

LIST OF EQUIPMENT FOR THE DEPARTMENT OF OBST. & GYNAECOLOGY

1. Colposcope
2. Open Care Radiant Warmer
3. Advance Vessel Sealer device
4. CTG Machine
5. Operating Loupe
6. Phototherapy machine
7. Tuboplasty instrument set
8. Mycomectomy instrument set
9. Hysteromat
10. Cut down set
11. Postpartum ligation set
12. *Cayo cautery*



① **Colposcope:**

**Latest HD Colposcope**

- Full HD Technology with CMOS Sensor
- 1080p Resolution Sony Sensor (1920x1080)
- Aspect Ratio 16:9
- 21.2 Mega Pixels
- No need of Dongle & Capture Card
- Multiple Grades of green Filter
- Recommended Lamp life 50000 hours
- Highest quality 1-52x Magnification
- Progressive Scanning Lines
- Latest Digital Matrix Processor
- Fine Advance & fast Auto/Manual focus – Fine Technology
- E Flips & Mirror image Facility
- Display of genuine tissue color and tone
- Corner to Corner Uniform Brightness
- Real time display of magnification
- Acetic acid Test Timer
- Electronic Green Filter with no light loss  
Minimum Illumination 0.1 Lux.

**Multi-function Image processing software.**

- Designed according to the guidelines of IFC
- Integrated Management of View Examination, image capture & Freeze, Recording, Observation, Processing.
- Can be integrated to LAN and HIS
- Reference pictures library to help user
- Statistics mode with automatic flow chart facility is provided.
- Printing of Multi Format photo report with Hammond graph Report
- Powerful Comparison to compare
- Colposcopy REID Evaluation

② **Technical Specification : Radiant Warmer :**

**(Open Care System with resuscitator, Venturi suction & Auxiliary Oxygen)**

**Controller**

Electronics	: High Speed Micro Controller
Mode of Operation	: Air, Servo Skin (Two Probes), Manual, Pre-warm & Safe
Skin Mode Control Range	: 30.0° C – 38.0° C
Air Mode Control Range	: 20.0° C – 38.0° C
APGAR Timer	: Alerts at 1, 5, 10, 15 & 20 min (selectable)
Manual Mode Timer	: 1 min – 15 min (selectable)
% of Heater output	: 10% to 100% in 10% increment
Memory Back Up	: Equipment restores the previous settings
Programmable Mute Time	: User can select the mute time
Safety Heater Cut off	: If the skin sensor is removed from the Baby's skin
Over Temp Heater Cut Off	: If the skin temperature is > 39° C in any Skin/Manual Mode
Temperature Sensor	: Thermister Sensor
Accuracy of Skin / Air Sensor	: ± 0.1° C
Accuracy of Skin / Air Probe	: ± 0.2° C
Interchangeability	: ± 0.2° C
Calibration of Skin Probe	: No need of calibration after changing new probe
Heater element	: Quartz Infrared Heater
Power Rating	: ~ 230 V, 50 Hz, 700 W
Maximum Heater Wattage	: 600 Watt
Maximum Power requirement	: 700 Watt
Examination Lights	: Halogen / LED Bulb
X Ray facility	: Underneath the bed
Mattress tilt	: ± 15° on both sides
Mattress Tray	: Transparent acrylic
IV pole	: Max load 2.2 Kg
Castor wheels	: 4" dia, 4 no.s (two with brake and two without brake)
Vital Monitor shelf	: 1 no. Swivel and 1 no. fixed
Operating noise level	: < 50dbA

**Controller Alarms**

Skin Temp High	: >1.0° C from the set temp
Skin Temp Low	: <1.0° C from the set temp
Air Temp High	: >1.0° C from the set temp
Air Temp Low	: <1.0° C from the set temp
Skin Temp probe fail	: If short or open circuit OR No probe
Over temp	: If the skin temp is > 39° C in any mode
Heater Fail	: If Heater defects
System Fail	: Indicates System fail
Power Fail	: If AC power interruption

**Resuscitation Module**

Cylinder Type	: 480 Litres, Pin-Index A Type Flow Regulator (Optional)
Wall supply pressure	: 40 – 75 psi (275 -517 kPa)
Cylinder Pressure	: 2,900 psi max (19.994 kPa)
Pressure Gauge	: 0 – 150 Kg/cm <sup>2</sup>

**Patient Gas Supply**

Flow control range	: 5 – 15 LPM
Manometer Range	: -20 to 100 cm H <sub>2</sub> O

### **Airway Ventilation**

Breathing Rate : Manual Control  
Max. Pressure Relief @ 7 LPM : 4 – 66 cm H<sub>2</sub>O  
Peak Inspiratory Pressure  
(PIP) @ 7 LPM : 4 – 66 cm H<sub>2</sub>O  
Positive End Expiratory Pressure  
(PEEP) @ 7 LPM : 1 to 10 cm H<sub>2</sub>O  
Delivered Oxygen  
Concentration : up to 100% depending on the gas supply  
: 21 – 100%, if Blender(optional) is used  
Patient Circuit : Disposable  
Auxiliary O<sub>2</sub> flow range : 0 – 15 LPM

### **Suction Circuit**

Suction Control : O<sub>2</sub> achieved Ventury Slow Suction with adjustable control valve  
Max. Suction : 0 – 400 mmHg  
Vacuum Gauge : 0 – 760 mmHg  
Reusable Collection Container : 500 ml

### **Physical Characteristics ( approx. dimensions) .**

Equipment : 109 cm (L) x 68 cm (W) x 192 cm (H)  
Weight : 81 Kg  
Mattress : 73 cm (L) x 51 cm (W) x 2 cm (H)  
Mattress from Floor : 95 cm  
Maxm. Load : 10 Kg  
Side panels : Aluminium hinged 4 no.s Acrylic Panel  
Swivel Monitor Tray : 32 cm (L) x 25 cm (W) x 3 cm (H)  
Maxm. Load : 4.5 Kg  
Heater Module Swivel : ± 90° on both sides

### **Environment Reading**

Operating Temperature : 15.0° C to 35.0° C  
Storage Temperature : -10.0° C to 60.0° C  
Operating Humidity : 15% to 90% RH, non condensing  
Storage Humidity : 15% to 90% RH, non condensing  
Altitude : Sea Level to 1.6 Km to 14.4 Km

### **Quality and Test approval**

Quality : ISO 9001 : 2008 & ISO 13485 : 2012  
Electrical & Product Safety : IEC 60601 – 1 & IEC 60601 – 1 -2  
: IEC 60601 – 2 - 50 & IEC 60601 – 2 -21

Type of protection against  
Electric shock : Class I  
Degree of protection against  
Electric shock : Type B  
Product Classification : Class II b  
CE Approval

### ③ Technical specifications for Advanced Vessel sealer device :

- Single screen LCD display with four inbuilt quadrants & touch screen
- Cooling Natural convection and fan
- Connector receptacles LED illuminated connector readers on the sealer / Bipolar receptacle.
- Enclosure Magnesium
- Operating System Linux
- Generator should have TissueFect™ Tissue Sensing Technology which can read tissue: 434,000 times per second
- Software Upgradeable
- Generator should have WiFi capabilities.
- Serial port connection
- Bipolar Cable Compensation Reads cable length and width for consistent ES output
- Generator should have soft coag feature.
- Lower max jaw temperatures
- faster sealing times (1-4 seconds)
- Automatic power settings
- Simple, intuitive controls and information displays
- Auto bipolar feature; 328 ms at 0 second delay setting.
- Auto Bipolar Specifications Duration

Interrogation Frequency 434 kHz

Interrogation Current < 10  $\mu$ ARMS averaged over 1 second


Interrogation Voltage < 12 VRMS

Activation Impedance < 2200  $\Omega$  •} 20%

Deactivation Impedance > 4000  $\Omega$  •} 20%

Keying Delay User selectable in 0.5 second increments from 0 sec. to 2.5 sec.

- Minimum Power 1 W
- The technology allows rapid dynamic sensing of cable impedance thus adjusting cable compensation to allow for power delivery to tissue regardless of cable type that is used.
- The generator should be capable of having multistage algorithm which reduces the need for manual bar settings
- The system should produce six effects of Monopolar power output.
  
- The generator should have inbuilt bipolar resection function.
  
- The generator should be capable of operating a duty cycle of 25%, defined as 10 seconds active And 30 seconds inactive, in any mode for a period of four hours.
  
- Generator should have RFID compatibility.
- Should be compatible with Argon Plasma and smoke evacuator.
- Should be US FDA approved for & upto 7mm vessel sealing.
- Generator should support the adaptive Return electrode monitoring technology to prevent patient burns.
- Should be supplied with the below mentioned FDA approved hand instruments :

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- Open Instrument Length: 18.8 cm Seal Length: 16.5 mm Cut Length: 14.7 mm Jaw Angle: 28 degrees .... 01 unit
  - Lap instrument with 37 cm shaft length, 13mm wide jaw aperture, 20mm jaw length & 350 degrees shaft rotation, cut length 18 mm.... 01 unit
  - Open instrument with 18 cm shaft length, 13mm wide jaw aperture, 36mm jaw length & 180 degrees shaft rotation, cut length 34 mm.... 01 unit
  - Lap instrument Maryland with 37 cm shaft length, & 359 degrees shaft rotation, cut length 18 mm seal length 20mm.... 02 unit.
  - Laparoscopic 10mm Hand instrument-----2 pcs.
  - Open Repposable hand instrument with seal length more than 17mm and cut length more than 15mm-----1pcs
  - Electrode for Repposable hand instrument-----6 pcs.

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④ **CTG Machine – Fetal Monitor:**

For Fetal Heart Rate ; TOCO & Fetal Movement  
Screen size minm 12”

Programmable alarm on probe off position & abnormal FHR

Built in thermal printer with 10 Rolls of paper & 10 tubes of jelly

Optional: Twin monitoring function

Equipment should be European CE / FDA approved

Price of: Thermal paper & Jelley to be quoted separately

⑤ **Operating Loupe:**

2.5X Magnification

European CE / FDA Approved

⑥ **Phototherapy Machine:**

Portable Mobile LED Phototherapy Unit

Intensity control facility manually from 15-70 microwatts;

Analogue timer ; Eye Guard ( 100 nos)

Minm 24 Blue LED for treatment & White LED Light for observation

Option: Double surface to be quoted as optional with baby trolley

Price of Eye Guard as spare to be offered separately

Equipment should be ISO ; CE Certified

⑦ **Tuboplasty Instrument Set :**

⑧ **Mycomectomy Instrument Set**

⑨ **Hysteromat**

⑩ **Cut Down set**

⑪ **Postpartum Ligation set**

Item SI. No. 49

**SPECIFICATION FOR HYSTEROMAT SUCTION IRRIGATION SYSTEM**

**Special features : COMPLETE UNIT ALONGWITH ACCESSORIES**

- Suction and irrigation system for use in laparoscopy and gynecology
- Irrigation function is performed by reel pump
- Maximum parameters for Laparoscopy and Hysteroscopy mode are automatically fixed by the choice of the tubing set
- Precise presetting of suction and irrigation parameters via touch keys
- Adjacent display scales for set values and actual value ensure safe monitoring of suction and irrigation levels

**Technical specifications :**

**Irrigation :-**

**With pressure control** - 0-200 mmHg (for Hysteroscopy) & 0-400 mmHg (for Laparoscopy)

**with flow control** - -500 mmHg (for Hysteroscopy) & 0-1000 mmHg (for Laparoscopy)

**Suction :-**

Regulated - Hysteroscopy mode – 0-0.5 (50 kPa) & Laparoscopy mode – 0-0.8 (80kPa)

Certified to - IEC 601 –1 CE label according to MDD

Should be compatible to the Communicating Computer System, so as to function as an integral part of the digitally controlled Operating Room under the command of the operating Surgeon

**Should be USFDA approved.**

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Item Sl. No. 012

Specifications for Cryocautry

- SUPER DELUXE SILENCER GUN,
- Hand Operated, with on off switch
- Interchangeable probe connection facility,
- combined unit for GYNAEC, GENERAL SURGERY, E.N.T., & DERM applications with one probe attached to it, spare washers & Carrying case