

Nursery & Pediatric

Umbilical Cord Clamp

No.	Item Specifications
1	Technical Specifications
1.1	Standard specifications
1.2	Box of 50 Pcs.
1.3	Sterile.

Baby Cot

No.	Item Specifications
1	Description of Function
1.1	Basic baby cot on castors for use in wards and delivery rooms of healthcare facilities.
2	Operational Requirements
2.1	Mobile baby cot with removable bassinet.
3	System Configuration
3.1	Baby cot with bassinet on castors.
4	Technical Specifications
4.1	Mounted on 4 swivel anti-static castors, of which two with brakes.
4.2	With padded mattress, detachable for easy cleaning.
4.3	Mattress cover removable via side zipper.
4.4	Basinet sets and removes smoothly from cart frame.
4.5	Materials:
	☐ High resistance to corrosion (tropical environment).
	☐ Frame: Epoxy oven baked powder coated tubular steel.
	☐ Mattress: High-density polyurethane foam with density approx. 20 kg/m3.
	☐ Cover: Plastic, flexible highly tear resistant, anti-static, flame retardant, disinfectant- and liquid proof, washable.
4.6	Dimensions, Approx. + 10%:
	☐ Frame: 800 x 400 x 900mm (l x w x h).
	☐ Bassinet: 800 x 400 x 300mm (l x w x h).
	☐ Frame, diameter: 30mm.
	☐ Mattress: 70mm (h)
	☐ Swivel castors, diameter: 50mm.
	☐ Carrying capacity: 30kg.
5	Accessories, spares and consumables
5.1	All standard accessories/consumables/parts required for the proper operation of the above item shall be included in the offer.
6	Operating Environment
6.1	The system offered must be designed to store and be operated normally under the condition include Climate, temperature and relative humidity for Sudan.
7	Standards and Safety Requirements
7.1	Must be USFDA or CE or TUV approved product
7.2	This unit shall be certified to meet ISO9001 and/or ISO14971 and/or ISO 13485:2003/AC: 2007.
8	Warranty
8.1	Warranty for 1 year.
9	Maintenance Service During Warranty Period
9.1	Standard warranty conditions are applicable.
10	Installation and Commissioning
10.1	Must supply preassembled unit, ready to use.
11	Documentation
11.1	User's manual shall be supplied in English.

Infant Incubator

No.	Item Specifications
1	Description of Function
1.1	An infant incubator provides a closed, controlled environment that warms an infant by circulating heated air over the skin. The heat is then absorbed into the body by tissue conduction and blood convection. Ideally, both the skin and core temperatures must be maintained with only minor variations.
2	Operational Requirements

2.1	High quality with humidity and servo controlled double walled with cabinet incubator. The quality of the material shall be very high and crystal transparent.
3 System Configuration	
3.1	Infant Incubator Servo Control, complete unit with all standard accessories.
4 Technical Specifications	
4.1	Microprocessor controlled, easy access control panel with feather touch switches. Facility for self-test function.
4.2	Shall have facility to elevate base to offer adjustable range.
4.3	Facility with both servo control as well as air temperature control and servo humidifier.
4.4	Shall have Oxygen port with tubing.
4.5	Continuous bed tilt up to 8° on either sides
4.6	Head end raise facility with auto lock.
	Both visual and audible alarms for:
4.7	☐ High / low temperature.
	☐ Air circulation / probe / system / power failure.
	☐ Humidity control.
4.8	Head end raise facility with auto lock.
4.9	Facility to take x-ray and weight without removing baby.
4.1	Facility to display and trending of temperature information on compatible monitors with other physiological parameters.
4.11	Height 140 +/- 5 cm, depth at least 60 mm, width at least 90 mm.
4.12	Mattress to hood distance (approx.) 40 cm.
4.13	Working level (approx.): 90 to 100 cm.
4.14	Iris port for tubing, leads, probes.
4.15	Gel mattress (approx.) 4 cm. thick and easily washable.
4.16	With at least 4" dia. castors wheel with swivel in all directions and with front lockable wheels. Two shelves cabinets with door.
4.17	Weight (approx.) 90-100 kg.
4.18	Patient control (Servo) mode, 35 oC to 37 oC and Air control (manual mode), 20 oC to 37 oC
4.19	Air velocity less than 10 cm/sec with inner wall.
4.2	Temperature variability less than +/- 0.2 oC. and temperature resolution +/- 1 oC.
4.21	Average oxygen input concentration range 5-15 litres/min or 25-70%.
4.22	Humidification:
	☐ Standard: 10-75% dependent on nursery environment and incubator temperature setting.
	☐ Servo: 40-80% regardless of nursery environment.
4.23	Double wall canopy with six hand ports.
4.24	Shall accommodate IV pole.
4.25	CO2 flushing, according to IEC 60601-2-19 / 105.1 Maximum CO2 concentration inside incubator 0.2%.
4.26	Servo control for Oxygen with integrated monitoring.
4.27	Noise level < 49 dB.
5	Accessories, spares and consumables
5.1	Accessories:
	☐ Two sets of extra mattresses.
	☐ Two sets of extra sensors.
5.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.
6 Operating Environment	
6.1	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.
6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.
7 Standards and Safety Requirements	
7.1	Must submit ISO13485:2003/AC:2007 for Medical Devices AND
7.2	CE (93/42 EEC Directives) or USFDA approved product certificate.
7.3	Shall meet IEC 60601-2-50 Medical Electrical Equipment PART 2: Particular Requirements for the Safety of Baby Incubators.
8 User Training	
8.1	Must provide user training (including how to use and maintain the equipment).
9 Warranty	
9.1	Comprehensive warranty for 2 years after acceptance.
10 Maintenance Service during Warranty Period	
10.1	During warranty period supplier must ensure preventive maintenance corrective/breakdown maintenance whenever required.

11	Documentation
11.1	User (Operating) manual in English.
11.2	Service (Technical / Maintenance) manual in English.
11.3	List of important spare parts and accessories with their part numbers and costing.
11.4	Certificate of calibration and inspection from factory.

Infant Portable Ventilator

No.	Item Specifications
1	Unit to be used for child and infant ventilation during cardiopulmonary resuscitation and for ventilation during transportation when necessary.
2	To have frequency control 1 – 150 bpm breaths per minute.
3	Tidal volume control 5 - 100 ml.
4	Inflation pressure monitor 0 to 100 cm H ₂ O.
5	Air mix control zero to 70% air mixture,
6	Adjustable relief pressure with audible alarm 20 to 80 cm H ₂ O
7	PEEP facility 0 to 10 or 15 cm H ₂ O.
8	To be supplied with a sling to enable the user to carry the unit easily and a patient circuit 1.25m long 15mm single bore silicone hose Autoclavable
9	Must have at least 1 hour of built in battery back-up for the complete ventilator including compressed Air Source.
10	The ventilator should be compatible with DC power cables for powering the ventilator from Ambulance Cigarette lighter power supply.
11	Operating Environment
11.1	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.
11.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.
12	Standards and Safety Requirements
12.1	Must submit ISO13485:2003/AC:2007 for Medical Devices AND
12.2	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.
12.3	Shall meet IEC 60601-2-50 Medical Electrical Equipment PART 2: Particular Requirements for the Safety of Baby Incubators.
13	User Training
13.1	Must provide user training (including how to use and maintain the equipment).
14	Warranty
14.1	Comprehensive warranty for 2 years after acceptance.
15	Maintenance Service during Warranty Period
15.1	During warranty period supplier must ensure preventive maintenance corrective/breakdown maintenance whenever required.
16	Documentation
16.1	User (Operating) manual in English.
16.2	Service (Technical / Maintenance) manual in English.
16.3	List of important spare parts and accessories with their part numbers and costing.
16.4	Certificate of calibration and inspection from factory.

Infant Ventilator

No.	Item Specifications
1	Description of Function
1.1	Only Paediatric/Infant Ventilators provide artificial respiration support to infants and neonates in ICU/Wards & not to be used for Adult.
2	Operational Requirements
2.1	☐ The Infant Paediatric ventilator must be easy to operate and must incorporate safety alarms and backup ventilation.
	☐ Microprocessor Controlled integrated suitable for neonate and child ventilation.
3	System Configuration
3.1	Ventilator-Paediatric & Infant with Built in Medical Air Compressor and with complete accessories or Turbine.
4	Technical Specifications
4.1	Must have not less than 10 inch colour Digital screen for monitoring of the ventilation parameters, curves and loops
4.2	Automatic compliance & Leakage compensation for circuit and ET tube

4.3	Must have the facilities for following setting for neonate to child:
	☐ Tidal Volume
	☐ Flow Pattern
	☐ Inspiration Plateau
	☐ Pressure ramp
	☐ SIMV Rate
	☐ CPAP/PEEP
	☐ Pressure Support
	☐ FiO2
	☐ Pause Time
	☐ Inspiration trigger sensitivity to flow & pressure
	☐ Base Flow
	☐ Sensitivity for cycling to expiration
4.4	Must have the capability of monitoring of the following parameters:
	☐ Airway Pressure
	☐ Expired tidal Volume
	☐ Minute Volume
	☐ Spontaneous Minute Volume
	☐ Total Frequency
	☐ Fio2
	☐ Auto PEEP
	☐ Rapid Shallow Breathing Index
	☐ Plateau Pressure
	☐ Inspiratory & Expiratory Resistance
	☐ Static Compliance
	☐ Imposed Work of Breathing
	☐ Peak, Plateau and mean airway pressure
4.5	Must have the Alarms for all the measured and monitored parameters.
4.6	☐ Must have the following Modes of ventilations:
	☐ Volume controlled
	☐ Pressure controlled
	☐ Pressure support
	☐ SIMV (Pressure Control and volume control) with pressure support.
	☐ CPAP/PEEP (0 – 50 CM H2O)
	☐ Auto mode /Auto flow preferable
	☐ PRVC
	☐ Biphasic preferable
	☐ High frequency ventilation
4.7	Sensors must be automatically calibrated every time it is switched on
4.8	Must have the ability to calculate:
	☐ Intrinsic Peep
	☐ Occlusion Pressure
	☐ Negative Inspiratory force
4.9	If Medical Air Compressor:
	☐ Imported Built in Medical Air compressor
	☐ Snap fit with the Ventilator module to provide an oil free Medical air .
	☐ Peak output flow must be minimum 160 LPM.
	☐ Air quality must comply with ISO compressed air purity class.
	☐ Medical Air Compressor must automatically activate in the event of wall air supply loss.
	☐ Replacement of internal filters must be performed without removing the compressor
	☐ Must have washable air filter.
5 Accessories, spares and consumables	
5.1	Accessories:
	☐ Humidifier -Servo controlled with digital monitoring of inspired gas temperature complete with heating wire-01 no.
	☐ Nebulizer compatible with ventilator-01
	☐ Medical Air Compressor-01 no.
	☐ Air Hose-01 no.
	☐ Oxygen Hose-01 no.
	☐ Paediatric autoclaveable/reusable silicon breathing circuit-02 nos.
	☐ Infant autoclaveable/reusable silicone breathing circuit-02 nos.
	☐ Filter paper for humidifier for 100 uses

	☐ Non corrosive trolley and hinged arm: 01no.
5.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.
6 Operating Environment	
6.1	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.
6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.
7 Standards and Safety Requirements	
7.1	Must submit ISO13485:2003/AC:2007 for Medical Devices AND
7.2	CE (93/42 EEC Directives) or USFDA approved product certificate.
7.3	Certified to be compliant with ANSI/IEC60601.2.12-01 Medical Electrical Equipment—Part 2-12; Particular Requirements for the Safety of Lung Ventilators—Critical Care Ventilators.
7.4	Must meet IEC 529 Level 3 (IP3X) (spraying water) for enclosure protection , water ingress.
7.5	Certified to be compliant with ISO-7767 for Oxygen monitoring.
8 User Training	
8.1	Must provide user training (including how to use and maintain the equipment).
9 Warranty	
9.1	Comprehensive warranty for 2 years.
10 Maintenance Service During Warranty Period	
10.1	During the warranty period supplier must ensure planned preventive maintenance (PPM) along with corrective/breakdown maintenance whenever required.
11 Documentation	
11.1	User (Operating) manual in English.
11.2	Service (Technical / Maintenance) manual in English.
11.3	List of important spare parts and accessories with their part numbers and costing.
11.4	Certificate of calibration and inspection from factory.

Over head heater (Infant Warmer)

No.	Item Specifications
1 Description of Function	
1.1	A radiant warmer is used to keep the patient's core temperature stable at 37 oC.
2 Operational Requirements	
2.1	It shall be microprocessor controlled radiant warmer with manual and servo options.
3 System Configuration	
3.1	Radiant Warmer with Baby Bassinet, complete unit with all standard accessories.
4 Technical Specifications	
4.1	It must have facility to display both skin and air (ambient) temperature separately.
4.2	It shall have audio-visual alarm facilities for:
	☐ Overheating beyond set temperature range.
	☐ Patient temperature less than or greater than the required temperature i.e. above or below the set range.
	☐ Power failure.
	☐ Heater failure.
	☐ Probe failure.
	☐ Time out alarm in manual mode.
4.3	It must have manual setting for high and low alarm setting.
4.4	It must rotate and swivel in different direction, so as to allow taking X-ray.
4.5	The light must be dazzle free.
4.6	It must have preferably inbuilt rechargeable battery to run equipment in case of power failure for at least 30 min.
4.7	In servo mode, the heater output must be controlled to maintain the baby at the required set temperature.
4.8	In manual mode, the heater output must be directly controlled by a setting on the front panel.
4.9	The desired temperature range from 25 to 40 oC.
4.1	The resolution must be 0.1 oC.
4.11	The height of the warmer must be adjustable for different types of bed.
4.12	Halogen based observation light must be provided for observing the baby.
4.13	It must be mounted on a pole with sturdy base with lockable castors.
5 Accessories, spares and consumables	
5.1	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.
6 Operating Environment	

6.1	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.
6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.
7	Standards and Safety Requirements
7.1	Must submit ISO13485:2003/AC:2007 for Medical Devices AND
7.2	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.
7.3	Shall meet IEC 60601-2-21 Medical Electrical Equipment PART 2: Particular Requirements for the Safety of Infant Radiant Warmers.
8	User Training
8.1	Must provide user training (including how to use and maintain the equipment).
9	Warranty
9.1	Comprehensive warranty for 2 years after acceptance.
10	Maintenance Service during Warranty Period
10.1	During warranty period supplier must ensure corrective/breakdown maintenance whenever required.
11	Documentation
11.1	User (Operating) manual in English.
11.2	Service (Technical / Maintenance) manual in English.
11.3	List of important spare parts and accessories with their part numbers and costing.
11.4	Certificate of calibration and inspection from factory.

Infant Transport Incubator

No.	Item Specifications
1	Description of Function
1.1	Required for transportation of premature babies and neonates and it can be used for long distance transportation.
2	Operational Requirements
2.1	It shall be self-contained mobile intensive care station including power supply unit and infusion stand.
3	System Configuration
3.1	Transport Incubator, complete unit with all standard accessories.
4	Technical Specifications
4.1	Microprocessor controlled, easy access control panel with feather touch switches.
4.2	It shall be mounted on collapsible trolley having lockable rust free casters of the size 4 inches dia. or more and with facility to mount two A type Aluminium oxygen cylinders on rack under the Incubator .
4.3	Single walled incubators with at least two large pot holes for access. Iris ports for ventilator & other tubings. Bed level at least 80 cm. above ground level. Two shelves cabinet with door.
4.4	Mattress to hood distance at least 30 cm.
4.5	Air Mode: Adjustable set temperatures between 20 oC to 39 oC. Display of set temperatures with resolution of 0.1 oC . Skin mode adjustable set temperatures between 34 oC to 38 oC . Display of set temperatures with resolution of 0.1 oC.
4.6	Alarms of high, low and probe failure for the set air mode up to +2.5 oC and skin mode of + 0.5 oC of temperatures.
4.7	Oxygen monitor in incubator hood with display of 21 to 100% Oxygen alarms for high, low and probe failure.
4.8	Heart and Oxygen saturation monitor: Fixed, built monitors, dual wavelength probe for Oxygen saturation with digital LED display for Heart rate and Oxygen saturation. Alarms for high and low for Heart Rate, Oxygen saturation and probe failure.
4.9	The system must have an internal rechargeable maintenance free battery to ensure continued functioning of the unit for at least 3 hours during transport. It shall have automatic switch circuit for change over from battery to AC and vice versa.
4.1	One suction apparatus with negative suction pressure of 5- 120 mm Hg must be provided.
4.11	Shall provide IV fluid stand to support two infusion bottles.
4.12	One Syringe infusion pump with stand compatible with 10, 20, and 50 ml syringes compatible with available brand of syringes. Range of infusion rate 1to 99 ml / hr.in steps of 0.1ml. Shall have display functions for infusion rates, alarms for occlusions, end of infusion and it shall have internal rechargeable battery.
4.13	Overall Dimensions with trolley (approx.):
	☐ Height less than 60”.
	☐ Depth less than 30”.
	☐ Width 33”-36”.
	☐ Weight 90-100 kg or less.
5	Accessories, spares and consumables

5.1	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.
6 Operating Environment	
6.1	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.
6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.
7 Standards and Safety Requirements	
7.1	Must submit ISO13485:2003/AC:2007 for Medical Devices AND
7.2	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.
7.3	Shall meet IEC 60601-2-50 Medical Electrical Equipment PART 2: Particular Requirements for the Safety of Baby Incubators.
8 User Training	
8.1	Must provide user training (including how to use and maintain the equipment).
9 Warranty	
9.1	Comprehensive warranty for 2 years after acceptance.
10 Maintenance Service during Warranty Period	
10.1	During warranty period supplier must ensure preventive maintenance corrective/breakdown maintenance whenever required.
11 Documentation	
11.1	User (Operating) manual in English.
11.2	Service (Technical / Maintenance) manual in English.
11.3	List of important spare parts and accessories with their part numbers and costing.
11.4	Certificate of calibration and inspection from factory.

Feeding Pump

No.	Specifications
1	Description of Function
1.1	Enteral Feeding Pump uses the gastrointestinal tract for the delivery of nutrients with the help of a pump and infusion tube.
2	Operational Requirements
2.1	Must be able to deliver the nutrients for desired dose limits for desired timings and must automatically stop thereafter.
3	3 System Configuration
3.1	Enteral feeding pump with rechargeable battery and complete with accessories.
4	Technical Specifications
4.1	Must be able to deliver feeding rate 1 - 300 ml/hour.
4.2	Must have facility to programme Feeding Limits from 1 - 9999 ml.
4.3	Delivery of Feeding must automatically stop with audio & visual alarm when Volume Administered reaches the Dose Limit.
4.4	There must be continuous display on Bright Backlit LCD display giving information of Flow rate, Volume delivered, Dose limit programmed as well as Alarm conditions such as Empty container, Occlusion, Dose limit reached, Low battery, Technical failure etc.
4.5	The pumping mechanism must be rotary peristaltic type to ensure good flow rate accuracy.
4.6	Each pump must be supplied with at least 100 Infusion Sets (in lots of 25 each or as per requirement) and separate price of the infusion set must be also indicated.
4.7	The pump must be complete with Integrated Pole Clamp for mounting on IV Stand.
4.8	Battery backup 5 - 6 hours
5	Accessories, spares and consumables
5.1	Accessories:
	☑ Feeding bags- 100 pieces
5.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).
6 Operating Environment	
6.1	The system offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.
6.2	Power supply: 220 – 240 VAC, 50Hz single phase fitted with appropriate plug. The power cable must be at least 3 metre in length.
7 Standards and Safety Requirements	
7.1	Must submit ISO13485:2003/AC:2007 for Medical Devices AND
7.2	CE (93/42 EEC Directives) or USFDA approved product certificate.

7.3	Electrical safety conforms to standards for electrical safety IEC-60601.
8	User Training
8.1	Must provide user training (including how to use and maintain the equipment).
9	Warranty
9.1	Comprehensive warranty for 2 years after acceptance.
10	Maintenance Service During Warranty Period
10.1	During the warranty period supplier must ensure planned preventive maintenance (PPM) along with corrective/breakdown maintenance whenever required.
11	Installation and Commissioning
11.1	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.
12	Documentation
12.1	User (Operating) manual in English.
12.2	Service (Technical / Maintenance) manual in English.
12.3	List of important spare parts and accessories with their part numbers and costing.
12.4	Certificate of calibration and inspection from factory.

Infant Phototherapy

1	Description of Function
1.1	Phototherapy units are used to treat hyperbilirubinemia, a condition characterized by high bilirubin concentrations in the blood. These units are also called: bilirubin lamps, bilirubin lights, fibreoptic phototherapy blankets, neonatal phototherapy units.
2	Operational Requirements
2.1	It must be LED based single surface phototherapy unit used for clinical management of neonatal hyperbilirubinemia.
3	System Configuration
3.1	Phototherapy Unit (LED type), complete unit with all standard accessories.
4	Technical Specifications
4.1	Single surface, LED phototherapy unit with blue power and white power LEDs.
4.2	Light Source :
	☐ Blue power LEDs for phototherapy
	☐ White power LEDs for Observation
4.3	Wavelength: Blue Light: Peak between 450 and 470nm.
4.4	There shall be no UV and no IR radiation.
4.5	Phototherapy Intensity Adjustment:
	☐ Intensity at 30 cm: Low level > 20 μ W/cm ² /nm. High level > 30 μ W/cm ² /nm.
	☐ Effective area: 250mm round (at 30cm).
4.6	Therapy timer: An accurate LCD timer for recording therapy time with reset facility.
4.7	Life of LED: Minimum 20,000hours of use.
4.8	It must have flexible neck for easy use with Radiant Warmer.
4.9	Flexible Mobile Stand:
	☐ Base of Stand: Sturdy mild steel with epoxy powder coated base with casters.
	☐ Approx. 4 inch dia castors with break/locking mechanism.
	☐ Easily slides below all standard trolleys.
	☐ Height: Adjustable from 1,000 to 1,500mm +/- 50mm (from ground).
	☐ Tilt adjustment: 0° (horizontal) to approx. 40° (both sides).
4.10	It shall have thick gauge Stainless Steel top of baby tray with foldable transparent acrylic side panels. The baby tray shall have facility for trendelenburg and anti-trendelenburg position.
4.11	It shall have breakage free Stainless Steel clips and holders for acrylic panels.
4.12	Shall provide foam / bubble mattress.
4.13	Shall provide Stainless Steel instrument/medicine tray.
4.14	It shall have X-ray cassette guide facility.
4.15	It shall have facility to provide phototherapy from underneath also.
5	Accessories, spares and consumables
5.1	Accessories:
	☐ Phototherapy eye pads for preterm and term babies: 05 each.
5.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).
6	Operating Environment
6.1	The system offered shall be designed to store and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.

6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.
7	Standards and Safety Requirements
7.1	Must submit ISO13485:2003/AC:2007 for Medical Devices AND
7.2	CE (93/42 EEC Directives) or USFDA approved product certificate.
7.3	Shall meet IEC 60601-2-50 Medical Electrical Equipment PART 2-50: Particular Requirements for the Safety of Infant Phototherapy Equipment.
8	User Training
8.1	Must provide user training (including how to use and maintain the equipment).
9	Warranty
9.1	Comprehensive warranty for 2 years after acceptance.
10	Maintenance Service During Warranty Period
10.1	During warranty period supplier must ensure corrective/breakdown maintenance whenever required.
11	Installation and Commissioning
11.1	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.
12	Documentations
12.1	User (Operating) manual in English.
12.2	Service (Technical / Maintenance) manual in English.
12.3	List of important spare parts and accessories with their part numbers and costing.
12.4	Certificate of calibration and inspection from factory.

Suction Machine One Bottle

No.	Item Specifications
1	Description of Function
1.1	To extract fluid from the body during surgery or emergency treatment.
2	Operational Requirements
2.1	Shall operate on mains AC supply .
3	System Configuration
3.1	The system consists of:
	☐ Suction machine with 1 Jar.
	☐ Suction tubing.
	☐ One bottles.
4	Technical Specifications
4.1	The vacuum pump must be totally oil-free diaphragm type. Must have maintenance free pumps of international design for continuous use.
4.2	Motor shall be of Class "F" insulation to operate in ambient temperature to withstand up to 50 oC, with thermal cut-outs.
4.3	To facilitate maintenance, the cover of the machine must be easy to open from the top & sides.
4.4	The suction machine must be capable of producing minimum vacuum of approx. 700 mm Hg and which must be adjustable and monitored by vacuum gauge of suitable range. The suction capacity must be 25 litres per minute and can be regulated.
4.5	It must have one bottles of 2L . made of unbreakable polycarbonate with ABS Lid with float (over flow control device).The jars must be graduated (in cc levels). The suction bottles shall be autoclaveable.
4.6	On/Off Switch and power indicator must be available.
4.7	Body material:
	Base, top & panel made of rust proof and corrosion resistant moulded ABS.
5	Accessories, spares and consumables
5.1	Accessories:
	☐ Spare bottle: 01 nos.
	☐ Lids: 01 nos.
	☐ Rubber Seals: 01 nos.
	☐ Blades: 01 nos.
	☐ Suction tubing set at least 5 metres: 01 nos.
	☐ Spare fuse: 01 set.
	☐ Bacterial filter : 05 nos.
5.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.
6	Operating Environment
6.1	The product offered shall be designed to be stored and to operate normally under Power Supply, Climate, Temperature, Humidity, etc. for Sudan.

6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.
7	Standards and Safety Requirements
7.1	Must submit ISO13485:2003/AC:2007 for Medical Devices AND
7.2	CE (93/42 EEC Directives) or USFDA or TUV approved product certificate.
7.3	Electrical safety conforms to standards for electrical safety IEC 60601-1 General requirement for Electrical safety of Medical Equipment.
8	User Training
8.1	Must provide user training (including how to use and maintain the equipment).
9	Warranty
9.1	Comprehensive warranty for 2 years after acceptance.
10	Maintenance Service During Warranty Period
10.1	During warranty period supplier must ensure corrective/breakdown maintenance whenever required.
11	Documentation
11.1	User (Operating) manual in English.
11.2	Service (Technical / Maintenance) manual in English.
11.3	List of important spare parts and accessories with their part numbers and costing.
11.4	Certificate of calibration and inspection from factory.

Doppler Fetal Heart Detector

No.	Specifications
	1 Description of Function
	1.1 Doppler fetal heart detector is a hand-held ultrasound transducer used to detect the heartbeat of a foetus for prenatal care.
	2 Operational Requirements
	2.1 Shall be portable/handheld, lightweight and easy to carry.
	3 System Configuration
	3.1 Doppler, Foetal Heart Detector, complete with accessories.
	4 Technical Specifications
	4.1 Doppler based foetal heart rate detector with amplifier loudspeaker.
	4.2 Transducer frequency, approx.: 2 MHz.
	4.3 Transducer probe with fixed wire connection to the main unit, length approximately 35cm.
	4.4 Detector diameter approximately 20mm.
	4.5 Self-test is performed each time the device is switched on.
	4.6 Large LCD/TFT display shows foetal heart rate (FHR) in beats per minute (bpm), pulse indicator, sound volume level, battery indicator.
	4.7 System shall report operational status, malfunctions and low battery with audio-visual alerts.
	4.8 Built-in loudspeaker with volume adjustment.
	4.9 Advanced noise suppression system assures quality diagnostic sound.
	4.10 Operates on inbuilt rechargeable batteries with autonomy of 10 hours or more continuous operation. Bidder to specify the number of batteries to be supplied, and details of hours of examinations on fully charged battery.
	4.10 Battery charger with AC adaptor shall be provided.
	5 Accessories, spares and consumables
	5.1 Accessories:
	☐ 2 x Tubes of ultrasound gel, approximately 350ml
	☐ 1 x Set of spare batteries
	☐ 1 x Soft carry bag easy to clean
	5.2 All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).
	6 Operating Environment
	6.1 The system offered shall be designed to store and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.
	6.2 Power input: 220 – 240 VAC, 50Hz for battery charging.
	7 Standards and Safety Requirements
	7.1 Must sub mit ISO13485:2003/AC:2007 for Medical Devices AND
	7.2 CE (93/4 2 EEC Directives) or USFDA approved product certificate.
	8 User Training
	8.1 Must provide user training (including how to use and maintain the equipment).

	9 Warranty
	9.1 Comprehensive warranty for 1 year after acceptance.
	10 Maintenance Service during Warranty Period
	10.1 During warranty period supplier must ensure corrective/breakdown maintenance whenever required.
	11 Installation and Commissioning
	11.1 Supplier must accomplish proper commissioning of equipment onsite.
	12 Documentation
	12.1 User (Operating) manual in English.
	12.2 Service (Technical / Maintenance) manual in English.
	12.3 List of important spare parts and accessories with their part numbers and costing.
	12.4 Certificate of calibration and inspection from factory.

Pediatric Scale

No.	Item Specifications
1	Description of Function
1.1	Infant Weighing Scale (Pan Type) for Neonatal use and it must be mechanically operated
2	Operational Requirements
2.1	Pan type baby weighing scale. Suspension, trouser or hanging types as well as electronic or battery operated scales are not acceptable.
3	System Configuration
3.1	Infant weighing scale (Pan type), complete unit.
4	Technical Specifications
4.1	Large pan, approx. 450mm long and 300mm wide.
4.2	Pan to have flat base with lips on sides only (NOT on ends). Lip to be approx.80mm height
4.3	Pan preferably of Acrylic or Moulded Engineering Plastic. Metal having easy clean surface is also acceptable.
4.4	Scale to weigh 0 to 20 Kg in increments of 50g
4.5	Dial type or Danish yard-arm balance types acceptable
4.6	To have Tare/Zero adjustment system
5	Accessories, spares and consumables
5.1	Shall supply with all accessories for smooth operation of the system.
6	Operating Environment
6.1	The product offered shall be designed to be stored and to operate normally under Climate, Temperature, Humidity, etc. for Sudan.
7	Standards and Safety Requirements
7.1	Manufacturer must have ISO certification for quality standards.
8	User Training
8.1	Not applicable.
9	Warranty
9.1	Comprehensive warranty for 2 years after acceptance.
10	Maintenance Service During Warranty Period
10.1	Standard warranty conditions are applicable.
11	Installation, Inspections and Commissioning
11.1	Must supply preassembled unit, ready to use.
12	Documentation
12.1	User (Operating) manual in English.
12.2	Service (Technical / Maintenance) manual in English.
12.3	List of important spare parts and accessories with their part numbers and costing.
12.4	Certificate of calibration and inspection from factory.