

# PVMS OF UROLOGY

DRAFT

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<b>Clinical Specialty</b>	<b>Urology</b>
<b>Generic Name</b>	<b>Adult Basic Urology Set</b>
<b>Clinical Purpose</b>	<b>Urology also known as genitourinary surgery, is the branch of medicine that focuses on surgical and medical diseases of the male and female urinary tract system and the male reproductive organs. 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</b>

#### **TECHNICAL SPECIFICATIONS**

##### **Technical Specification of Adult Basic Urology Set**

###### **Cystoscope With Accessories (For Adults)**

**Telescope 30° Degree, 4mm, Autoclavable length 30cm**

**Cystoscope-Urethroscope Sheath 19 to 25 Fr, with Obdurate and 2 Luer-Lock adaptors**

**Cystoscope-Urethroscope Sheath 17 to 20 Fr, with Obdurate and 2 Luer-Lock adaptors**

**Telescope Bridge with 1 Lockable instrument channels**

**Grasping Forceps for the removal of foreign bodies, 7Fr. Double action jaws, Flexible Length 30 to 40 cm**

###### **Resectoscope With Accessories (For Adults)**

**Telescope 25°- 30° Degree, 4mm, Autoclavable length 30cm**

**Working element active/positive.**

**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**

**Urethromote (For Adults)**

**Telescope 0° - 12° Degree, 4mm, Autoclavable length 30cm**

**Working element Pessive/negative.**

**Urethromote Sheath, 21-22Fr, with channel for Filiform Bougies**

**Obturator, for Urethromote sheath, 21-22Fr**

**Supplementary Sheath, half round to insert a balloon catheter, To slip on Urethromote sheath**

**Cold knife straight, not to, be ued with HF content**

**Stone Punch (For Adults)**

**Stone working element**

**Sheath for working element**

**Obturator for Sheath**

**Elek Evacuator**

**Quality Certificate CE or FDA certified**

**Origin: Europe, USA, Japan**

**Accessories: LED + Fiber Optic Cable 3.5mm - 4.2mm**

**Optional (if any):**

<b>Clinical Specialty</b>	<b>Urology</b>
<b>Generic Name</b>	<b>Laser Cystoscope / Resectoscope</b>
<b>Clinical Purpose</b>	<b>Cystoscopy is endoscopy of the urinary bladder via the urethra. It is carried out with a cystoscope.</b>
<b>TECHNICAL SPECIFICATIONS</b>	
<p><b>Technical Specification of Adult Basic Urology Set Cystoscope With Accessories (For Adults)</b>  <b>Telescope 30° Degree, 4mm, Autoclavable length 30cm</b>  <b>Cystoscope-Urethroscope Outer Sheath 21 / 23 Fr, with Obdurate and 1-2 Luer-Lock adaptors</b>  <b>Cystoscope-Urethroscope Inner Sheath</b>  <b>Obturator</b></p> <p><b>Resectoscope With Accessories (For Adults)</b>  <b>Telescope 30° Degree, 4mm, Autoclavable length 30cm</b>  <b>Working element</b>  <b>Outer Sheath</b>  <b>Inner Sheath</b>  <b>Standard obturator</b>  <b>Glass syringe 100ml - 150ml</b></p> <p><b>Quality Certificate CE or FDA certified</b>  <b>Origin: Europe, USA, Japan</b></p>	

**Accessories:**

**Optional (if any):**

Clinical Specialty	Urology
Generic Name	<b>Pediatric Basic Urology Set</b>
Clinical Purpose	Pediatric urology is a surgical subspecialty of surgery dealing with the disorders of children's genitourinary systems. Pediatric urologists provide care for both boys and girls ranging from birth to early adult age. The most common problems are those involving disorders of urination, reproductive organs and testes.

**TECHNICAL SPECIFICATIONS**

**Cystoscope Set for Miniature**

**Technical Specification of Pediatric Basic Urology Set**

Telescope 0° Degree, 1.9mm - 2.7mm

Cystoscope Sheath 7.5 FR

Cystoscope Sheath 9.5 FR

Pediatric Biopsy Forcep Flexible 3 FR

Button Electrode 3 FR

HF Cable

**Cystoscope Set for Paeds**

**Technical Specification of Pediatric Basic Urology Set**

Telescope 0°/30°/70° Degree, 1.9mm - 2.7mm

Cystoscope Sheath 11 FR

Cystoscope Sheath 13/14 FR

Adopter with 1 Instrument port

Insert with Albran Deflector

Biopsy Forcep Flexible 4 FR

Button Electrode 3 FR

HF Cable

**Optical Urethrotome Paeds**

Telescope 0° Degree, 1.9 mm

Urethrotome Sheath 8.5FR to 10FR

Instrument port

Working Element

Knife

**Resectoscope Paeds**

Telescope 0° Degree, 1.9 mm

Resectoscope Sheath 9FR to 11FR

Instrument port

Working Element

Cutting Loop

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:



Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>URS Semi Rigid Set</b>
Clinical Purpose	URS is endoscopy of ureter, pelvis and break the stone.
<b>TECHNICAL SPECIFICATIONS</b>	
URETERO-RENSCOPE,AUTOCL.,SEMIRIGID 8/9,8FR,12°,WL430MM,5,2x6,2FR,INST-CH. W. LATERA.OFFSET EYEP or equalint	
<b>Following accessories are included:</b> SILICONE AUTOMATIC VALVE, Ø 3.9 MM, 5 PIECES / PACKAG RUBBER CAP FOR INSTRUMENT CHANNEL FLEXIBLE CLEANING BRUSH FOR INSTRUMENT CHANNEL Grasping Forcep 5FR Length, 550 to 600 Biopsy Forcep 5FR Length, 550 to 600 Three prong forceps	
Quality Certificate CE or FDA certified	

Origin: Europe, USA, Japan
Accessories: Stone Cone/Basket
Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>URS Peads Rigid Set</b>
Clinical Purpose	Ureteroureterostomy is end-to-end connection (anastomosis) of the two portions of a transected ureter; also called ureteroureteral anastomosis and van Hook operation

**TECHNICAL SPECIFICATIONS**

URS 6/7.5 Fr , 5<sup>0</sup> or 12<sup>0</sup>, Length 43 cm, 4 Fr working channel or better

- Following accessories are included:**  
 SILICONE AUTOMATIC VALVE, Ø 3.9 MM, 5 PIECES / PACKAG  
 RUBBER CAP FOR INSTRUMENT CHANNEL  
 FLEXIBLE CLEANING BRUSH FOR INSTRUMENT CHANNEL  
 Grasping Forcep 4FR Length, 550 to 600  
 Biopsy Forcep 4FR Length, 550 to 600

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories: Stone Cone/Basket

Optional (if any):

Clinical Specialty

Urology

Generic Name

**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 Sensor URS Set

Comprising of:

FLEXIBLE SENSOR URS / CHIP ON TIP / DISPOSABLE CLEANING BRUSH / FIBERSCOPES / DISPOSABLE CLEANING BRUSH (PACK=10 PCS) / ADAPTER / LEAK TESTER / PRESSURE EQUALIZATION VALVE / CLAMPING ELEMENT, ORANGE ( PACK OF 20) with container

### TECHNICAL DATA

Distal tip: cylindrical, atraumatic, oblique distal tip 5.2 Fr or better.

Sheath diameter: 9.9 Fr or better

Number of working channels: 2 Working/irrigation channel diameter: 2.5Fr or Above.

Laser/irrigation channel diameter: 2.4 Fr.

Angulations: 180° or better Upward/Downward, Working length: 680 mm Viewing angle: 90°

Handle: integrated LED lighting, ergonomically contoured handle with axial camera cable

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories: Uretric Access Sheath different sizes.

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>INSTRUMENT REQUIRED TO USE DISPOSABLE FLEXIBLE URETRO RENOSCOPE</b>
Clinical Purpose	Retrograde intrarenal surgery (RIRS) is a procedure for doing surgery within the kidney using a viewing tube called a fiberoptic endoscope.
<b>TECHNICAL SPECIFICATIONS</b>	
<b>RIRS Set</b> Flexible optic/Telescope 120° view / 180cm Y-adaptor with haemostasis valve Adaptor separate light Fix Focus Ocular 3-Joint-Arm  Quality Certificate CE or FDA certified Origin: Europe, USA, Japan Accessories:	

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Flexible URS</b>
Clinical Purpose	Endoscopy means <i>looking inside</i> 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
<b>TECHNICAL SPECIFICATIONS</b>	
<b>Uretero-Fiberscope</b>	
<b>Sensor/Ciip on Tip</b>	
steerable,	
deflection of distal tip	270°/270°
direction of view	0°

angle of view                    88° or Above  
working channel inner        3.6Fr  
sheath Size                    7.5Fr - 8Fr  
working length                67cm

**Following accessories are included**

case

pressure compensation

cap

leakage tester, ith bulb and manometer

cleaning brush, flexible, for working channel  
diameter 1.2-1.8mm, double action jaw(Grasper),  
flexible, length 100cm - 120cm

biopsy forceps, 3Fr., double action jaw, flexible, length  
100cm - 120cm

stone basket, sterile, disposable, 2.5Fr., length 120cm

coagulation electrode, 3Fr., unipolar, length 110cm

guide wire, 3Fr., with ball end, sterile, package of 10

sealing for instrument ports

package of 10

single use

recommended

cleaning adaptor for instrument

ports

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:
Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Video Cystoscope Urethroscope</b>
Clinical Purpose	Cystoscopy is endoscopy of the urinary bladder via the urethra. It is carried out with a cystoscope.
<b>TECHNICAL SPECIFICATIONS</b>	
<b>video cysto-urethroscope</b>	
steerable,	
Specification:	
working channel inner	inner diameter 6.5Fr
direction of view	0°
angle of view	120°
sheath size	16Fr,.
working length	37cm



Following accessories are included

carrying case

**video cysto-urethroscope**

grasping forceps

biopsy forceps, 3Fr.,

pressure compensation cap

leakage tester

cleaning brush

LUER-adaptor

coagulation electrode, unipolar, 4Fr., length 73cm

unipolar high frequency cord, with 4mm plug, length 300cm, for models Erbe type T, older models and Ellman

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 and storage, external dimensions (w×d×h): 550×260×90mm, for use with a flexible endoscope

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Cystco-Urethro-Fiberscope</b>
Clinical Purpose	Cystoscopy is endoscopy of the urinary bladder via the urethra. It is carried out with a cystoscope.

**TECHNICAL SPECIFICATIONS**

Instrument channel 6Fr or Above  
direction of view: 0°  
angle of view 90° or Better  
working length 37cm  
O.D: 14Fr or Above

**Following accessories are included**  
case  
Grasping Forceps, 5Fr., length 73cm  
biopsy forceps, 5Fr., length 73cm

**Pressure compensation**  
cap

leakage tester  
cleaning brush  
stone basket, 5Fr., length 60cm  
coagulation Electrode, unipolar, 4Fr., length 73cm  
sealing for instrument ports package of 10, single use  
recommended  
cleaning adaptor for instrument  
ports

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Bipolar Resectoscope</b>

Clinical Purpose

Biopolar 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 12<sup>0</sup> - 30<sup>0</sup>, enlarged view, Ø4mm, autoclavable at 134°C, fiber optic light transmission incorporated

**Following accessories are included**

autoclavable

compatible adaptors

working element set

including:

working element active

cutting loop, bipolar

coagulation electrode, bipolar

high frequency cord

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 high frequency cord, for electro surgical unit(high end), length 300cm, for use with bipolar resectoscopes

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:

Optional (if any):

**Bipolar Diathermy**

High Frequency 430 KHZ  $\pm$  20%

Maximum high Frequency power 320W or Better

**Output Modes & Power**

PureCut: 300W or Better

BlendCut: 200W

PulseCut Slow: 150W

PulseCut fast: 150W

SoftCoag: 120W

ForcedCoag: 120W

SprayCoag: 120W

**Bipolar**

BipolarCut: 100W

SalineCut: 320W

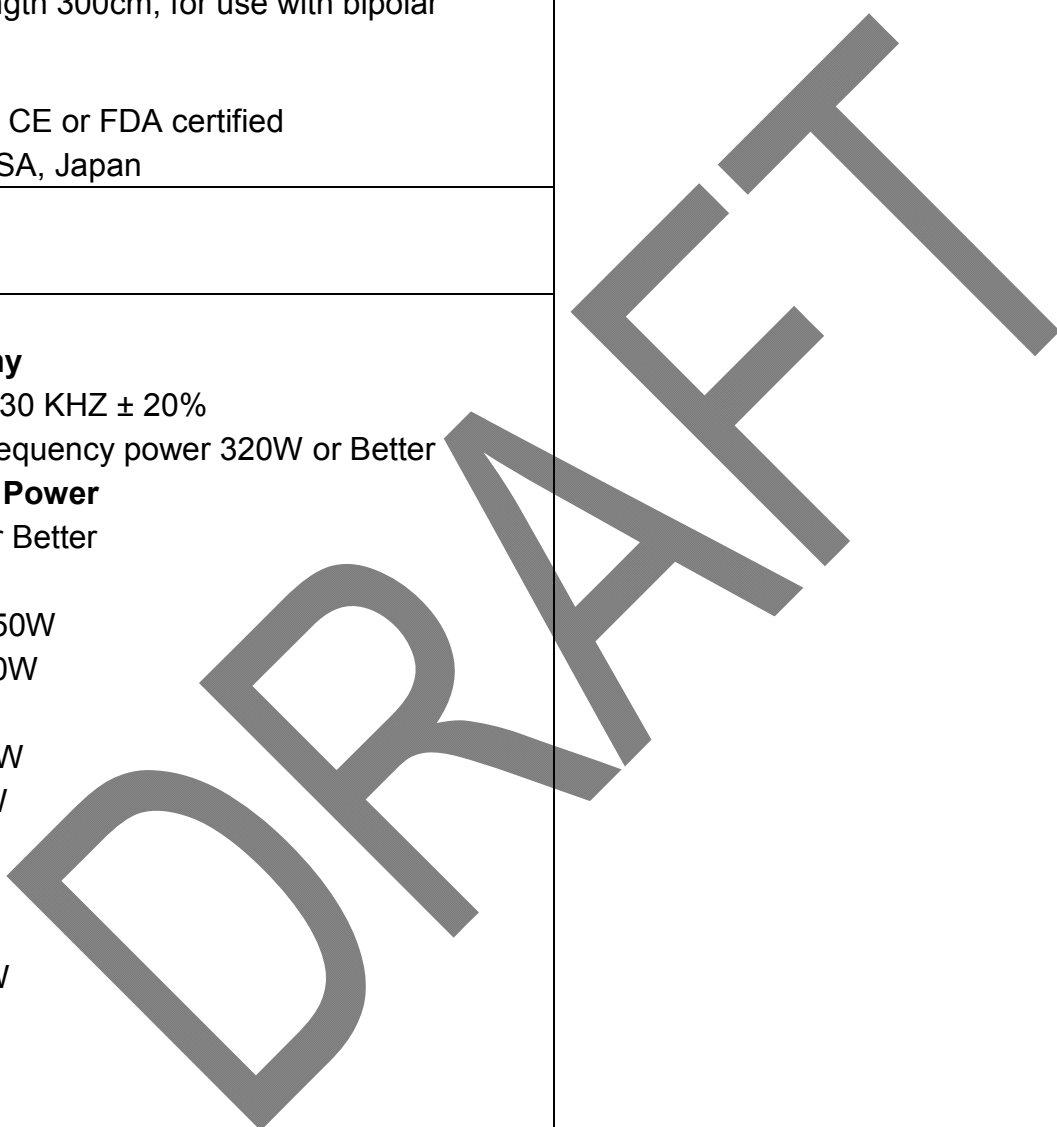
BiSoftCoag: 120W

AutoCoag: 120W

HardCoag: 120W

RFCoag: 220W

Quality Certificate CE or FDA certified



Origin: Europe, USA, Japan

Clinical Specialty	Urology
Generic Name	<b>Pneumatic or Electro kinetic or Ultrasonic Intracorporeal lithotripsy System</b>
Clinical Purpose	it is used for fregmentation of urinary stones

#### **TECHNICAL SPECIFICATIONS**

##### **Technical specification of Intracorporeal Lithotripter**

Electrical foot pedal

Power supply cable

Compressd air supply tube

Set of connectors for exhaust

Spare fuses

Pneumatic / Electro kinetic / Ultrasonic Handpiece kit

Probe Q 2.0 x 425 mm

Probe Q 1.0 x 605 mm

Probe Q 0.8 x 605 mm

Probe Q 1.6 x 605 mm

**OR**

Highest security for tissue compared to all other

lithotripsy methods due to short stroke (0,8 mm)  
Precise working through low-vibration hand piece  
3 intensities, microprocessor controlled  
Single and continuous pulses controlled by footswitch  
Dimensions: 320 x 120 x 240 mm; 7,6 kg  
Handle with Integrated rod  
Autoclavable: self-contained unit handle/rod  
Low-vibration: secure and sensitive handling possible  
Handles with 3 different integrated rods  
AP 0.8 (diameter 0,8 mm, length 550 mm)  
AP 1.0 (diameter 1,0 mm, length 550 mm)  
AP 1.4 (diameter 1,4 mm, length 430 mm)

Quality Certificate CE or FDA certified  
Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
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Generic Name	<b>INTRACORPOREAL LITHOTRIPTER COMBINE UNIT OF ANY TWO ENERGIES PNEUMATIC, ULTRASONIC, ELECTRO HYDROLIC &amp; ELECTRO KINETIC</b>
Clinical Purpose	It is used for fragmentation of urinary stones, the combine unit gives more power

### TECHNICAL SPECIFICATIONS

#### Consisting Of:

Dual foot pedal, Compressed air connection, Pneumatic hand piece, ultrasound hand pieces stone catcher and a selection of a Pneumatic and Ultrasound, hydraulic, kinetic Probes

#### Technical specification of Pneumatic Lithotripter

Pneumatic + Ultrasound

- 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:
- 4 x pneumatic probes :
- 1 x Probe, 2.0 mm, length 425 mm :
- 1 x Probe, 1.0 mm, length 605 mm :
- 1 x Probe, 0.8 mm, length 605 mm :



1 x Pneumatic probe 1.0 mm, length 570 mm :  
- 2 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  
Or  
EHL + EKL  
A rapid discharging of sparks from the probe's tip produces steep compressional waves (shock waves) in

the liquid, directly in front of the concernment.  
Mechanical stress is created inside the concernment which results in the disintegration of the stone.  
The repetition rate of the spark discharge should depend on the intensity settings and the type of EHL-probe being used.

#### Recognition Of EHL Probes.

The unit should recognize the type of EHL probe being used. The unit should automatically select the appropriate frequencies depending on the type of probe and the intensity setting in use.

Should be supplied with **2** probes of user recommended.

#### Electro Kinetic Lithotripsy (EKL).

The handle of the EKL probes should contain a driving unit that produces a magnetic field with a high energy density. This shock wave should be transmitted from the probe's tip to the stone causing its disintegration. Different shock wave energies and repetition rates may be selected.

Should be supplied with **4** probes and **2** suction probes of user recommended.

Once the handle has been connected to the probe connector, the unit should automatically switches to the EKL operation mode. The unit should be able to select the corresponding frequencies depending on intensity setting.

#### Mains Supply

Voltage: 100 V  $\pm$  10%

115V  $\pm$  10%

230V  $\pm$  10%

50-60Hz

Frequency

EHL Discharge Energy (min., max.):

Intensity A / Impulse frequency max. 250mJ / 60 Hz

Intensity B / Impulse frequency max. 500mJ / 50Hz

Intensity C / Impulse frequency max. 900mJ /40Hz

EKL Shock Energy:

Intensity A / Impulse frequency 45mJ/ 3Hz

Intensity B / Impulse frequency 60mJ / 20Hz

Intensity C / Impulse frequency 75mj / 15Hz

Classification:

Protection class I

Protection (application part) BF

Explosion protection None

Classification acc. to 93/42/EEC 93/42/EEC

**"Protection Against Penetration From Water Or Foreign Material:**

Handle with protective

Covers: protection IP67

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>PCNL Set</b>
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, 0/12/20/25 degs., 14 Fr. Or better Instrument channel Automatic valve with sealing membrane and sealing cap  
Sheath 20FR to 27 FR. Or better, distal tip straight, with swivelling irrigation connector and automatic locking mechanism

Obturaor Hollow  
Telescope dilator 9-27 Fr. Consisting of: 1 hollow guide  
rod 6 Fr. And telescope  
Dilator 30 Fr.  
Stone grasping forceps, diam,. 3.5 mm, working length  
30 to 35 CM  
THREE PRONGED STONE GRASPER, diam. 3.5 mm,  
WL 30 to 35 CM

Quality Certificate CE or FDA certified  
Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Mini PCNL</b>

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 06<sup>0</sup> - 12<sup>0</sup> or better with eye piece  
Oval instrument channel for auxillary instrument and irrigation for mini nephroscope  
Contunuous irrigation nephroscope 7-15 Fr. Or better  
operating sheath with Obturator compatible with the nephroscope and all acceorries  
stone grasping forceps, mouse tooth  
3 prong stone grasper  
grasping forceps with aligator Jaw  
Compatible Dilators

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Micro PCNL</b>
Clinical Purpose	This is further miniaturization of Mini PCNL.
<b>TECHNICAL SPECIFICATIONS</b>	
<b>Micro PCNL SET</b>	
Semirigid optic/Telescope modular PCNL 10,000 pixel / 120°	
Tuohy Borst adaptor	
Optic shifter	
Micro PCNL Sheath 4.8Fr & 8Fr	
3-joint-arm	
Container	
Quality Certificate CE or FDA certified	
Origin: Europe, USA, Japan	

Accessories:
Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Holmium: YAG Medical Laser 110 Watt or above</b>
Clinical Purpose	Used to treat BPH (Holep, Evaproziation), Bladder, tumor, stone and strictures.
<b>TECHNICAL SPECIFICATIONS</b>	
<b>PHYSICAL AND TECHNICAL SPECIFICATIONS          HOLMIUM LASER FOR UROLOGY          THE SYSTEM SHOULD BE TOP OF THE LINE AND          LATEST</b>	
<b>APPLICATION OF HOLMIUM-YAG LASER FOR          PROSTATE AND LITHOTRIPSY          SURGERIES REQUIRED</b>	



Prostate Enucleation/Evaporization

Prostate Ablation/Holep

Lithotripsy

Excision of bladder tumors

Urethrotomy

Polyps ablation

Nasal treatments

Discectomy

Arthroscopy

Adhesiolysis

**Laser should be suitable for;**

Urology

ENT

Gynecology

Orthopedic

General Surgery

**LASER DATA**

Laser type: Holmium-YAG

Laser control Panel should be of 8.2 inch in touch screen or better

Wave Length: 2.1  $\mu\text{m}$  or more

Emission type should be Pulse Wave

Power up to 110 Watts or better

Energy/Pulse: 0.5 to 3.5 J or more

Pulse Length: up to 800  $\mu\text{s}$  or more

Repletion rate: 5-75 Hz or better

Beam Delivery fiber should be of size from 200 up to 1000 micron

Aiming beam, Green: 532nm, adjustable in steps or better

**UNIT**

Built in cooling system

**APPLICATORS**

Optical fibers: 200, 400, 600, 800, 1000 in micron

**ACCESSORIES****Holmium Laser Fibers**

20 x Fibers (200,400,600,1000 in micron)

10 x Laser safety goggle for spectacle wearers

6 x Eye protection shield for patients

4x Fiber Cutter

4x Fiber Striper

4 x Repair set fiber steeper

6 x Sterilization tray

**Power Requirement**

Power Supply: 220-240 VAC, 50 Hz

**Environmental Condition:**

Temperature range: 15-30 C

Relative humidity: 30-85%

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories: Morcellator

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Holmium: YAG Medical Laser 20 - 35 Watt or above</b>
Clinical Purpose	Used for stone and strictures.

#### **TECHNICAL SPECIFICATIONS**

Tower type  
AVERAGE POWER 30W or above  
Laser source ho:yag  
Wave lengths 2.1 micron  
Energy per pulse 2-4 joules  
Repetition rate 5-20 hertz  
PULSE DURATION UP TO 800 mseconds  
Aminaing beam green diode, 3 intensities,  
Continuous or blinking model  
Delivery systems over 100 reusable and disposable options

Cooling self-contained water-to-air exchanger

Utilities 200-230v, 10a, 50/60 hz single phase

**Including:**

Footswitch

User manual

Reusable laser fiber, length 3 m, optical core 365µm

Reusable laser fiber, length 3m, optical core 550µm

Reusable laser fiber, length 3.0m, optical core 200µm

Quality Certificate CE or FDA certified

Origin: europe, usa, japan

Accessories: Striper and cutter

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Holmium: YAG Medical Laser 50 - 80 Watt or above</b>

Clinical Purpose

Used to treat BPH (Holep), Bladder, tumor, stone and strictures.

### TECHNICAL SPECIFICATIONS

Tower type

Average power 80w

Laser source ho:yag

Wave lengths 2.1 micron

Energy per pulse 0.5-3.5 joules

Repetition rate 5-40 hertz

PULSE DURATION UP TO 800 mseconds

Aminaing beam green diode, 3 intensities,

Continuous or blinking model

DELIVERY SYSTEMS REUSABLE AND DISPOSABLE OPTIONS 200um 365um ,550um and 1000um SMA 905

Cooling self-contained water-to –air exchanger

200-230v, 16a, 50/60 hz single phase

**Including:**

Footswitch

User manual

Reusable laser fiber, length 3 m, optical core 365µm

Reusable laser fiber, length 3m, optical core 550µm

Reusable laser fiber, length 3.0m, optical core 200µm

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan or companies having CE Certification

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Diode Laser 200W or Above</b>
Clinical Purpose	Used for vaporization of prostate.
<b>TECHNICAL SPECIFICATIONS</b>	
<b>The System Should Be Top of the Line and Latest General Technical Specifications - Diode Laser for Ablation of Prostatic Tissue</b> <b>Medical Application:</b> Multi-disciplinary use in the OR and doctor's office Palliative and curative treatment of malignant and Benign tumors, especially of benign prostate Enlargement (Vaporization and Enucleation)	

Surgical tissue preparations such as resection,  
Extirpation, ablation and coagulation  
Type of Laser: Solid-State Diode Laser  
Wavelength: **980nm** or better  
Peak energy at fiber tip cw: 200 W or above  
Peak energy at fiber tip pulsed: **25 W** or better  
Pulse duration: **250 μs – 5s** or better  
Pulse interval: **250 μs – 5s or better**  
Aiming beam: **632 nm** adjustable in **5** intensity levels,  
flashing or continuous or better

**Warning Signal:**

Optical  
Acoustical; Volume Adjustable  
Dose mode: variable by time, applied energy or pulses

**Emission Mode**

Continuous (CW) Pulse(PM) single (SM), Quasi  
Continuous (QCW)

**Memory Function:**

Programmable hot memory keys for storage of  
treatment parameters

**User Interface:**

Color Touch Screen

**Accessories:**

Single use fiber with bare fiber tip (sterile) 10 Pieces  
Reprocess able fiber with bare fiber tip (sterile) 10  
Pieces

Connector type: SMA 905

Foot pedal: electric

Electrical Requirement:

Voltage: 220-230VAC

Frequency: 50/60 Hz

Power consumption: 1,0 kVA

Line fusing: 16 A, medium time lag

Ambient temperature: +15°C bis +29°C or better

Atmospheric pressure: 700 hPa to 1060hPa or better

Laser cooling system:

Air Cooled

Noise Emission:

Max. 60 dB

System Type:

Safety Norms & Standards:

Classification: European Medical Device Directive

MDD: Medical

Device Class IIb

IEC60601: Electrical Protection Class 1, Type BF

IEC60825: Laser Class 4 and above

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:



Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>LAPROSCOPY SET WITH HD SYSTEM</b>
Clinical Purpose	Laparoscopic surgery, also called <i>minimally invasive surgery (MIS)</i> , <i>band aid surgery</i> , or <i>keyhole surgery</i> , is a modern surgical technique in which operations are performed far from their location through small incisions (usually 0.5–1.5 cm) elsewhere in the body.
<b>TECHNICAL SPECIFICATIONS</b>	
PHYSICAL AND TECHNICAL CHARACTERISTICS: <b>FULL HD MONITOR:</b> High definitions medical monitor 26" with LED Backlight Resolution 1920 x 1080 (Full HD) are better	

**VIDEO SIGNAL INPUTS:**

2 x DVI-I  
DVI-D  
RGSB  
S-Video  
Composite-Video

**VIDEO SIGNAL OUTPUTS:**

DVI-D  
SDI/HD-SDI  
S-Video

**FULL HIGH DEFINITION CAMERA HEAD**

Fully digital 3 CCD HD camera head with 1080p or better

Camera Resolution 1920 x 1080 or better

Scan Mode should be progressive

3 x 1/3" Lens on Chip CCD Sensor

Two Programmable head keys or better

Zoom Objective f=13-34 mm or better

Highly flexible cable 3m or better

**CAMERA CONTROL UNIT**

With Separate or built-in Recording System Provided by same Manufacturer (should be available in catalogue)

Automatic shutter closure

7 Selectable camera setting or better

10 adjustable user settings or better

Automatic self-test, user menu for all settings

Operation with sealed head keys

**OUTPUTS**

1 x HD-DVI

1 x HD-SDI

2 x BNC (FBAS)

Automatic White balance with digital long time memory

### **LIGHT SOURCE**

Lamp type should be LED/Xenon

Light Output 180 Watt or better

Color Temperature should be 6500 K or better

Full High Definition Light guide cable 4.5mm diameter

### **INSUFFLATOR**

Insufflator 40 l/min or better, 100-240 V, 50-60 Hz Gas heating

Insufflation Med CO<sub>2</sub>

Max. Gas Flow: 40L/min or better

P. Range: 3-25mm Hg

### **Urology Pump**

Automatic Instrument calibration

Precise control of pressure,

Clear visualization of operating site

### **Technical Data**

Pressure 15-150 mmHg or better

Flow range 30-400 ml/min or better

Accessories should be supplied with complete accessories

Standard: CE/FDA

Origin: USA, Europe, Japan

### **Laparoscopic Hand Instruments**

Laparoscopic Telescope Autoclavable Ø 5.0 MM, 0°, WL300 MM or Above

Laparoscopic Telescope Autoclavable Ø 10.0 MM, 30°,

WL300 MM or Above

Reducer, Ø 10MM-5.5MM

Needle Holder, TC, STRAIGHT HANDLE WL 300 MM or Above, Ø5 MM,

Needle Holder, TC, STRAIGHT HANDLE WL 300 MM or Above, Ø10 MM,

TROCAR SHEATHS COMPL. WITH TRIANGULAR TROCAR, WL 95 MM

or Above, 5.0 MM OR equalient

TROCAR SHEATHS COMPL. WITH TRIANGULAR TROCAR, WL 101 MM

or Above, 10 MM OR equalient

CLIP APPLYING FORCEPS, MEDIUM, COMPLETE, WL 300 MM or Above,

Ø 10 MM OR equalient

INSUFFLATION NEEDLE, VERESS NL 120 MM or Above, Ø 2 MM

BIPOLAR COAGULATION ELECTRODE L-HOOK,

Hook Secissior Forceps 5mm WL 300 or better

Metzenbaun Secissior Forceps 5mm WL 300 or better

GRASPING FORCEPS COMPLETE, UNIVERSAL, DOUBLE ACTION, Ø 5MM

DISS. AND GRASPING FORCEPS. MIXTER

COMPLETE DOUBLE ACTION,

Ø 5 MM

Biopsy Forceps 5mm WL 300 or better

Bowel Forceps 5 MM

Mery Land Forceps 5 MM

Babcock Forcep 5 MM

Claw Forcep 10 MM

Metallic Suction irrigation tube 5 mm

Quality Certificate CE or FDA certified Origin: Europe, USA, Japan
Accessories:
Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Ultrasound Machine &amp; TRUS</b>
Clinical Purpose	Used for imaging of Kidney, Ureter, Bladder
<b>TECHNICAL SPECIFICATIONS</b>	
<b>Ultrasound Machine</b> <b>Color Doppler with Intraoperative Probe</b> <b>System Standard features:</b> 15" TFT LCD or more Color Monitor Operational Modes: B Mode, M Mode, Doppler Mode, Color Flow Mapping,	

BFLOW / e flow

Color Flow Mapping in M Mode, HPRF, Duplex/Triplex modes

Power Doppler, Doppler, Directional Power Doppler.

Frame Rate 745 FPS or more

Scanning Dept: 30 cm or more

**System Advance Application Software:**

Compound precision Imaging /Cross Beam/M-View

System Should Be Capable Of Following Up gradation:

B flow/eflow

**Probes**

2-6MHz MULTI-FREQUENCY CONVEX PROBE with Biopsy

5-11MHz MULTI-FREQUENCY LINEAR PROBE.

**Optional Probe (Price to be quoted separately):**

Intra Operative probe 5 to 11 MHZ.

4-8 MHZ Multi frequency Probe with TRUS Probe With adaptor and kit for TRUS Biopsy

Printer

**Connectivity & Peripherals:**

2 USB Ports in standard or more.

**Endo Probe on recommendation of end user is to be provided Free of cost**

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Morcellator</b>
Clinical Purpose	A morcellator is a surgical instrument used for division and removal of large masses of tissues during laparoscopic surgery.
<b>TECHNICAL SPECIFICATIONS</b>	
<b>Electronic Morcellator</b> 12 mm complete system consisting of Control unit 230 /115 /100 V a.c. Morcel Power 100-1000 rpm, clockwise or anticlockwise or better Footswitch (ON/OFF) IP 68 Electronic motor for control unit: 230 /115 /100 V a.c. Morcellator handpiece Ergonomic handle	

Sealing unit complete with tissue and instrument seal for

12mm / 15mm / 20mm or better

Trocar sleeve with automatic flap valve and tissue positioner for 12mm / 15mm / 20mm or better

Morcellator cutting tube for 12mm / 15mm / 20mm

Trocar long and short or better

Sealing unit complete with tissue and instrument seal for

Myoma screw, rigid 10 mm , WL 330 mm or better

Claw grasping forceps, double jaw action, 10 mm, WL 310 mm

Grasping forceps, 2/3 claws both jaws opening, 10 mm , WL 310 mm

Needle forceps with active suture holder 2 mm, WL 160 mm, with irrigation tap to carry suture in to abdomen

**Application parts:**

Degree of protection against fluid penetration:

Micro motor speed:

Max. motor torque: Micro motor:

Degree of protection against fluid penetration:

Ratio:

Max. speed:

Motor coupling:

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan



Accessories:
Optional (if any):

Clinical Speciality	Urology
Generic Name	<b>Digital Mobile C-arm</b>
Clinical Purpose	An imaging scanner intensifier, so named because of its configuration. C-arms have radiographic capabilities, though they are used primarily for fluoroscopic imaging during surgical, orthopedic, c

os | ritical care, and  
e | emergency care procedures

## TECHNICAL SPECIFICATIONS

### **Digital Mobile C-arm**

High resolution imaging technology. from a fully digital image processing system

9-inch Image Intensifier with ABS provides automatic tracking and selects the optimum imaging technique.

### **Generator**

High frequency generator with 40 kHz or better for continuous fluoroscopy

Generator 3 KW or Above

Up to 110kVp or better

Radiographic film exposure up to 65 mA or more

Continuous high level fluoro (HLF) 5mA or more

Digital spot up to 12mA or more

### **X-ray Tube**

Stationary anode X-ray tube

Dual focal spot: 0.5-1.5 in mm or 0.6 mm & 1.4 mm or better

Anode heat capacity: 40 KHU or more

### **PreView Collimator**

Should have on-screen collimator position indication

Iris collimator

Rotatable double leaf collimator

Adjusts collimators without X-ray exposure

**Fluoro Mode**

The system should have different fluoro modes

Normal Fluoro mode

Low Fluoro mode

High Fluoro mode

Pulse Fluoro mode

Low Pulsed Fluoro mode

High pulsed Fluoro mode

Radiographic mode

Digital Spot mode

**Automatic Brightness Stabilization (ABS)****Video Display Monitor**

Dual medical 19" (48cm) LCD with anti-glare panel.

Tilt motion: 7 degree up / 10 degree down or Better

Swivel motion: 130 - 180 degree

1280 x 1024 or 1024 x 1024 high resolutions or Better

**Image Processing**

1k x 1k x 12 bit image processing or better

Automatically detects metal in the field and optimizes image quality

Automatic digital brightness and contrast control

Manual digital brightness and contrast control

Image edge enhancement

Image negate mode

Image save and auto-save

Image swap and auto-swap

Last image hold (LIH)

Image zoom and roam

Left-right image reversal

Top-bottom image invert  
Digital Image Rotation  
360 degree real-time rotation for live and static images  
Image positioning without additional exposure  
100,000 images storage or more  
Exam Management software with patient list and information.  
Multi-purpose image directory  
Retrieve and review images  
Export images capability  
Import images capability  
Delete images capability  
Image reviewing capabilities and standalone work station capabilities.

**C-arm:**

Source to Image Distance should be 95 cm or more  
Free space in ARC should be 70cm or more  
Depth in ARC should be 65 cm or more  
Orbital rotation should be 120 degrees or more  
Lateral rotation should be  $\pm 200$  degrees or more  
Wig/Wag should be  $\pm 10$  degrees or more  
Vertical travel should be 42 cm or more

Quality Certificate CE or FDA certified  
Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Urology OT Table</b>
Clinical Purpose	An operating table, sometimes called operating room table, is the table on which the patient lies during a surgical operation. <sup>[1]</sup> This surgical equipment is usually found inside the surgery room of a hospital
<b>TECHNICAL SPECIFICATIONS</b>	
<b>Standard Features: -</b> Total length 2070 mm, height adjustment 675-1035mm (without mattresses), width 550 mm (lying surface) Light and modular radio translucent table tops (6 section table top), incl. adjustable head rest	

Trendelenburg 30°, Lateral tilt? 20°  
Head section +26°/-58°, can be raised 135mm, double hinged  
Back section +70° / -35°  
Leg section 90°  
Two wired hand controls.  
Hydraulic locking of the table from hand control  
0-position, orientation, slide, one memory position in hand control unit  
Safe working load 350 /280 kg  
weight of the table 260 kg  
125mm twin castors (3 pc's) enable excellent movability in all directions. Manual override of table locking (floor locks).  
ABS—plastic covers  
Table includes standard EU—side rails 10x25 mm, made of stainless steel  
Two high capacity batteries, table can be used up to one week with one charging (230VAC/50Hz, 220VAC/60Hz). Battery charge indication in hand control.  
pc —connection, USB-cable  
Service software (windows)  
English user/service manuals

Mattress set, with 6 sections 75mm

**Accessories**

Arm board with one hand ball joint release, without mattress  
Comfort mattress Med iSOFT for arm board



Anesthesia frame, simple, requires clamp 61264  
Rapid Rod Clamp (g20mm)  
Padded Leg and Body strap, wide  
Infusion stand 18mm, stainless steel.  
One hand height adjustment. Req. clamp 60264  
Rapid Rod Clamp (g18mm)  
Compatible with C-Arm

Quality Certificate CE or FDA certified  
Origin: Europe, USA, Japan

Accessories:

Optional (if any): Radiation protection accessories

Clinical Specialty	Urology
Generic Name	<b>Wireless Urodynamic</b>

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

**WIRELESS VIDEO URODYNAMIC SYSTEM should be able to perform following**

Cystometry

Uroflowmetry

Pressure Flow Studies

Urethral Pressure Profile

Video Urodynamics

EMG

Biofeedback with Electro Stimulator

### SYSTEM CONTENT

Main Module with 3 each Pressure Channel or more

Wireless USB Module

Wireless Uroflow Transducer

Wireless Peristaltic Pump

Wireless EMG

Wireless Remote Controller

Standard Software CD

Urine beaker

Funnel

Starter Kit

Basic Urology Table for investigations

Wireless UPP Puller



Video urodynamic  
Laser Printer  
Computer with monitor Core i7, RAM 8GB, Hard Drive 1TB

Quality Certificate CE or FDA certified  
Origin: Europe, USA, Japan or Companies having CE/FDA Certification

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Extracorporeal Shockwave Lithotripter Integrated Type</b>
Clinical Purpose	Extracorporeal shock wave lithotripsy (ESWL) is a non-invasive treatment of kidney stones (urinary calculosis) 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/freeline 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:**

<b>Type</b>	<b>ESWL</b>
<b>Shockwave generator</b>	<b>Electromagnetic/</b>
<b>Electroconductive / Piezoelectric</b>	
No. of Shockwave System:	One
Triggering Method:	Auto &
Manual	
Selection of Energy	Variable
Energy Density	
1.27mJ/mm <sup>2</sup> or better	
Penetration depth of waves:	min.
120mm	
Focal Pressure:	73 Mpa or
better	
Rate of Shockwaves:	Variable up

to 120 / minute or more

Water system:

loop, integrated

Control:

through main console and remote

closed

Both

### **IMAGING / LOCALIZATION**

Modes:

Ultrasound

Localization system

/freeline localization/Outline

X-Ray and

Inline

#### **a) X-Rays Image Intensifier**

Type:

insocentric C-arm

X-ray Generator:

Frequency inverter type

Output power generator

more

Size of I.I.:

Pickup Tube

Fluoroscopy

and 120 kV

X-ray tube focal Spot

0.6 mm

Anode Heat Storage capacity

more

Memory:

Monitor:

more

Integrated

High

7.5KW or

23cm

CCD

min.4.0 mA

Dual 0.3 /

300khu or

LIH

43cm or

#### **b) Ultrasound**

Type:	Trolley
Mounted	
Transducer:	Multi
frequency, Convex 3.5MHz	( I.O to
specify)	256 gray
Resolution	30 cm/
levels	24cm
Monitor Size:	
more	
Depth	

**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:-**

Type	1-
Integrated special motorized table	suitable for
litho & Endo urological and	diagnostic
procedure.	
	2- Tilttable
	3-
Complete with leg holders and	douche
tray.	
Height	Adjustable
Movements:	Four way

movements

Patients positing

Table top:

translucent

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

Automatic

Radio

**OPERATING CONSOLE:**

Control:

functions must be available at

console & on table.

Data storage and analysis:  
stored in the main computer

separate PC through dedicated

CD /DVD writing system or

Communication Software:

Control of all

the operating

The data will be

system or on

software. MOD /

USB recording.

DICOM-3

**POWER REQUIREMENT: -**

Voltage:

50Hz

Three phase,

**QUALITY STANDARDS: -**

ISO 9000

IEC Compliance

MDD (CE) Conformity

FDA 510K approval

Quality Certificate CE or FDA certified Origin: Europe, USA, Japan
Accessories:
Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Extracorporeal Shockwave Lithotripter Modular Type</b>
Clinical Purpose	<p>Extracorporeal shock wave lithotripsy (ESWL) is a non-invasive treatment of kidney stones<sup>[1]</sup> (urinary calculosis) and biliary calculi (stones in the gallbladder or in the liver) using an acoustic pulse.</p> <p>It is also reported to be used for salivary stones.<sup>[2]</sup> and pancreatic stones</p>

## 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 SYSTEM:

#### Type

**Shockwave generator  
Electroconductive/Piezoelectric**

No. of Shockwave System:

Triggering Method:

Manual

Selection of Energy

Energy Density

1.27mJ/mm<sup>2</sup> or better

Penetration depth of waves:

120mm

Focal spot size:  
better

Rate of Shockwaves:  
to 120 / minute or more

Water system:

loop, integrated

Control:

through main console and remote

### IMAGING / LOCALIZATION

#### ESWL

**Electromagnetic/**

One

Auto &

Variable

min.

70mm<sup>2</sup> or

Variable up

closed

Both

Modes:	X-Ray and
Ultrasound	
Localization system	Inline /free
line localization/Outline	
<b>a) X-Rays Image Intensifier</b>	
Type:	Integrated
insocentric 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.4.0 mA
and 120 kV	
X-ray tube focal Spot	Dual 0.3 to
1.5mm	
Anode Heat Storage capacity	300khu or
more	
Memory:	LIH
Monitor:	43cm or
more	
<b>b) Ultrasound</b>	
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: -**

Type 1- Special  
motorized table suitable  
for litho & Endo urological and  
diagnostic  
procedure.

with leg holders and douche tray.  
Height Adjustable  
Movements: Four way  
movements  
Patients positing Automatic  
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

CD /DVD writing system or

Communication Software:

**POWER REQUIREMENT:** -

Voltage:

50Hz

**QUALITY STANDARDS:** -

ISO 9000

IEC Compliance

MDD (CE) Conformity

FDA 510K approval

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:

Optional (if any):

software. MOD /

USB recording.

DICOM-3

Three phase,

DRAFT

--

Clinical Specialty	Urology
Generic Name	<b>Diathermy Unit</b>
Clinical Purpose	Used for Coagulation cutting and spray Coagulation

### **TECHNICAL SPECIFICATIONS**

Electrosurgical unit is a microprocessor controlled universally applicable electrosurgical with outstanding performance characteristics.

It also incorporates the latest safety technology.

#### **Technical Specification of Diathermy (Monopolar & Bipolar Diathermy)**

Cutting 1 (Pure)

Cutting 2 (Blend)

Cutting 3 (Super blend)

Forced prep

Endo Mode

Contact Coagulation

Spray Coagulation

Bipolar Coagulation

Complete with All Accessories

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:
Optional (if any):

Clinical Specialty	Urology
Generic Name	General Paediatric 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**

### **General Paediatric Surgery Set**

Scalpel Handle # 3 125MM

Scalpel Handle .STR. No 4

IRIS Scissors SQ Handle STR S/S 115MM

IRIS Scissors SQ Handle CVD S/S 115MM

Baby Metz Scissors SQ Handle STR 145MM

Baby Metz Scissors SQ Handle CVD 145MM

Kilner Skin Hook Sharp 158MM

Gillies Skin Hook Sharp SM180MM

Hartmann Mosquito FCSDEL STR 100MM

Hartmann Mosquito FCSDEL CVD 100MM

Baby CRILE Forceps DEL STR 140MM

Baby CRILE Forceps DEL CVD 140MM

CRILE Forceps STR 160MM

CRILE Forceps CVD 160MM

Rochester-Ochsner FCPS STR 1x2 140MM

Rochester-Ochsner FCPS CVD 1x2 140MM

Kocher-Ochsner Forceps STR 1X2 200MM

Kocher-Ochsner Forceps CVD 1X2 200MM

Baby-Mixter Forceps CVD 140MM

Baby-Mixter Forceps Heavy CVD 180MM

Backhaus Towel Clamp 110MM

Backhaus Towel Clamp 135MM

FoersterSponge Forcep Serr STR 245MM

FoersterSponge Forcep Serr CVD 245MM

TC Ryder Needle Holderdelserr 135MM

TC Ryder Needle Holderdelserr 175MM

TC Ryder Needle Holderdelserr 195MM  
Micro-Adson Forceps Serr 150MM  
Adson Dissecting Forcep W/O T.180MM  
Dressing Forceps STR 240MM  
Dressing Forceps CVD 240MM  
Tuttle Lung Forceps 230 MM  
Allis Forceps 4X5 155MM  
Allis Forceps 5X6 190MM  
Allis Forceps 5X6 255MM  
Babcock Tissue Forceps 155MM  
BABCOCK TISSUE FORCEPS 155MM  
BABCOCK TISSUE FORCEPS175MM  
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 135MM  
LANGENBECK RETRACTORSOLID30X10MM229MM  
LANGENBECK RETRACTORSOLID40X10MM230MM  
LANGENBECK RETRACTORSOLID43X13MM229MM  
DEAVER RETRACTOR FIG 00 22MM 215MM  
DEAVER RETRACTOR FIG 1 25MM300MM  
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  
Autoclaveable with container and  
accessories**

Forcep  
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 SCISSORS STR S/B145MM

POTTS-DE MARTEL SCISSORS25DGS/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-PEAN FORCEPS STR 200MM

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 CLAMP RING-  
HDL45DEG125MM  
DE'BAKEY COARCTAT FCPSANG15DEG50/165MM  
BABY-SATINSKY CLAMP150MM  
SATINSKY CLAMP265MM  
SATINSKY CLAMP HVY-CVD SM265MM  
DERRA PEDIATRIC FORCEPS 26MM175MM  
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  
FARABEUF 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-SERR150MM  
MAYO-HEGAR NEEDLE HOLDER200MM  
TC RYDER NEEDLE HOLDERX-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 SCISSORS60DG 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 STR 185MM  
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-HNDBLTLNG-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 RETRACTOR 90X60MM 242MM  
DOYEN RETRACTOR 120X60MM 242MM  
FRITSCH RETRACTOR #4 OPEN 46X75MM 242MM  
DEAVER RETRACTOR FIG 2 25MM 318MM  
HARNGTN 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 CLAMP 4.58MM-WIDE 270MM  
DEBAKEY TANGENTIAL CLAMP 5 75MM-W 280MM  
GLOVER MINI-BULLDOG 22/52MM  
DEBAKEY ATRAUMATIC AORTA CRSS-CLAMP 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

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>HAEMODIALYSIS MACHINE</b>

Clinical Purpose

Hemodialysis, also spelled hemodialysis, commonly called kidney dialysis or simply dialysis, is a process of purifying the blood of a person whose kidneys are not working normally. This type of dialysis achieves the extracorporeal removal of waste products such as creatinine and urea and free water from the blood when the kidneys are in a state of renal failure

### TECHNICAL SPECIFICATIONS

Various Dialysis Therapies including double needle system & Single Needle with Single Pump.  
Dialysis machine system should be open consumable types and no binding on consumable or disposable.  
Variable Bicarbonate & Acetate Concentration.  
Bicarbonate profiling with monitoring  
Variable temperature control  
Water Inlet pressure requirement: 0.5 to 6 Bar maximum  
Heparin Pump Automatic start & stop & Bolus with flow rate from 0.1-10ml/hour  
Programmable Ultra filtration with control or varying rate  
Ultra-filtration with or without diffusion  
Automatic priming with leakage



Dialysis machine with touch digital display size 10.4-  
inches or more  
Touch Display 10.4-inches or more for service  
diagnostic and calibration  
Touch Electronic control of flow rate and blood flows  
Automatic clean, disinfect and rinsing mechanism, built  
in heat disinfect system  
Should capable to record disinfection history  
Should capable to record patient data without patient  
Card  
Blood Pump: 0, 50 to 500 ml / minute  
Variable Dialysate Flow: from 300 to 700 ml  
Temperature Control: up to 39 deg. C. (Adjustable)  
Arterial Pressure Monitor  
Venous Pressure Monitor  
Ultra-filtration Rate Control: Range of UFR 0.0 to 3.00  
Kg - hour or above.  
Air Bubble Detection: Air bubble detector alarm  
threshold.  
Blood leak Detection  
Sodium profiling  
Bicarbonate profiling  
Dialysis Adequacy Monitoring (Kt/v) with graphical  
Display  
Built in Heat disinfect system  
Universal Bicarbonate Cartridge Holder  
Battery backup for at least 20-min  
220V, 50Hz

Quality Certificate CE or FDA certified  
Origin: Europe, USA, Japan

Accessories:
Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Dialyzer Reprocessor</b>
Clinical Purpose	A Dialyzer Reprocessor is an instrument used to reuse or reprocess fluids from the renal glands (kidneys). The reprocessing procedure involves cleaning, testing, filling your dialyzer with germicide, inspecting, labeling, storing

## TECHNICAL SPECIFICATIONS

Consistent reprocessing of artificial kidney.

Digital display for dialyzer type selection,  
(low flux, High flux & High Efficiency dialyzer)  
Fully automatic integrated reprocessing machine, able  
to clean, test and fill the dialyzer  
with disinfectants.

Multiple selectable programs.

Diagnostic display, alarms, automatic calculating and  
filling of sterilant into a dialyzer.

Fiber bundle volume and leak test facility.

The reprocessing time will be around 8-10 minutes for  
each dialyzer.

Average Flow rate: 1.5 – 2.0 liter per minute

Power: 220 V, 50 Hz

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>RO System</b>
Clinical Purpose	Reverse osmosis (RO) is a water purification technology that uses a semipermeable membrane to remove ions, molecules, and larger particles from drinking water . In reverse osmosis, an applied pressure is used to overcome osmotic pressure, a colligative property

**TECHNICAL SPECIFICATIONS**

**RO Water Purification System**

Locally Made and Supplied on FOR basis  
 Meets the highest industry standard (AAMI) for pure water of AAMI or greater of quality for Water to Dialysis Machines and Renal Patients for improvement in quality of life with highest innovation.

**Configuration**

RO Water Purification System to operate 06-8 Dialysis Machines

Direct feed to Dialysis Machines through UV sterilizer  
Mounted on SS305 SKID (corrosion proof)  
RO internal Plumbing HDPVC Schedule 80  
Product & Reject Flow Meters  
Product & Reject ONLINE TDS / Conductivity Meter  
Manual Operation in Case Electrical Control Panel  
Failure

**Includes Pre Treatment**

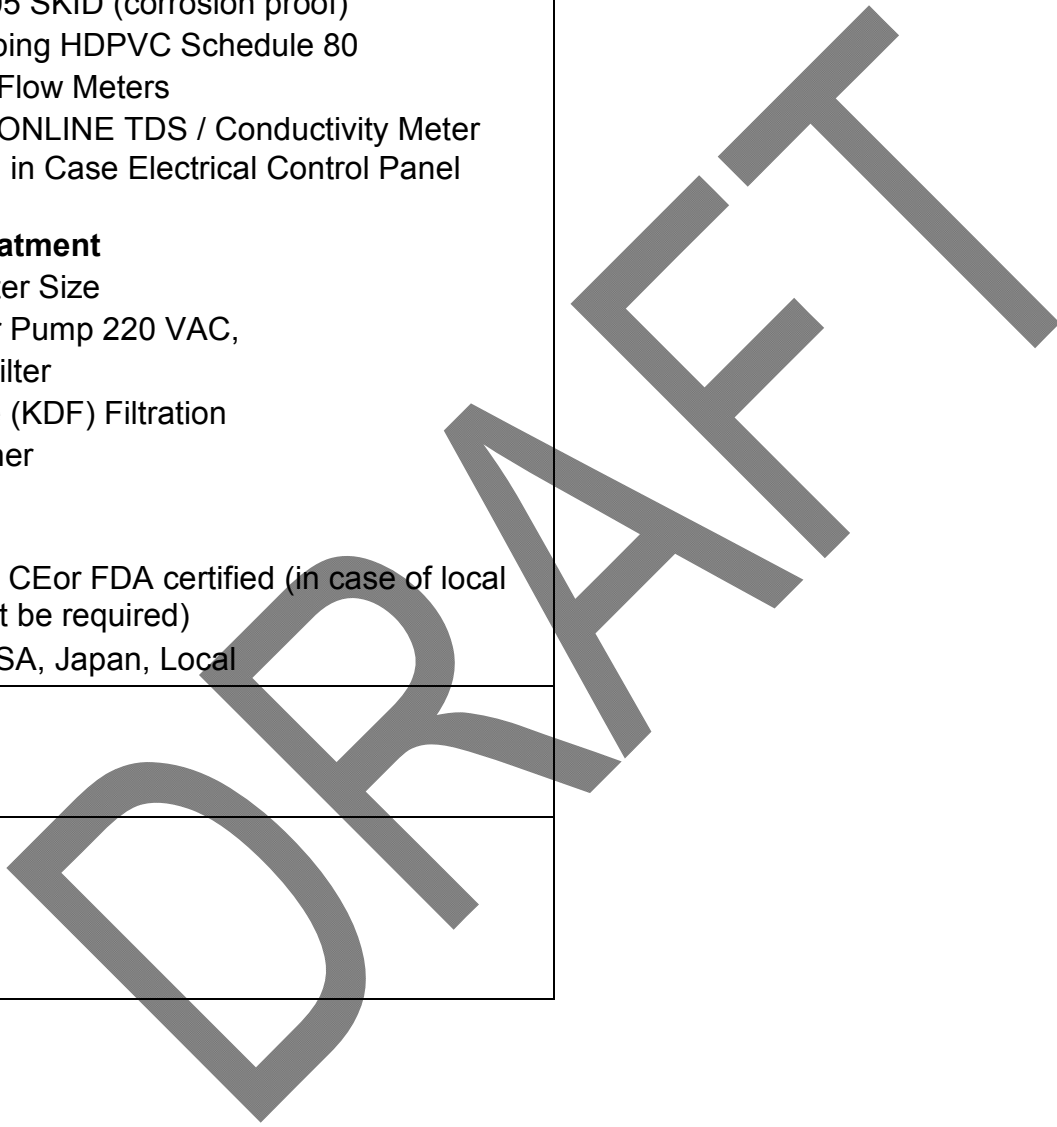
- a. Cartridge Filter Size
- b. Feed Booster Pump 220 VAC,
- c. Multimedia Filter
- d. ACF Chlorine (KDF) Filtration
- e. Water Softener
- f. UV Sterilizer

Quality Certificate CE or FDA certified (in case of local  
CE or FDA will not be required)

Origin: Europe, USA, Japan, Local

Accessories:

Optional (if any):



Clinical Specialty	Urology
Generic Name	<b>Dialysis Chair</b>
Clinical Purpose	Dialysis Chair is comfortable, easy to use and mobile. It offers healthy ergonomic seating, ideal for those patients and clients who have to spend a long time in one position when under treatment

#### **TECHNICAL SPECIFICATIONS**

Safe working load up to 200 kg or better  
 Step less adjustment from sitting to shock position  
 Step less adjustment to comfort position  
 Manually adjustable footrest  
 Hand control unit for step less adjustment  
 Folding upwards and rotatable armrests  
 Castors Ø 7.5 cm, individually lockable  
 Neck roll  
 Dimensions, length x width 200 X 75 cm  
 Armrests, length x width 65 X 12 cm  
 Upholstery, length x width x height 220 X 54 X 7 cm  
 Access height 64 cm or better  
 Adjustment range of seat inclination 46 degree  
 Seat inclination between 4 ° – 50 °

Quality Certificate CE or FDA certified Origin: Europe, USA, Japan
Accessories:
Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Surgical Lights</b>
Clinical Purpose	<p>A surgical light – also referred to as an operating light or surgical lighthouse – is a medical device intended to assist medical personnel during a surgical procedure by illuminating a local area or cavity of the patient.</p> <p>A combination of several surgical lights is often referred</p>

to as a “surgical light system

## TECHNICAL SPECIFICATIONS

### LED OT LIGHT

Light System

#### Technical Specification of OT light

Weight of light head (kg)

18

Dimensions (l x w x h)

679 x 708 x 55 mm

Lifetime of LED light source (h)

> 50.000

Rotation

360°

IP Protection class

42

Power consumption (Watt)

42

Light Intensity in 1m distance (klx)

160

Electronic brightness adjustment (klx)

40 - 160

Light field (d10) at illuminance at a distance of 1 m  
(mm) 170 - 300

Electrical light field adjustment

Ja / Yes

Colour rendering index Ra

96



Red rendering index R9

96

Depth of light field L1 + L2 (mm) 20 %

900

Increase of temperature at head height

< 1°C

Colour Temperature (Kelvin)

4900

Integrated camera (central position)

Optional (HD / SD)

Certification

CE

Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Flexible Nephroscope System &amp; Accessories</b>

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.

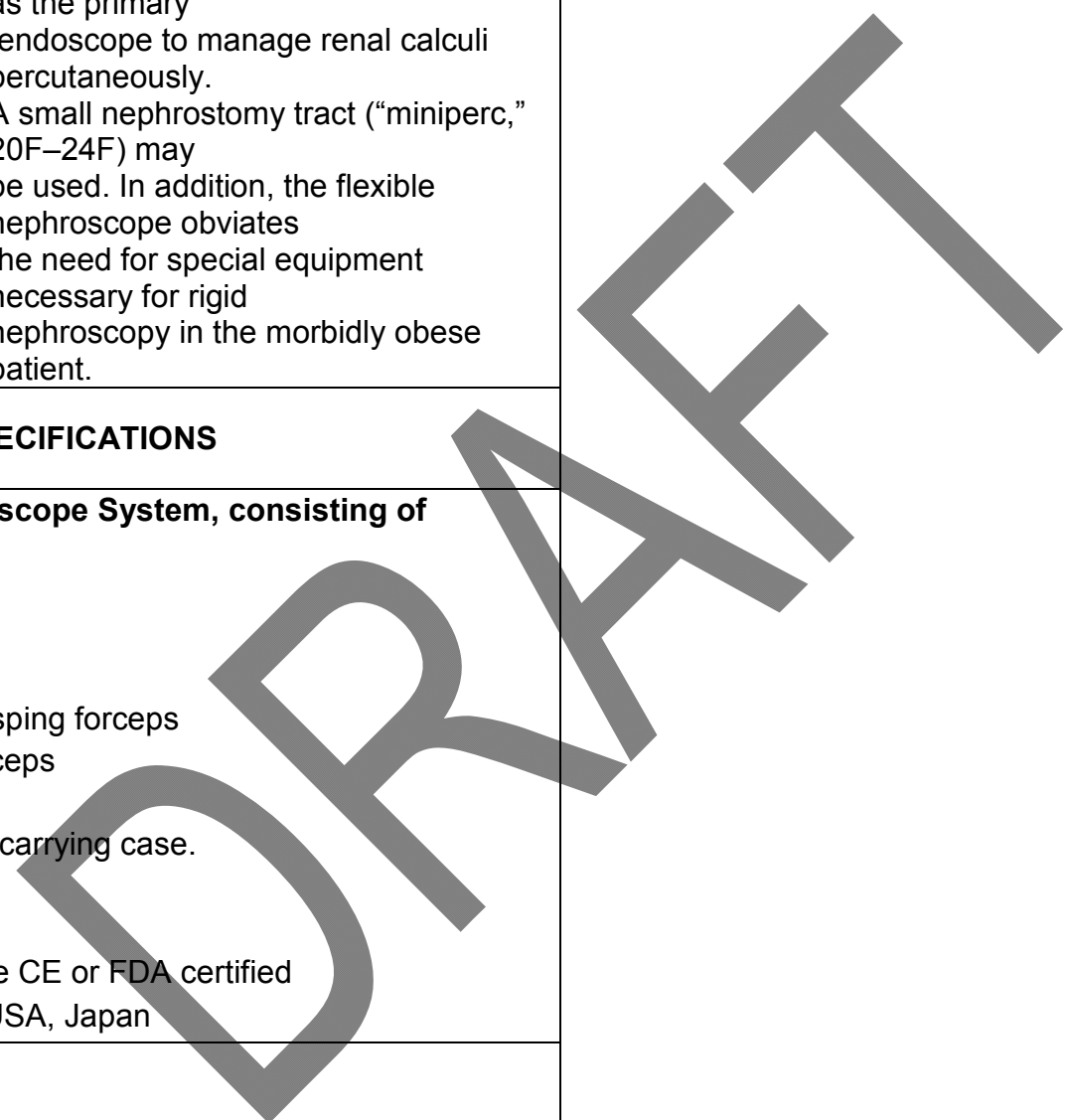
**TECHNICAL SPECIFICATIONS**

**Flexible Nephroscope System, consisting of**

- Nephroscope
- Dilatation Set
- Grasping forceps
- Biopsy forceps
- Three Prong grasping forceps
- Alligator type forceps
- Suction Tubes
- Maintenance kit, carrying case.
- Sterilizing case

Quality Certificate CE or FDA certified  
Origin: Europe, USA, Japan

Accessories:



Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>HIFU (High Intensity Focused Ultrasound)</b>
Clinical Purpose	High Intensity Focused Ultrasound (HIFU) is intended for non-invasive treatment of localized cancer of the Prostate (tumors at the T1 and/or T2 stage) for the first occurrence or in the event of local recurrence after external radiation or prostatectomy.
<b>TECHNICAL SPECIFICATIONS</b>	

The basic principle of transrectal high intensity focused ultrasound (HIFU) is the precise destruction of prostatic tissue in one session, which is achieved by depositing large amounts of energy into it. Ultrasound waves, generated by the high frequency vibration (0.5 – 10 MHz) of a transducer, are focused into a small discrete region (the focal point) and each shot lasting a few seconds creates an elementary lesion. These lesions are created by a sharp temperature rise (85 °C to 95 °C) and they take the shape of an ellipse measuring 1.7 mm width and between 19 and 26 mm height. The whole prostate is treated with between 400 and 600 elementary lesions.

The robotic probe carries out the surgeon's instructions automatically and extremely precisely (orders are accurate to within a few millimeters). HIFU treatment lasts between one and a half and two and a half hours depending on the volume of the prostate.

The ability to choose the mode of treatment - associated with a particular power algorithm is crucial and enables to give the patient the best HIFU treatment based on his medical history. HIFU can be performed on previously untreated prostates, after EBRT failure and as repeated HIFU treatment.

During HIFU treatment, the rectum wall is cooled continuously and critical safety parameters such as rectal wall temperature are monitored to avoid side-effects

such as rectal fistul

**General specifications**

Designation

HIFU

device with imaging ultrasound

Medical Application

Prostate cancer

Treatment by focused ultrasound

**Certifications**

US - FDA

Europe - CE

Canada – following DORS 98-282

**Technical description**

**Ultrasound scanner module**

Homologation

CE / 510(k) / Canada / Japon

Input voltage

230 Volts +/- 10 %

Imaging

Noir et blanc/B/W

Frequency

6,5 ± 1 MHz

Operating mode

Mode B

Data input

Clavier / Soft Keyboard/software

Video output

Prise BNC/ BNC plug

computer interface

RS 232

**Cooling system**

**Control Module**

Computer

Type	PC
voltage input V +/- 10%	230
Microprocessor Pentium 4 - 1,8GHz (min) or better	
Hard disk drive GB (min) or better	40
Memory GB (min) or better	1
Rs 232 port (min)	2
Port USB/usb port (USB2)	2
Operating system WINDOWS XP-US (SP2 min)	
Audio output (Stéréo)	1
Mouse	1
Keyboard	1
Monitor LCD (1280x1024) or better	17"
Graveur CD/CD-ROM RW drive	1
Video acquisition board: Meteor II MC/4 de Matrox (sur écran principal)/on main screen	
Imprimante/printer Colour	1
<b>Software</b>	
<b>Distributed architecture</b> Treatment safety features are controlled by internal computer devices based on a multi-task real time kernel in order to thoroughly master the response time	

Operator interface is based on a PC type Windows computer in order to facilitate user access and file legibility  
Different treatment protocols for an optimised Initial treatment therapy according to patient medical history

Treatment following a radiotherapy

Treatment following a first HIFU

Integrated patient data base for following Separate administration of patients from different sites in order to protect data confidentiality  
Possibility to export data in MDB format (Microsoft Access) to perform statistical Analysis.

Recording of JPEG images for each transverse view during the planning phase and during therapy for post-treatment analysis.

Available disk space allows for storage of 500 or more patients

Acquisition of prostatic volume in 3D. Dynamic and simultaneous viewing in the longitudinal and transverse planes to facilitate positioning in the difficult zones.

Automatic detection of the rectal wall during the planning phase in order to accelerate the procedure

Possibility to adjust the thickness of the rectal wall (3-10mm) as well as lesion height (19-24mm) in order to conform to prostate characteristics

**Integrated safety features**

movement detector

Patient

power monitoring

Emitted

monitoring of the rectum

Temperature

Verification and automatic correction of the position of the rectal wall at the moment of firing (compared to position during the planning phase).

The treatment probe includes an electronic system memorizing all its technical parameters. These are loaded at the start of a treatment thus enabling the use of a second probe while the first is being disinfected.

**Endorectal probe**

**Ultrasound imaging transducer**

**Dual Ultrasound transducer**

**integrated imaging and treatment**

Type

Electronic

Frequency

1 MHz

Scanning plane

Transversal

Transversal scanning angle

Cable length

(min)

**Treatment transducer**

Type

Piezoelectric

Frequency

± 100 KHz

6,5 ±

≥ 100°

2.2m

3 MHz



Length ± 0,1mm	59,5mm
Width ± 0,2mm	37,9mm
Focal distance	45mm
Quality Certificate CE or FDA certified Origin: Europe, USA, Japan	
Accessories:	
Optional (if any):	

Clinical Specialty	Urology
Generic Name	<b>TRAINING SIMULATOR FOR UROLOGY</b>

Clinical Purpose

Simulator allows urologists learn how to master instruments and manage complications without involving live patients. Didactic content and expert movies best techniques. Individual course allow for personalized urologic surgery training. It offers urologic surgeons a very realistic training with a wide range of prostate anatomies, pathologies and operative complications. The basic skills training with outside views guides the trainee and show the important landmarks used for orientation.

## TECHNICAL SPECIFICATIONS

### Features

Photorealistic graphics

Bleeding & Complications

Robot for best in class tactile sensation

### Use of Original Instruments

Using original tools eases

transfer of skills to the OR

Resect scope with working element for electro surgery (active and passive)

3 optics: 0°, 12°, 30°

### **Customize Training**

Variety of different training cases and pathologies available

Live performance feedback and expert-defined scoring

### **Along with**

Movable display cart with height-adjustable screen

Easy transportation

23" multi touch monitor

### **Urology training modules**

**TURP Basic Skills**

Training cases introduce beginners to trans-urethral urologic surgery.

The basic skills module teaches all skills that are necessary to successfully perform full procedures later on.

Containing different basic tasks, including visualization of important landmarks

such as verumontanum or reteral orifices, bleeding control, and partial resection of either the median lobe or the side lobes only.

This module provides understanding of the anatomic landmarks, depth perception and

hand-eye coordination during urologic surgery, and how to control flow and bleedings for a clear view.

### **TURP Full Procedures :**

Training cases offer patients with varying prostate sizes for complete trans-urethral resection of the prostate (TURP).

The full TURP cases allow trainees to get familiar with each step of complete procedures

using an original active or passive resect scope: A high

realistic scenario that eases the

transfer of skills to the OR.

Trainees need to properly manage fluid handling, coagulate bleedings throughout the entire virtual surgery, and respect delicate regions, e.g. at the bladder neck or close to the sphincter.

Helpful didactic tools like a resection map show trainees differences between prostate tissue and capsule.

#### **TURB:**

Different virtual patients with different, multiple papillary and solid bladder tumors

offer trainees the opportunity to perform complete TURB procedures in a safe environment without involving patient-related risk.

The level of difficulty of the cases differs in the type of the bladder tumors, their location and the intensity of the complications, such as bleedings and risk of perforating the thin bladder wall.

#### **Laser BPH:**

Different training cases for partial and full procedures with ThuLEP or HoLEP laser teach surgeons the removal of prostatic tissue with different endoscopic laser techniques: vaporization, enucleation, and vaporesection. Goal of the BPH education module is the learning of the different power setting applications as well as differences and benefits of advanced techniques.

Trainees gain experience in removing prostates varying from 55 to 90 grams while safely handling the laser fiber. The original instruments require safe and correct

Quality Certificate CE or FDA certified  
Origin: Europe, USA, Japan

Accessories:

Optional (if any):

Clinical Specialty	Urology
Generic Name	<b>Training Simulator for LAPROSCOPY</b>

Clinical Purpose

Simulator allows LAPROSCOPIST learn how to master instruments and manage complications without involving live patients. Didactic content and expert movies exemplify best techniques. Individual courses allow for personalized urologic surgery training. It offers laproscopic surgeons a very realistic training with a wide range of prostate anatomies, pathologies and operative complications. The basic skills training with outside views guides the trainee and shows the important landmarks used for orientation

### TECHNICAL SPECIFICATIONS

**Essential Skills & Lap Chole Software Module, Running the Bowel Software Module**

**Key Features:**

Replicates laparoscopic procedures with accurate haptic technology  
Patient cases developed using real patient data and physiological models  
Essential Skills Module includes: camera navigation, peg transfer, cutting, clipping, needle driving, and knot tying

Procedural Skills Module includes: adhesiolysis, running the bowel, suturing and knot tying, and loop ligation

General Surgical Procedures Module includes: laparoscopic appendectomy and laparoscopic cholecystectomy

OB-GYN Procedures Module includes: minimally invasive bilateral tubal occlusion, tubal ectopic pregnancy, and salpingo-oophorectomy  
Ability to use two instruments with six degrees of freedom

Includes two pairs of handle attachments: pistol grip attachments and suturing attachments

Instructor has ability to restrict instrument selection on either hand

Camera includes five degrees of freedom, adjustable virtual lenses, and image capture

Dual foot pedal for electro-surgery and advanced energy devices

Software includes didactic content for tasks, covering training objectives, instructions, demos, case history, pre-procedures, parameters, and post-procedures

Software includes metrics to track time, proficiency, dexterity and complications on each task and compare a learner's results with the instructor's established acceptable results

Software compiles usage summaries for learners containing metrics on duration, and skills and cases completed

Ability to customize certain case parameters to match the learner's skill level and interests.



Quality Certificate CE or FDA certified

Origin: Europe, USA, Japan

Accessories:

Optional (if any):

DRAFT