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	Electromagnetic
No. of Shockwave System:	One
Triggering Method:	Auto & Manual
Selection of Energy	Variable
Energy Density	Min 0.88mJ/mm 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 (<i>Procuring agency to specify</i>)
IMAGING / LOCALIZATION	
Modes:	X-Ray and Ultrasound
Localization system	Inline /free line localization/Outline
a) X-Rays Image Intensifier	
Type:	Integrated isocentric C-arm
X-ray Generator:	High Frequency inverter type Output
power generator	2 KW or more
Size of I.I:	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)	
Heat Storage capacity	40KHU or more
Memory:	LIH
Monitor:	43cm or more
b) Ultrasound	
Type:	Trolley Mounted
Transducer:	Multi frequency, Convex 3.5Mhz (I.O to specify)
Resolution	256 gray levels
Monitor Size:	30 cm/ more
Depth	24cm

DIANOSTIIC 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
Weight Bearing Capacity	Min 180 Kg
Movements:	Four way movements
Patients positing	Automatic / Manual
Table top:	Radio translucent

Complete with relevant accessories. Lead Aprons (I.O to specify size and quantity)

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:

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:

Nil

Optional (if any):

Nil

Note:

The variation in specifications according to the type of source quoted by the bidders will be acceptable as per respective manufacturer standard specifications.

APPROVED PLMS

Clinical Specialty	Urology
Generic Name	GENERAL /PEDIATRIC SURGERY SET
Clinical Purpose	Pediatric urology concerns urologic disorders in children Such disorders include cryptorchidism (undescended testes), congenital abnormalities of the Genitourinary tract, enuresis, underdeveloped genitalia (due to delayed growth or delayed puberty, often an endocrinological problem), and vesicoureteral reflux.
TECHNICAL SPECIFICATIONS	
<p>NOTE:</p> <ul style="list-style-type: none"> • Minor variation in sizes shall not be made reason for rejection • Procuring agency to select the items and quantity of instruments / retractors from the list mentioned below <p>CONSISTING OF:</p> <ul style="list-style-type: none"> • BABCOCK TISSUE FORCEPS 155MM BABCOCK TISSUE FORCEPS 155MM BABCOCK TISSUE FORCEPS 175MM BABCOCK TISSUE FORCEPS 215MM BENSON PYLORUS SPREADER 155MM PAYR INTESTINAL CLAMP 180MM. PAYR INTESTINAL CLAMP 200MM PAYR INTESTINAL CLAMP 275MM • PROBE DOUB.ENDED D:3MM W/HOLE 190MM DBL-ENDED PROBE MALL 3.5MM EYES 250MM POOL SUCTION CANNULA CHARR.21 • POOL SUCTION CANNULA CHARR.30 BABY-ROUX • RETRACTOR • BOOK WALTER RETRACTOR OMNITRACK THOMSON RETRACTOR • MERCEDES BELFOUR • RETRACTOR • LONE STAR AYUVARD • WEIGHTED VAGINAL SPECULUM • RING RETRACTORS • RETRACTOR 135MM • LANGENBECK RETRACTOR SOLID 30 X 10MM 229MM LANGENBECK RETRACTOR SOLID 40 X 10MM 230MM LANGENBECK RETRACTOR SOLID 43 X 13MM 229MM DEAVER RETRACTOR FIG 00 22MM 215MM DEAVER RETRACTOR FIG 1 25MM 300MM • RIBBON RETRACTOR MALL 330X30MM RIBBON RETRACTOR MALL 330X40MM RIBBON RETRACTOR MALL 330X50MM BECKMANN-ADSON RETR 4X4 SHARP 310MM ADSON LAMIN RETR 5X4 SEMI-S 325MM BALFOUR-BABY ABDOMINAL RETRACTOR • BALFOUR ABDOMINAL RETRACTOR 155X200MM MICRO FORCEPS DE'BAKEY 1MM STR.185MM MICRO FORCEPS DE'BAKEY 1MM STR.210MM MICRO FORCEPS DE'BAKEY 1MM STR.185MM MICRO-ADSON FORCEPS SERR 120MM • HAIGHT RIB SPREADER 30X30MM-BLDS • RIB SPREADER FINOCHIETTO-HAIGHT ALUMI. FINOCHIETTO RIB SPRDR ALUM 31X45 BLDS FRAZIER SUCTLUER-HUB9FR102MMWRK-LGTH FRAZIER • SUCTLUER-HUB15FR5/102MM LGTH DESMARRES RETRACTOR 12X16MM 140MM DESMARRES RETRACTOR 13X18MM 140MM • STERILIZATION CONTAINER SYSTEM COMPLETE SET Consisting of: • BOTTOM FOR 1/1 CONTAINER HEIGHT:120MM PRIMELINE 1/1 LID RED 	

- SILICONE PAD 470X230X30MM
- 1/1 SIZE PERF BASKET 540X253X76MM
- PEADS CYSTOURETHROSCOPE 8FR, 6, 1 STEP, 8TO11FR AUTOCLAVABLE WITH CONTAINER AND ACCESSORIES FORCEPS
- HOOK ELECTRODE BALL ELECTRODE KNIFE
- INJECTION NEEDLE

VASCULAR BASIC SET

- FOERSTER SPONGE FCPS SERR STR 245MM BACKHAUS TOWEL CLAMP 110MM KIDNEY TRAY STAINLESS STEEL 250MM LABORATORY DISH 0.16 L
- SCALPEL HANDLE #3 125MM SCALPEL HANDLE #4 135MM
- METZENBAUM SCISSORS CVD 145MM METZENBAUM SCISSORS CVD 200MM MAYO SCISSORS CVD 170MM SURGICAL SCISSORSSTR S/B145MM
- POTTS-DE MARTEL SCISSORS 25DGS/S185MM POTTS-DE MARTEL SCISSORS45DGS/S185MM POTTS-DE MARTEL SCISSORS60DGS/S185MM TOENNIS-ADSON SCISS X-DEL CVD 175MM DE'BAKEY ATR.FCPS 2.0MM STR150MM DE'BAKEY ATR.FCPS 2.0MM STR 200MM STANDARD TISSUE FORCEPS 1X2 145MM STANDARD TISSUE FORCEPS 1X2T 200MM CUSHING DEL STR FORCEPS 200MM
- HALSTED-MOSQUITO FORCEPS DELSTR125MM HALSTED-MOSQUITO FORCEPS DEL CVD125MM CRILE FORCEPS STR 140MM
- CRILE FORCEPS CVD 140MM ROCHESTER-PEANFORCEPSSTR200MM
- ROCHESTER-PEAN FORCEPS CVD 200MM KOCHER-OCHSNER FORCEPS STR 1X2 160MM KOCHER-OCHSNER FORCEPS STR 1X2 200MM DE'BAKEY ATR.BULLDOGCLAMP CVD.20/78MM DE'BAKEY ATR.BULLDOGCLAMP STR.30/90MM DE'BAKEY ATR.BULLDOGCLAMP CVD.30/86MM DE'BAKEY ATR.BULLDOGCLAMP CVD.45/97MM DE'BAKEY-BAINBRIDGE ATR.FCPS STR180MM DE'BAKEY-BAINBRIDGE ATR.FCPS CVD 180MM DE'BAKEY ATR.MOSQUITO FCPS STR165MM DE'BAKEY ATR.MOSQUITO FCPS CVD165MM PEAN-DE'BAKEY ATR.FRCPS STR155MM
- PEAN-DE'BAKEY ATR.FRCPCVD 155.MM
- DE'BAKEY ATR.COARCTAT. CLMPSTR65/225MM DE'BAKEY PERIPHERAL CLAMP 60DG180MM DE'BAKEY BULLDOG CLAMPRING-HDL45DEG125MM DE'BAKEY COARCTAT FCPSANG15DEG50/165MM BABY-SATINSKY CLAMP150MM
- SATINSKY CLAMP265MM
- SATINSKY CLAMP HVY-CVD SM265MM DERRAPEDIATRICFORCEPS26MM175MM
- COOLEY PEDIATRIC CLAMP 60DG 30/160MM
- BABY-MIXTER FORCEPS HEAVY-CVD180MM OVERHOLT FORCEPS # 1 CVD209MM
- BABY-MIXTER FORCEPS CVD 140MM ALLIS ATR.FORCEPS 6.2MM 155MM DIRECTOR W/TONGUE STR 145MM DOUBLE-ENDED PROBE 1.5MM 145MM DAVIS VASCULAR SPATULA 245MM SCHMIDT DISSECTOR BLUNT 235MM DE'BAKEY DILATOR MALL 1.0MM 190MM DE'BAKEY DILATOR MALL 1.5MM 190MM DE'BAKEY DILATOR MALL 2.0MM 190MM DE'BAKEY DILATOR MALL 2.5MM 190MM DE'BAKEY DILATOR MALL 3.0MM 190MM DE'BAKEY DILATOR MALL 3.5MM 190MM DE'BAKEY DILATOR MALL 4.0MM 190MM DE'BAKEY DILATOR MALL 4.5MM 190MM DE'BAKEY DILATOR MALL 5.0MM 190MM PELKMANN FORCEPS CVD SERR261MM
- CUSHING VEIN RETRACTOR 10X13MM 203MM
- SENN-MILLER RECTOR.SH.8X7/18X5.5MM FARABEU RTRCTRS23X16/28X16-20X16/24X16 VOLKMANN RETR4-PRGSEMI-S8.5X19222MM KOCHER-LANGENBECK RETR 41X11MM216MM CRILE VESSEL HOOK BLUNT 90DEG 6/200MM ADSON-BABY RETRACTOR 3X4 BLUNT140MM

ADSON LAMIN RETR 5X4 SEMI-S 325MM SCHMID IRRIGATING CANNULA MALLEAB.LL. SCHMID IRRIGATING CANNULA MALLEAB.LL. HALSEY NEEDLE HOLDER DEL SERR130MM CRILE-WOOD NDHLDRFINE-SERR 150MM MAYO-HEGAR NEEDLE HOLDER 200MM

- TCRYDERNEEDLEHOLDERX-DELSERR155MM LAHEY FORCEPS LONG-SERR 224MM
- LAHEY DISS.A. LIGAT.FORCEPS 230MM UNIVERSAL TROCAR WITH 4 TIPS
- THORACIC RETRACTOR (MERCEDES-RETRACTOR) CONSISTING OF: RETRACTOR ONLY
- PAIR OF BLADES SMALL 42X65MM PAIR OF BLADES LARGE 75X75MM
- STERILIZATION CONTAINER SYSTEM COMPLETE SET Consisting of: BOTTOM FOR 1/1 CONTAINER HEIGHT:120MM
- PRIMELINE 1/1 LID RED SILICONE PAD 470X230X30MM
- 1/1 SIZE PERF BASKET 540X253X76MM

KIDNEY INSTRUMENTS SET

- FOERSTER SPONGE HOLD.FORC., SERRAT.JAWS
- MAIER SPONGE FORCEPS W/RATCH.CVD.262MM BACKHAUS TOWEL HOLDING FORCEPS,110MM SCALPEL HDL.NO.3
- SCALPEL HANDLE NO.3L SCALPEL HDL.NO.4
- OP. SCISSORS, STR., BL/SH,145MM MAYO SCISSORS STR 170MM
- MAYO DISSECT.SCISSORS CVD.170MM MAYO-HARRINGTON SCISSORS STR 230MM
- MAYO HARRINGTON DISSECT.SCISSORS CVD.230 METZENBAUM SCISSORS STR 145MM METZENBAUM DISSECT.SCISSORS CVD.145MM METZENBAUM SCISSORS STR 200MM METZENBAUM DISSECT.SCISSORS CVD.200MM NELSON-METZENBAUM SCISSORS STR 250MM NELSON-METZENBAUM SCISSORS CVD 253MM POTTS-SMITH VESSEL SCISSORS 60DG 175MM POTTS-DEMARTEL SCISSORS 60DG 220MM JOSEPH SCISSORS STR S/S 150MM
- JOSEPH SCISSORS CVD S/S 150MM CUSHING DISSECT.FORCEPS STR.200MM DISSECT.FORCEPS W/O T.STD.PATT.200MM TISSUE FORCEPS, STD.PATT.,1X2 T.,145MM WAUGH DISSECT.FORCEPS 1X2T.200MM WAUGH DISSECT.FORCEPS 1X2T.250MM ALLIS INTESTINAL FORCEPS DELIC.PATT.
- ALLIS ATRAUMATIC FORCEPS 8,4MM 255MM ATRAUMATIC OVUM FORCEPS STR SM250MM HALSTED-MOSQUITO FORCEPS DELSTR125MM HALSTED MOSQUITO FORCEPS, CURVED,125MM CRILE FORCEPS CVD 140MM
- CRILE ARTERY FORCEPS STR.140MM ROCHESTER-PEAN FORCEPS STR185MM
- ROCHESTER-PEAN ARTERY FORCEPS CVD.185MM HALSTED-MOSQUITO FORCEPS DELSTR200MM HALSTEAD MOSQ.ARTERY FORCEPS CVD.200MM CRAFOORD ARTERY FORCEPS CVD.245MM KOCHER-OCHSNER
- FORCEPS STR 1X2240MM KOCHER-OCHSNER FORCEPS CVD 1X2240.MM MIKULICZ PERITONEUM FORCEPS CVD.205MM BABY-MIXTER FORCEPS HEAVY-CVD180MM OVERHOLT-GEISS SUTURE FCPS#3CVD276MM MIXTER SUTURE FORCEPS RT-ANG 230MM
- CRILE-WOOD NEEDLE HOLDER 150MM HEGAR-MAYO NEEDLE HOLDER 200MM JAMESON NEEDLE HOLDER DEL SERR 230MM
- MASSON NEEDLE HOLDER 265MM
- WANGENSTEEN NEEDLE HOLDER 275MM DESCHAMPS NDLF/RT-HNDBLTNG-HK215MM DIRECTOR W/TONGUE STR 145MM
- DOUBLE-ENDED PROBE 1.5MM 200MM VOLKMANN RETR4-PRGSEMI-S8.5X19222MM KOCHER RETRACTOR 60X25MM
- RICHARDSON RETRACTOR OPEN 37X37MM 242MM KELLY RETRACTOR 150 X 39MM
- DOYEN RETRACTOR 90X45MM 242MM DOYEN RETRACTOR 60X60MM 242MM DOYEN

<p>RETRACTOR 90X60MM 242MM DOYEN RETRACTOR 120X60MM 242MM</p> <ul style="list-style-type: none"> • FRITSCH RETRACTOR #4 OPEN 46X75MM 242MM DEEVER RETRACTOR FIG 2 25MM 318MM HARTGNT LNG SPATULA FLX 123X64MM 299MM CUSHING VESS. HOOK BLNT 90DG 6MM/279MM CUSHING VEIN RETRACTOR 10X13MM 203MM GLOVER ATRAUMATIC CLAMP CVD 215MM GLOVER ATRAUMATIC CLAMP CVD 220MM DEBAKEY TANGENTIAL CLMP 4.58MM-WIDE 270MM DEBAKEY TANGENTIAL CLMP 5 75MM-W 280MM GLOVER MINI-BULLDOG 22/52MM • DEBAKEY ATRAUMATA AORTA CRSS-CLMP 240MM DEBAKEY CLAMP 90DG 55/85MM 210MM DEBAKEY CLAMP 60DG 40/93MM 240MM • GUYON ATR. KIDNEY PED. CLAMP 230MM GUYON ATRAUMATIC KIDNEY CLAMP 230MM SCHMIDT DISSECTOR BLUNT 235MM VASCULAR SPATULA 230MM • KIDNEY TRAY STAINLESS STEEL 250MM LABORATORY DISH 0.16 L • LAHEY/SWEET GALL DUCT FORCEPS 200MM LAHEY FORCEPS LONG-SERR 224MM • LAHEY DISS. A. LIGAT. FORCEPS 230MM UNIVERSAL TROCAR WITH 4 TIPS • THORACIC RETRACTOR (MERCEDES-RETRACTOR) CONSISTING OF: RETRACTOR ONLY • PAIR OF BLADES SMALL 42X65MM PAIR OF BLADES LARGE 75X75MM DOYEN INTESTINAL CLAMP STR 165MM DOYEN INTESTINAL CLAMP CVD 165MM • HARTMANN INTESTINAL CLAMP STR 200MM HARTMANN INTESTINAL CLAMP CVD 200MM BIPOLAR CABLE 3.5MM LENGTH • DUROGRIP NDL HLDR SERR 0.2/180MM DUROGRIP CASTROV. NDL HLDR SERR 0.2/215MM • BONE CURETTE DBEND 210MM • ST MARK PELVIS CLAMP 35X45/124X60MM 292MM ST MARK PELVIS CLAMP 60X45/174X60MM 333MM ST MARK PELVIS CLAMP 60X45/178X60MM 333MM INSTRUMENTS TROLLEY (IMPORTED) • SURGICAL DRUM BASIN STAND SMALL BASIN STAND MEDIUM BASIN STAND LARGE • STERILIZATION CONTAINER SYSTEM COMPLETE SET Consisting of: BOTTOM FOR 1/1 CONTAINER HEIGHT: 120MM • PRIMELINE 1/1 LID RED SILICONE PAD 470X230X30MM • 1/1 SIZE PERF BASKET 540X253X76MM
<p>Accessories:</p> <p>Nil</p>
<p>Optional (if any):</p> <p>Nil</p>

Clinical Specialty	Urology
Generic Name	FLEXIBLE NEPHROSCOPE SYSTEM & ACCESSORIES
Clinical Purpose	The flexible nephroscope can be used as the primary endoscope to manage renal calculi percutaneously. A small nephrostomy tract ("miniperc," 20F–24F) may be used. In addition, the flexible nephroscope obviates the need for special equipment necessary for rigid nephroscopy in the morbidly obese patient.
TECHNICAL SPECIFICATIONS	
Flexible Nephroscope System, consisting of Nephroscope 15-17 FR, length 37cm or above, Angle up 210 degree and down 120 degree Dilatation Set (Metallic) Grasping forceps (Quantity 5) Biopsy forceps (Quantity 5) Three /Two Prong grasping forceps Alligator type forceps (Quantity 5) Suction connector and tube Maintenance kit, carrying case Sterilizing case	
Accessories: Nil	
Optional (if any): Nil	

Clinical Specialty	Urology
Generic Name	ENDO-UROLOGY FULL HD SINGLE CHIP CAMERA SYSTEM
Clinical Purpose	HD Video system is used with Endourology procedures in adult and peads including Cystoscopy (Rigid/Flexible), Resectoscope (TUR/TURs), URS (Rigid/Flexible), PCNL (standard /Mini/Micro)
TECHNICAL SPECIFICATIONS	
<u>Camera Single Chip Full HD</u>	
Technology:	Full HD Single Chip 1 CCD / 1 CMOS (<i>procuring agency to specify</i>)
Resolution:	1920 x 1080 or better
Scan Mode & input:	Progressive
Aspect Ratio:	16:9 or better
Camera Head buttons:	2 or more programmable buttons
Zooming:	Digital or Optical Zoom
Focal Length:	13 / 14 / 15 / 16 mm or better
Features:	White balance facility, 5 or more user registration facility
Power Requirements:	220 V, 50 Hz
<u>Video Processor Full HD</u>	
Video Processor:	Full HD Camera Video processor
Input:	Full HD Camera Head connection
Resolution:	1920 x 1080 progressive
Aspect Ratio:	16:9 or better
Video Output connection:	DVI / HDMI / SDI / HD
Power Requirements:	220 V, 50 Hz
<u>Light Source</u>	
Lamp type:	LED Light Source (<i>the replacement of lamps shall be the responsibility of the supplying firm during warranty period</i>)
Lamp life:	20,000 or more
Control:	Knob or Buttons
Light guide cable:	Diameter 3.5mm or more, length minimum 200 to 300 cm.

Power Requirements: 220 V, 50 Hz

Display

Monitor: 30" Full HD Medical Grade LCD / LED or better

Resolution 1920 x 1080 progressive

Aspect Ratio 16:9 or better

Video Input DVI / HDMI / SDI

Video Output DVI / HDMI / SDI

Power Requirements: 220 V, 50 Hz

Recording System HD

Built-in or External Video HD recording system (*Procuring agency to specify*)

In case of External Video Recording system, specifications are as under:

System type: Built-in processor system or External Device (OEM Recommended)

Dual function: Should be able to capture still images and video recording at same time

Still Images: FULL HD (JPEG) (1920x1080)

Video Capturing: Full HD (MPEG4) (1920x1080P)

Input Ports: DVI / HDMI / SDI

Data Storage: External USB type or internal hard drive (500 GB) (*procuring agency to specify*)

Power Requirements: 220 V, 50 Hz

Special Features Requirement

Automatic white balance.

Powerful video signal processing.

Picture in picture mode control via camera head button / monitor. (*Procuring agency to specify*)

Control of peripheral i.e recording system parameter via camera head buttons.

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.

ACCESSORIES:

- Full HD Urological scopes (*procuring agency to specify*)
- Equipment Cart or Trolley (Same Manufacturer / Compatible imported / Local made) (*procuring agency to specify*)

OPTIONAL:

Pendulum Single Chip Full HD Camera Head for End-Urology (optional)

Technology:	Full HD Single Chip 1 CCD / 1 C-MOS (procuring agency to specify)
Resolution:	1920 x 1080 or better
Scan Mode & input:	Progressive
Aspect Ratio:	16:9 or better
Camera Head buttons:	2 or more programmable buttons
Zooming:	Digital or Optical Zoom
Focal Length:	13 / 14 / 15 / 16 mm or better
Power Requirements:	220 V, 50 Hz

Clinical Specialty	Urology
Generic Name	ENDO-UROLOGY FULL HD THREE CHIP CAMERA SYSTEM
Clinical Purpose	HD Video system is used with Endourology procedures in adult and peads including Cystoscopy (Rigid/Flexible), Resectoscope (TUR/TURs), URS (Rigid/Flexible), PCNL (standard /Mini/Micro)
TECHNICAL SPECIFICATIONS	
<u>Camera Three Chip Full HD</u>	
Technology:	Full HD Three Chip 3 CCD / 3 C-MOS (<i>procuring agency to specify</i>)
Resolution:	1920 x 1080 or better
Scan Mode & input:	Progressive
Aspect Ratio:	16:9 or better
Camera Head buttons:	2 or more programmable buttons
Zooming:	Digital or Optical Zoom
Focal Length:	13 / 14 / 15 / 16 mm or better
Features:	White balance facility, 5 or more user registration facility
Power Requirements:	220 V, 50 Hz
<u>Video Processor Full HD</u>	
Video Processor:	Full HD Camera Video processor for 3-chip (3CCD / 3C-MOS) Camera
Input:	Full HD 3-chip (3CCD / 3C-MOS) Camera Head connection
Resolution:	1920 x 1080 progressive
Aspect Ratio:	16:9 or better
Video Output connection:	DVI / HDMI / SDI / HD
Power Requirements:	220 V, 50 Hz
<u>Light Source</u>	
Lamp type:	LED Light Source (<i>the replacement of lamps shall be the responsibility of the supplying firm during warranty period</i>)
Lamp life:	20,000 or more
Control:	Knob or Buttons

Light guide cable: diameter 3.5mm or more, length minimum 200 to 300 cm.
Power Requirements: 220 V, 50 Hz

Display

Monitor: 30" Full HD Medical Grade LCD / LED or better (for 3-chip camera)
Resolution 1920 x 1080 progressive
Aspect Ratio 16:9 or better
Video Input DVI / HDMI / SDI
Video Output DVI / HDMI / SDI
Power Requirements: 220 V, 50 Hz

Recording System HD

Built-in (50 GB or better) or External Video HD recording system (*Procuring agency to specify*)

In case of External Video Recording system, specifications are as under:

System type: Built-in processor system or External Device (OEM Recommended)
Dual function: Should be able to capture still images and video recording at same time
Still Images: FULL HD (JPEG) (1920x1080)
Video Capturing: Full HD (MPEG4) (1920x1080P)
Input Ports: DVI / HDMI / SDI
Data Storage: External USB type or internal hard drive (500 GB) (*procuring agency to specify*)
Power Requirements: 220 V, 50 Hz

Special Features Requirement

Automatic white balance.
Powerful video signal processing.
Image enhancement modes.
Picture in picture mode control via camera head button/monitor.
Control of peripheral i.e light source, recording system parameter via camera head buttons.

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.	
20 individual presets or better.	
20 patient data backup or better.	
<u>ACCESSORIES:</u>	
<ul style="list-style-type: none"> • Full HD 3-chip (3CCD / 3C-MOS) Urological scopes (<i>procuring agency to specify</i>) • Equipment Cart or Trolley (Same Manufacturer / Compatible imported / Local made) (<i>procuring agency to specify</i>) 	
<u>OPTIONAL:</u>	
<u>Pendulum Three Chip Full HD Camera Head for End-Urology (optional)</u>	
Technology:	Full HD Single Chip 3 CCD / 3 CMOS (procuring agency to specify)
Resolution:	1920 x 1080 or better
Scan Mode & input:	Progressive
Aspect Ratio:	16:9 or better
Camera Head buttons:	2 or more programmable buttons
Zooming:	Digital or Optical Zoom
Focal Length:	13 / 14 / 15 / 16 mm or better
Power Requirements:	220 V, 50 Hz

Clinical Specialty	Urology
Generic Name	ENDO-UROLOGY 4K CAMERA SYSTEM
Clinical Purpose	4K Video system is used with Endourology procedures in adult and peads including Cystoscopy (Rigid/Flexible), Resectoscope (TUR/TURs), URS (Rigid/Flexible), PCNL (standard /Mini/Micro)
TECHNICAL SPECIFICATIONS	
<u>Camera Head 4K UHD</u>	
Technology:	4k UHD or better
Resolution:	3840 x 2160 or better
Scan Mode & input:	Progressive
Aspect Ratio:	16:9 or better
Camera Head buttons:	2 or more programmable buttons
Zooming:	Digital or Optical Zoom
Focal Length:	13 / 14 / 15 / 16 mm or better
Features:	White balance facility, 5 or more user registration facility
Power Requirements:	220 V, 50 Hz
<u>Video Processor 4K UHD</u>	
Video Processor:	4 K UHD Camera Video processor
Input:	4K UHD Camera Head connection
Resolution:	3840 x 2160 progressive
Video Output connection:	DP / 3G-SDI / 12G-SDI / HDMI / HD-SDI
Aspect Ratio:	16:9 or better
Power Requirements:	220 V, 50 Hz
<u>Light Source</u>	
Lamp type:	LED / Xenon Light Source (<i>procuring agency to specify</i>) (<i>the replacement of lamps shall be the responsibility of the supplying firm during warranty period</i>)
Lamp life:	20,000 / 500 hours or more (<i>procuring agency to specify</i>)
Control:	Knob or Buttons
Light guide cable:	diameter 3.5mm or more, length minimum 200 to 300 cm.

Power Requirements: 220 V, 50 Hz

Display

Monitor: 30" 4K UHD Medical Grade or better

Resolution 3840 x 2160 progressive

Aspect Ratio 16:9 or better

Video Input DP / 3G-SDI / 12G-SDI / HDMI

Video Output DP / 3G-SDI / 12G-SDI / HDMI

Power Requirements: 220 V, 50 Hz

Recording System HD

Built-in or External Video HD recording system

In case of External Video Recording system, specifications are as under:

System type: Built-in processor system or External Device (OEM Recommended)

Dual function: Should be able to capture still images and video recording at same time

Still Images: FULL HD (JPEG) (1920x1080)

Video Capturing: Full HD (MPEG4) (1920x1080P)

Input Ports: DVI / HDMI / SDI

Data Storage: External USB type or hard drive (1 TB)

Power Requirements: 220 V, 50 Hz

Special Features Requirement

Automatic white balance.

Powerful video signal processing.

Image enhancement modes.

Picture in picture mode control via camera head button/monitor.

Control of peripheral i.e. light source, recording system parameter via camera head buttons.

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.

20 individual presets or better.

20 patient data backup or better.	
<u>ACCESSORIES:</u>	
<ul style="list-style-type: none"> • Compatible to UHD Urological scopes (<i>procuring agency to specify</i>) • Equipment Cart or Trolley (Same Manufacturer / Compatible imported / Local made) (<i>procuring agency to specify</i>) 	
<u>OPTIONAL:</u>	
<u>Display</u>	
Monitor:	55" 4k UHD Medical Grade Monitor LCD / LED or better
Resolution	3840 x 2160 progressive
Aspect Ratio	16:9 or better
Video Input	DP / 3G-SDI / 12G-SDI / HDMI
Video Output	DP / 3G-SDI / 12G-SDI / HDMI
Power Requirements:	220 V, 50 Hz

Clinical Specialty	Urology
Generic Name	MOTORIZED BI-PLANER MOBILE C -ARM SYSTEM
Clinical Purpose	Motorized Bi-Plane mobile C-Arm surgical imaging technology provides live views in two planes during Urological procedures to ensure reduction in dose, procedure time and infection risk, while increasing accuracy without needing the repositioning of equipment or patient to acquire images in longitudinal and lateral position simultaneously.
TECHNICAL SPECIFICATIONS	
<p>Fully motorized mobile Bi-Plain C-Arm for Radiography and Fluoroscopy</p> <p>High frequency generator with 4 KW or more output</p> <p>40 to 120KV with continuous Fluoroscopy facility at 7mA or more</p> <p>Automatic shut off after 10sec continuous expose</p> <p>C-Arm should have ± 45 degrees motorized rotation in both orbital and axial directions</p> <p>Continuous Fluoroscopy mode: 0.2 - 7mA or more</p> <p>Pulse Fluoroscopy Mode: 0.2 - 28mA or more</p> <p>Built-in hard disk for minimum 100,000 image storage capacity</p> <p>Two rotating Anode X-Ray Tubes</p> <p>Dual Focal spots 0.3 mm and 0.6 mm.</p> <p>Anode heat storage capacity should be 300 KHU or more</p> <p>Automatic Object Tracking facility</p> <p>Automatic kV and mA optimization</p> <p>Automatic Fluro dose control with single and cumulative dose rate display</p> <p>Dual image intensifier system of 9-inch size each</p> <p>High sensitivity CCD camera with 1024x1024 pixels resolution</p> <p>Memory for last image hold and last cine loop hold</p> <p>Auto storage facility for 100,000 or more images</p> <p>Display: Two (18") LCD medical grade monitors, on separate Mobile Trolley</p> <p>Main monitor: 18" or better flicker-free Grayscale medical grade LCD having 1280 x 1024 resolution</p> <p>Control monitor: 18" or better Grayscale LCD having 1360 x 768 resolution</p> <p>A/D Conversion Depth should be 12-BIT or better</p> <p>Motorized IRIS Collimator</p>	

<p>Automatic Collimator adjustment with the SID alteration</p> <p>Remote Control for collimator</p> <p>Emergency switches on control unit and C-Arm</p> <p>Fluoroscopy footswitch: One cassette holder 24x30cm</p> <p>Laser Pointing / localizer device, lights cross beam type</p> <p>DICOM 3.0 compatible (Print, Store, Worklist)</p> <p>Motion Adaptive Recursive filtration and integration for noise suppression.</p> <p>Automated Histogram based Image Brightness and Contrast Optimization</p> <p>User Interactive Contrast and Brightness Adjustment</p> <p>Panoramic real time image acquisition</p> <p>Automated stitching algorithms to acquire full-length images of both planes</p> <p>Adaptive Edge and contrast enhancement</p> <p>Horizontal and vertical image flipping</p> <p>Real time digital image rotation</p> <p>Image Inversion, zoom, annotation, real time sharpening and denoising</p> <p>DSA software should be provided.</p> <p>Bidder Will be responsible for arrangement of all installation requirements, console, Electric DB, lead shielding, UPS Installation for room finishing / preparation.</p>
<p><u>ACCESSORIES:</u></p> <ul style="list-style-type: none"> • Lead Apron • Lead Neck Collar • Lead Goggles • Protective Lead Cap • Gonad Protector • Thyroid shield <p>NOTE: Procuring agency to define the quantity of each accessory, as per requirement</p>
<p><u>Optional (if any):</u></p> <p>Nil</p>

Clinical Specialty	Urology
Generic Name	BLADDER WALL THERMOCHEMOTHERAPY
Clinical Purpose	It is used for minimally invasive non-ablative high temperature treatments (hyperthermia) for urological diseases
TECHNICAL SPECIFICATIONS	
<ul style="list-style-type: none"> • Controlled conductive Heat for drug stability • Must have capability for high-rate circulation in the bladder continuously for bringing fresh / heated drug in contact with all bladder walls • Must maintain uniform bladder wall temperature • Temperature range up to 44° C • 18Fr flexible catheter 	
Accessories: BWT catheters (18 Fr silicone catheter 10)	
Optional (if any): Nil	

Clinical Specialty	Urology
Generic Name	EXTRACORPOREAL SHOCKWAVE SYSTEM FOR TREATMENT OF ERECTILE DYSFUNCTION (ESWT)
Clinical Purpose	<ul style="list-style-type: none"> • Vascular Erectile Dysfunction • Induratio penis plastica (IPP) • Treatment of pain caused by superficial plaques. <p>Combination system for ESWT including a focused shockwave transmitter for treatment of erectile dysfunction. The system should be supplied as trolley version. Low energy shockwave system with focussed transmitter for use in all urological indications like erectile dysfunction, IPP & CPPS. Electromagnetic shockwave generator enables precise application and gentle dosing of the shock wave energy. All the essential control elements should be available on the hand piece specially the frequency and energy level can be adjusted directly at the hand piece.</p>
TECHNICAL SPECIFICATIONS	
<ul style="list-style-type: none"> • Electromagnetic shockwave principle • Focal Zone depth: 0-55 mm or better • Penetration depth: 0-60mm or above • Energy in Focus: 0.010-0.55 mJ/mm² or better • Hand piece weight: max 600 gm or better • Shockwaves: 1 million shockwaves • Coil replacement possible. • Possibility to connect an external monitor • System should allow user to create and store his own programmes. • 8" or better touch screen control • Patient annotation and storage should be possible with USB access for read out of the stored data. • Unit should be equipped with software indicating errors or service measurements. • Mobile trolley mounted system • Shockwave frequency: 300/minute or better • Application Linear segments • Shockwaves per session: 2500 or more • Shockwave duration: 5-10 minutes or more 	
Accessories:	
Nil	
Optional (if any):	
Nil	

Clinical Specialty	Urology
Generic Name	INTRACORPOREAL LITHOTRIPSY SYSTEM (COMBINE AND SEPARATE MODE OF BALLISTIC, ULTRASONIC AND SUCTION)
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 SPECIFICATION	
<p>Synergy of 3 modalities in a single-probe (Ballistic impacts for powerful fragmentation / ultrasounds for fine dusting / smart suction to remove large stone fragments).</p> <p>Independent generation of ballistic impacts and ultrasounds that can be used independently or simultaneously.</p> <p>Possibility to adjust the power and frequency (1-12 Hz) of the impacts, the power of the ultrasounds and the flow rate of the suction.</p> <p>Auto-adaptative algorithm allowing precise and constant generation and propagation of 100% the ultrasounds.</p> <p>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).</p> <p>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.</p> <p>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).</p> <p>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.</p> <p>Disposable Stone Catcher enfranchising from using additional stone retrieval consumables, while allowing sterile stone fragments collection for analysis without any treatment interruption.</p> <p>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.</p> <p>RFID recognition of the probes for an automatic set of best treatment parameters on the console.</p>	

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

Record of data of last 5 treatments

HDMI display option to View the console screen

Touch Screen Console

Integrated colling system to avoid over heating

ACCESSORIES:

- LITHOCLAST Main Unit
- Foot pedal
- Handpiece Kit
- Support Stone Catcher
- Suction Bag
- Electrical cord 6m
- HDMI 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 Ø 3.9 x 350
 - Lithoclast probe Ø 3.9 x 440
 - Lithoclast probe Ø 3.4 x 340
 - Lithoclast probe Ø 3.4 x 445
 - Lithoclast probe Ø 1.9 x 341
 - Lithoclast probe Ø 1.5 x 440
 - Lithoclast probe Ø 1.1 x 425
 - Lithoclast probe Ø 1.1 x 520
 - Lithoclast probe Ø 1.1 x 625

OPTIONAL (IF ANY):

Nil

Clinical Specialty	Urology
Generic Name	INTRA-OPERATIVE ULTRASOUND
Clinical Purpose	The intra-Operative ultrasound and sophisticated software algorithms, real-time imaging platform enables urologists to guide urology procedures with confidence It is used during surgery for urological applications with provision of biopsies through needle guides.
TECHNICAL SPECIFICATIONS	
<ul style="list-style-type: none"> • High Resolution Digital Imaging dedicated for Urology with simple work flow and small foot print • The system should have excellent images with high spatial, temporal, and contrast resolution with little adjustment • Provision of wide range of Sterilizable Urology Transducers • Small foot prints and design to fit the system in tight space • 19" or better LCD / LED / OLED monitor for the clear visualization of the images • Provision of button for activation of transducers, freeze, print and store images • Provision of four transducers connectivity at same time • Advance modes including 3D Elastography, contrast imaging and Needle enhancement • Should have built in function of the auto optimized imaging using No touch Auto gain and Auto focus features • Color Doppler should provide excellent real time visualization of vascular perfusion • Built in battery backup of 60 minutes or better • Sterilizable remote control • Provision of advance features including prostate cancer and benign prostatic Hypertrophy (BPH) 	
Parameters:	
Imaging Modes	B(2D), M, PW Spectral Doppler, CW Spectral Doppler, Color Flow Mapping, Power Doppler, Tissue Harmonic Imaging (THI), Elastography, contrast imaging
3D imaging Modes	Free Hand 3D Reconstruction
B Mode Techniques	Digital Beam former, Speckle reduction, Compound imaging, Dynamic focusing
Display:	19" inch or better
Keyboard height:	Adjustable
Frequency range	2-18 MHz or better
System Dynamic range	180 dB or better
Scanning Depth Min	2 cm or better
Scanning Depth Max	30 cm or better
Number of grey level	256 or better
B Mode Grey Scale	256 or better
Auto Line Density in B Mode	
Display dynamic	50- 90 dB or better

Multi frequency in B mode facility
 B Mode colorization facility
 Image storage capacity 50,000 or better
 Power Requirements: 200V, 50 Hz

OPERATING MODES:

B Mode
 Combination Mode
 3D Mode
 Power Mode
 PW Doppler Mode
 CW Doppler Mode
 M Mode
 Color Mode
 Digital beam Former
 Compound imaging
 Speckle Reduction
 Dynamic Apodization
 Multi Beam processing
 Sweep speed 2 – 12per second

CONNECTIVITY AND PERIPHERALS

High-Resolution Display
 DVD/ CD Recorder, USB Port, Ethernet Port
 4 x Active Transducer Ports
 Built-In Hard Disk Drive (500GB) or better
 12 inch or better touch screen LCD display
 Data Management and review facility with thumb nail
 HDMI / SVHS / VGA Output
 Built in patient Archive
 Needle Guide for Biopsy with Biplane and route through the transducers.
 The system must be Quoted complete with Standard Urology applications software and Accessories

ACCESSORIES:

- 4 - 10 MHz Multi frequency Endo-cavity Biplane Transducer
- 2 - 6 MHz Multi frequency Curved Transducer
- Foot Switch
- Printer compatible with Doppler
- Keyboard
- Compatible online sine wave UPS for battery backup of 30 min or better

OPTIONAL:

- Complete stepper system compatible with Brachytherapy
- 5 – 18 MHz Linear Transducer_
- 4 - 14 MHz Triplane transducer
- **IMAGE FUSION**

- Single System should be able to simultaneous display MRI/ CT and real-time ultrasound images on one monitor.
- Fusion should support scan selection in transverse, sagittal and end fire

Clinical Specialty	Urology
Generic Name	THULIUM FIBER LASER 60 WATT
Clinical Purpose	Used for Stone, BBH and Tissue Treatment
TECHNICAL SPECIFICATIONS	
<p>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.</p> <p>More effective stone dusting with high frequency and better clearance and suction possibilities.</p> <p>A safe alternative to treat soft tissue and BPH with better haemostasias</p> <p>Low maintenance requirements, reducing long term costs and reducing down time.</p>	
Wavelength	1940nm+ - 20nm
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 2x set of safety goggles 1x fiber stripper 1x fiber cutter 1x interlock connector 1x blast shield 1x fluid bag hook 1x power 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)
Optional (if any): Nil

APPROVED PLVMS

Clinical Specialty	Urology
Generic Name	SURGICAL ROBOTIC SYSTEM
Clinical Purpose	To be used in Minimal Invasive Robot Assisted operative procedure
TECHNICAL SPECIFICATIONS	
<p>The equipment must be capable of performing minimally invasive robot assisted operative procedures in multi therapeutic areas. The provided system must be the latest generation/ later model at the time of procurement.</p> <p>The Main Equipment should comprise of the following fully integrated subsystems.</p> <p>An ergonomic console: - on which the surgeon can operate seated comfortably from a distance by hand controls on the console and issuing instructions at the instrument which are connected to the different arms of the robot. The motion of the hands of the surgeon need to be scaled and need to be translated for the instrument arms of the robot in a very fine and precise manner</p> <p>Robot Arms: - Modular, separate and interchangeable instrument arms that are capable of holding instruments and one arm for endoscopic camera for performing robotic surgery.</p> <p>A Video system: - of high quality to process and transmit the video information during the intervention. This system needs to produce high definition 3D image through the camera to get a perception of depth.</p> <p>Ultra-High-quality 3D view: of the field using next generation light adapting technology. The elimination of any focusing required with infinite depth of field technology.</p> <p>System should be capable for virtual training with the Surgeon Console to practice & enhance surgical skills of new & existing robotic surgeons.</p> <p>System should be Capable enough to use</p> <p>Reusable, Autoclave able instrumentation: - the system should allow for robotic control of instruments that are reusable.</p> <p>The instruments should be able to be cleaned and sterilized using autoclave technology and not require additional, less standard sterilization method.</p> <p>High-quality three-dimensional view of the field of operation is to be provided by the Vision system through its stereo endoscope.</p> <p>LED light source to be provided for illumination of the surgical field with a standby lamp.</p> <p>Instruments to be used with the system should be able to provide surgeons with natural dexterity and a range of motion equal to the human hand.</p>	

Such instruments should be able to offer a wide range of tips suitable for performing procedures across multiple disciplines. These Instruments shall offer Seven degrees of motion mimicking the dexterity of human Hand with 720 degrees of shaft rotation.

The hand controllers at the surgeon's console should be capable of translating the natural hand and wrist movements in to corresponding precise and scaled movements to the instruments and camera attached to the arms minimizing fatigue. Such movements of the instrument tips shall replicate the experience of open surgery.

There should be facility for scaling of surgeon hand movements to corresponding smaller instrument tip movements. The surgeons hand movements shall be replicated at the instrument tip after filtering tremors if any in real time.

The endoscopes should be capable to view at 0 degree and 30 degree.

The ability to quickly change instruments during surgery should be a key feature.

Camera should provide high resolution images of the operative field along with perception of depth of field.

The system should perform self-checks to provide safety during usage

The system should have software required to safely use the system. Software upgrades should be given free of charge to the institution to ensure the latest version of software is always running on the system - without expense to the institution

Ability to change instruments during surgery safely with proper guidance

Auxiliary Monitor to provide ability for the assistants in the OR to see surgeon's view

Ability to adjust the surgeons monitor and console to suit individual comfort and ergonomics should be available.

Ability to enable the surgeon to view 2D as well as 3D HD image

While the robotic arms shall be operated by sterile persons the surgeons console shall be non-sterile are in the Operating room.

Adequate safety features to prevent inadvertent movements of the surgeon affecting the instruments shall be available.

The arms shall be easily movable within the OR.

The system shall have all software required to support all disciplines of surgery which is possible by the system under the control of the surgeon.

<p>Ability to change the instruments during surgery safely</p> <p>All equipment shall be capable of working on 230 V AC, +/- 5%, 50 Hz Power supply. The system shall be capable of working between 17 to 25 Deg C air-conditioned environment.</p> <p>Emergency spares that may be required for immediate replacement during procedures. A set of Reusable accessories required for common procedures</p> <p>Instrument for 200 procedures should be included in the package which includes hook, dissectors, needle holder, and energy instruments (Monopolar & Bipolar)</p>
<p>Accessories:</p> <p>Nil</p>
<p>Optional (if any):</p> <p>Nil</p>