

DEFENCE HOUSING AUTHORITY, LAHORE**INVITATION TO TENDER**

1. **Defence Housing Authority, Lahore** invites sealed offers from Firms/Vendors for purchase of brand new equipment as per following detail: -

- a. Tender No - 530/052/8083
- b. Detail of Equipment / Stores - Electro Medical Equipment for Establishment of Intensive Care Unit (ICU)
- c. Basis of Procurement - Delivered at DHA Lahore
- d. Collection Date of Tender Documents - Working Days
- e. Submission Date of Tender Documents - 26 Oct 2021 before 1400 hrs
- f. Opening Date of Tender - 26 Oct 2021, 1500 hrs

2. Tender documents be obtained from **DHA, Lahore (P&P Branch)** from given address or download from DHA website or obtain through email.

3. Firms who are either registered with **DHA, Lahore (P&P Branch)** or willing to get themselves registered with DHA Lahore, are eligible to apply.

4. The bidder should ensure presence of their authorized representative on date and time of opening of bids otherwise bids shall be opened in their absence.

Address: - Director Procurement & Purchase
Defence Housing Authority
Phase – III 'Y' Block
Commercial Area, Lahore
Tel No. 042-99063707
email: eqpt.pp.@dhalahore.org

DEFENCE HOUSING AUTHORITY, LAHORE
INSTRUCTIONS TO TENDER

1. General Staff Requirement (GSR) of equipment alongwith quantity and detail of equipment/stores being procured is attached as **Annexure 'A'**.
2. **Prices**
 - a. The prices quoted must be inclusive of all the taxes, packing and delivery charges.
 - b. The price must be quoted in PKR at the appropriate space on the "**Schedule to Tender**". Additional information, if any, must be linked with entries on the Schedule to Tender.
 - c. Validity of offer/prices should be 90 days.
 - d. The offer overwritten and received late will not be entertained.
3. **Date and Time for Receipt of Tenders**. Your Tender must reach DHA office by the date and time specified. DHA will not be responsible for delay occurring in post in the receipt of invitation to tenders by firms.
4. **Tender Submission Method**. The bid, shall be submitted on "**Single Stage Two Envelope Basis**". The Bid shall comprise of a single package containing two separate envelopes. Each envelope containing separately the "**COMMERCIAL OFFER**" and the "**TECHNICAL OFFER**". The envelope shall be marked as "**COMMERCIAL OFFER**" and "**TECHNICAL OFFER**" in bold and legible letters to avoid confusion. Initially, the envelope marked "**TECHNICAL OFFER**" shall be opened. The envelopes marked as "**COMMERCIAL OFFER**" shall be retained in custody of this DHA without being opened. DHA shall evaluate the "**TECHNICAL OFFER**" in a manner prescribed in advance, without reference to the priced "**TECHNICAL OFFER**" may be rejected if not conforming to "**GENERAL SERVICE REQUIREMENT**". During the technical evaluation no amendment to the technical offer shall be permitted. However, in case of any clarification, same will be sought from firm. After the evaluation and approval of "**TECHNICAL OFFER**", the purchaser shall, at a time within the bid validity period, open the "**COMMERCIAL OFFER**" of the technically accepted bids only. The price offer of bids found technically non responsive shall be returned unopened to the respective of bidders through registered letter. Date of opening of "**COMMERCIAL OFFER**" will be

communicated through letter to only those firms whose technical offer is approved. Commercial offer will be opened in the presence of only those firms representative who will qualify in **TECHNICAL OFFER**.

5. **Delivery of Tender.** Envelope should be sealed and bear Tender Enquiry Number and date of opening. All out-station tenders should send the proposal by Registered Post. Only one tender should be included in one cover.
6. Bid Security in shape of Pay Order for an amount of Rs. 5 Lac in favour of "**DHA Lahore**" will be submitted alongwith technical offer. Bid security not received with technical offer will entail the bid for rejection by tender opening board. Bid Security of the firm will be returned after finalization of the contract.
7. Firm will submit "**Unconditional**" quotation strictly in accordance with the tender documents. Conditional quotation or quotation on different format than tender documents may be rejected.
8. Offer must be filled as per schedule to tender Form-2 and accompany Form-3 duly completed.
9. Bids with maximum guarantee/warranty period will be preferred.
10. The tender is liable to be ignored if complete information is not given therein or if the particulars, asked for in schedule to the tender, are not filled in.
11. Offers not accompanied with complete technical specifications of equipment being offered and not supported with detailed technical brochures, spare parts manual and original recommended list of spare parts by the manufacturer, will **NOT** be entertained.
12. Offers overwritten and received late will not be entertained.
13. Manufacturer's name, model number and country of origin must be clearly indicated in relevant column of schedule to Tender.
14. DHA, Lahore "may reject all bids or proposals at any time prior to the acceptance of the bid or proposal. DHA, Lahore shall upon request may communicate to any supplier or contractor who submitted the bid or proposal, the grounds for its rejection of bid or proposal, but is not required to justify the grounds."



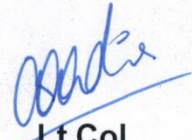
Lt Col
AD P&P
Abdul Qadir (Retd)

CONDITIONS FOR CONTRACT

1. These instructions will govern any contract made as an outcome of successful bidder.
2. **Terms of Payment.** As per mutual agreement.
2. **Bank Guarantees**
 - a. Performance Bank Guarantee (PBG) against Contract. 5% as Contract Performance Bank Guarantee (from any scheduled bank of Pakistan) against total value will be submitted with 15 days from the date of signing of contract. This shall remain in force till 60 days beyond Delivery Period.
 - b. Bank Guarantee (BG) against Warranty Period. 10% BG (from any scheduled bank of Pakistan) against the total contract value of the contract for warranty period. This shall remain in force till 30 days beyond expiry of warranty period.
4. **Penalty.** LD charges @2% per 30 days will be imposed after due date of delivery.
5. **Repeat Order.** The purchaser may place repeat order for the supply of additional requirements of contracted equipment, (if any) during the currency of contract, the supplier shall accept the delivery schedule of such order which shall be fixed by mutual consent of both the parties.
6. DHA Lahore may increase / decrease the quantity of stores / equipment before finalization of contract.
7. **Sale, Service and support (SSS) of Spares.** The firms will ensure availability of support for the next 5 years.
8. **Training**
 - a. Firm will arrange and conduct training for operation and maintenance of equipment in Pakistan Free of cost (FOC Basis).
 - b. On job training if required will be imparted on site at firm's expense.

9. **Delivery Terms.** The delivery of the stores is required within two months from signing of contract, however quotation with minimum delivery period will be given preference.
10. **Inspections.** Inspection of eqpt in operational condition after commissioning by firm will be carried out at consignee premises by DHA.
11. Photo copies of following certificates duly attested and stamped be attach with quotations: -
- National Tax Certificate.
 - Tax Exemption Certificate/Import Documents (if applicable).
 - Original copy of the firm's invoice.
 - Copy of manufacturer certificate (if applicable).
12. In case of any dispute regarding the terms and conditions specifications or the quality of stores, decision of the Administrator DHA Lahore will be considered as final and binding on the suppliers.
13. **Cancellation of Contract at Risk and Expense.** Failure to supply the good quoted for or failure to meet the commitment made regarding delivery schedule, specifications, short supplies etc will authorize DHA Lahore to purchase the items at firm's risk and cost. It is taken for granted that while quoting for the items, you accept these clauses. The purchaser will have a right to cancel the contract and purchase from elsewhere, the undelivered stores, at the risk and expense of the supplier. In case of non availability of originally contracted store or part thereof purchase of suitable substitute / equivalent will also be covered under this clause.

NOTE. ANY BIDDER WHICH FAILS TO COMPLY WITH THE INSTRUCTIONS GIVEN IN FORM-1,2 & 3 MAY BE LIABLE TO REJECTION. INCOMPLETE OFFERS WILL NOT BE CONSIDERED. PLEASE READ THESE INSTRUCTIONS CAREFULLY AND COMPLY WITH.



Lt Col
AD P&P
Abdul Qadir (Retd)

Form-2**DEFENCE HOUSING AUTHORITY**
SCHEDULE TO TENDER

Tender No. 530/052/PB-8083

Dated: **10 Oct 2021****TIME AND DATE OF OPENING OF TENDER 1500 hrs on 26 OCT 2021**

Item No	Description of Equipment / Stores	Country of Origin	Name of Mfr	Qty	Price Per Unit	Total Price

Note:

- a. Description of equipment / stores be given as per detail of given.
- b. Country of origin and manufacturer name be clearly mentioned.
- c. Prices be given in local currency (PKR).
- d. Rates should be inclusive of all the taxes.

Form-3**Contractor's Telegraphic**

Address _____

Telephone _____

Mobile No. _____

E-mail _____

From: _____
_____**To:** The Director Procurement & Purchase
Defence Housing Authority, Commercial Area
Y Block, Phase – III, Lahore

Dear Sir,

1. I/ We hereby offer to supply to Defence Housing Authority, Lahore the stores detailed in the Schedule hereto or such portion thereof as you may specify at the prices given in the said schedule and agree to hold this offer open till _____.
2. I/ We have understood the instructions to tenderer and conditions of contract and have thoroughly examined the specification/ drawing and or pattern quoted to the schedule hereto and am/ are fully aware to the nature of the stores required and my /our offer is to supply stores strictly in accordance with the requirements.
3. Recommended list of spare parts, technical operational and workshop manuals are also enclosed with the offer.
4. The following pages have been added to and form part of this tender.

Your Faithfully
(Signature of Firms Authorised Representative)

PROCUREMENT OF ELECTRO MEDICAL EQUIPMENT FOR ESTABLISHMENT OF INTENSIVE CARE UNIT (ICU)

<u>Ser</u>	<u>Items</u>	<u>Description</u>	<u>Model</u>	<u>Qty</u>	<u>Appendix</u>
1	ICU Beds (Motorized)	USA/Europe	2020/21	03	I
2	ICU Ventilators	Europe/USA/Japan/Korea	2020/21	02	II
3	Patient Monitor	USA/ Europe/ Japan	2020/21	04	III
4	Blood Gas Analyzer (ABG)	Europe/USA/UK/Japan	2020/21	01	IV
5	DVT Machine/ Sequential compression Device	USA/Europe/Japan	2020/21	01	V
6	Blood Warmer	USA/Europe/Japan/UK	2020/21	02	VI
7	Body Warmer	USA/Europe/Japan	2020/21	01	VII
8	ECG Machine	USA/Europe/Japan/UK	2020/21	01	VIII
9	Defibrillator	USA/Europe/Japan/UK/US FDA,/CE (MDD)/JIS/ MHLW	2020/21	01	IX
10	Video Laryngoscope	USA/Europe/Japan	2020/21	01	X
11	Crash Trolley	-	2020/21	02	XI
12	Medicine Trolley	-	2020/21	02	XII
13	Oxygen Cylinder	-	2020/21	06	XIII
14	Portable Suction Machine (Basic with two Bots)	Europe/USA/Japan/UK	2020/21	02	XIV
15	Syringe Pumps	Japan/USA/Europe/UK	2020/21	08	XV
16	Infusion Pumps	Europe/USA/Japan/UK	2020/21	08	XVI

Note:- Total Cost of Machine should also include fitting installation commissioning.

ICU BED (MOTORIZED FULLY AUTOMATIC)**TECHNICAL SPECIFICATIONS**

- Electrically operated Four Sectional ICU Bed having safe working load of 250 KG or more
- Positions: Backrest, Height, Trendelenburg & Reverse Trendelenburg, Cardiac Chair Positions
- Stainless Steel/ ABS split side rails with integrated remote controls for patient
- Mattress base should be removable and disinfectable

MOTORIZED MOVEMENTS

- Height adjustment from 334 to 76 cm or better without mattress
- Trendelenburg & Reverse Trendelenburg 12 Degree or better
- Backrest movement up to 60 Degree or better
- Thigh section movement should be upto to 20 Degree or better
- Should be operated with a single button for the position of the cardiac chair
- Radio translucent backrest with X-ray cassette tray
- The overall standard length should be of 220 cm or better
- Mattress platform should be extendable
- Overall width should be 100 cm or more
- Anti-collision system
- Bed should have central lock and castor size 125 mm or more
- Nursing/attendant remote should have functional lockout switch
- Bed would have single button motorized and manual CPR function
- Head and foot panels should be removable
- Drainage bag rail with hooks should be on both side
- Operating input:220 VAC, 50 Hz/ 60 Hz
- Built –ion battery backup
- Integrated weighing scale

BED SIDE CABINET (IMPORTED SAME MANUFACTURER)

- Upper drawer, niche, large bottom cupboard
 - Made from Zinc plated steel / ABS/Thermo formed PVC
 - Fronts of the drawers and cupboards from HPL board / MDF timber laminated
-

- 4 castors, 2 of which can be braked

OVER BED TABLE (IMPORTED SAME MANUFACTURER)

- height adjustable and tillable HPL/ABS/PVC board
- 4 Castors, 2 with brakes

ACCESSORIES

- IV pole with adjustable height and two hooks Qty-01
- Foam mattress with cover Qty-01
- Nurse Control Panel Qty-01
- (All accessories should be from same manufacturer)

ICU VENTILATORPATIENT TYPE

- Pediatric to adults

VENTILATION MODES

- (S)CMV+/APVcmv, SIMV+/APVsimv, PCV+ SPONT, ASV, P- SIMV+

SPECIAL FUNCTIONS

- Special functions should include nebulizer, manual breath, 100% O₂, Standby, sigh, apnea backup ventilation, screen – lock, screen shot, suctioning tool, dimmable screen, configurable quick start settings, tube resistance compensation, start-up over body height and IBW

TIDAL VOLUME STARTING FROM 20 ML UP TO AT LEAST 2000 ML

- PEEP and CPAP ranges from 0 cmH₂O not less than 35 cm H₂O

EVENT LOG

- Storage and display of not less than 1000 events with date and time

VENTILATION COCKPIT

- **Dynamic Lung**: Should show real time visualization of the lungs with representations of tidal volume, lung compliance, resistance and patient activity
- **VENT STATUS**: Visual representation of the ventilator dependency
- Adaptive Support Ventilation target graphics
- 41 monitoring parameters can be displayed

POWER SUPPLIES

- Up to 240 V AC at 50/60Hz
- Back up batteries with at least 2 hours functionality including Air Turbine.

PHYSICAL DIMENSIONS

- Screen upto 8", TFT color, High Resolution WXGA, backlit with touch screen

TO BE SUPPLIED WITH

- Disposable patient breathing circuits for Pleads and Adults, supporting arm and original trolley.

Origin: Europe, USA, JAPAN, Korea

PATIENT MONITOR**TECHNICAL SPECIFICATIONS**

- Bedside monitor for Adult, Paeds.

OPERATING FEATURES AND CHARACTERISTICS:

- Non fade Touch screen TFT color display
- Electro-surgical interference suppression/protection
- Defibrillator protection
- Freeze and cascade facility
- Waveform traces speed; 25/50mm/sec.
- Screen size: min. 15" TFT/LCD Touch Screen color display.
- Capacity to interface with LAN/WLAN for data transfer and HL7 Connectivity & have to watch Vital Sign data of other Monitors from each Individual monitor.
- Waveform Traces: 6- 10 Wave forms minimum real time on main display.
- Resolution should be 800 x 600 dots

ECG:

- Numeric: heart rate Range 0, 15 to 300 beats/min
- 12 Lead ECG Analysis capabilities.
- Cascade and freeze ECG trace.

NON-INVASIVE BLOOD PRESSURE(NIBP):

- Method: Oscillometric principle
- Numeric: systolic, diastolic and mean pressure
- Selectable auto inflates interval settings
- Rising cuff continuous pressure display and should also have ability to detect sudden Rise or Fall in Blood Pressure and automatic triggering of NIBP Measurement
- PWTT-triggered NIBP measurement is available.
- Reusable cuff.

PARAMETERS:

- Should Include ECG, Respiration, NIBP, SPO2, Temperature dual channel, CO2 and dual IBP, IBP and with other standard parameters.

TEMPERATURE:

- Numeric: temperature selectable in °C/°F.

PULSE OXIMETRY:

- Numeric: 0-100% oxygen saturation measuring range.
- Waveform-Plethysmograph pulse.
- Reusable sensor electrode.

IBP:

- Dual Channel.
- Complete with Disposable transducers.

CO2:

- CO2 measuring range 0 to 150 mmHg.
- Main/Side stream.

ARRHYTHMIA ANALYSIS:

- Arrhythmia analysis up to 20 and ST. analysis

RESPIRATION:

- Breath rate display and apnea alarms.
- Sweep speed; 6.25, 12.5 mm/sec.

OTHER FEATURES:

- Trend data; graphical and tabular, HL7, Interbed Function,

ALARMS:

- High & low (settable) on all parameters
- Visual and audible indication of alarms

OPERATING REQUIREMENTS:

- AC 220V/50HZ
- Built-in rechargeable battery for at least 1 hour AC power failure at full parameter.

ACCESSORIES:

- All accessories should be from the same manufacturer.

COUNTRY OF ORIGIN AND MANUFACTURER: USA/ Europe / Japan

QUALITY CERTIFICATES: CE/ FDA510K / MHLW (any Two)

BLOOD GAS ANALYZER (ABG)**MEASURED PARAMETERS**

- The measured parameters should include the following:

Type	Parameter
▪ PH	pH, cH
▪ Blood Gas	pCO ² , pO ²
▪ Electrolytes	cCa ²⁺ , cCl ⁻ , cK ⁺ , cNa ⁺
▪ Metabolite	cGlu, cLac
▪ Oximetry	ctHb, sO ₂ ,

DERIVED PARAMETER

- The derived parameters should not be less than the parameters stated below:
pH(T), pCO₂(T), cHCO₃ (P), cBase(B), cBase(B,ox), cBase(Ecf),cBase(Ecf, ox), cHCO₃ (P,st), cH⁺, cH⁺ (T), ctCO₂(P), ctCO₂(B), pH(st), pO₂(T), pO₂(A), pO₂(A,T), p50, p50(T), p50(st), pO₂(A-a), pO₂(A-a,T), pO₂(a/A), pO₂(a/A,T), pO₂(a,T)/FO₂(l), cCa²⁺(7.40), Anion Gap(K+) Anion Gap, DO₂, Hct, pO₂(x), pO₂(x,T), ctO₂(B),ctO₂(a-V), ctO₂(x), FShunt, FShunt(T), sO₂, CtHb, RI, RI(T), mOsm, p5O, p5O(st), pO₂(a)/FO₂(l), DO₂, Hct,pO₂(x),BO₂, VO₂, Qx,Q1, V(B)

INPUT PARAMETERS

- The input parameters should at least include the following:
Patient ID, Patient height, Patient department, T, Sample type, Patient note, Patient weight, Patient accession no. , Patient age, Patient sex, Draw time, Date of birth, Date of birth, Sample site, Patient birth weight, Patient gestational age, Patient name, Physician , Operator , Operator department, p50(st), RQ, FO₂(l), Qt, VO₂, VCO, sO₂(v-), pO₂(v-), ctHb, FCOHb(1), and FCOHb(2)

TECHNICAL SPECIFICATIONS

- Liquid Volume: 700µl
- Cycle time: <2 min 40 sec
- Scanning time: <30 sec with filled carousel

HARDWARE

- 128 MB RAM
- Hardisk 40 GB

- CD/RW/DVD drive
- Display
- 10.4 TFT VGA Color Touch Screen

DATA CAPACITY

- Should include the following results:
- Patient results: 2000
- Calibration results: 1000
- QC results: 1500
- System messages & service registrations: 5000

ORIGIN: Europe, USA, UK & Japan

DVT MACHINE / SEQUENTIAL COMPRESSION DEVICE**TECHNICAL SPECIFICATION**

- DVT prophylaxis, the compression device with Vascular Refill Detection increased the volume expelled per hour in the post-thrombotic leg. Customized compression cycles – Moves blood from the lower extremities as quickly as the veins refill
- Venous thromboembolism (VTE)
- Display of pressure, garments detection, battery status, time laps and alarm
- Prophylaxis for the obese and morbidly obese patient
- Small, medium and large sleeves
- Foot, thigh and calf sleeve
- Lithium ion battery
- Up to 8 hours of Uninterrupted compression on battery
- One touch operation
- Port A&B indicator
- Audio and visual alarm, e.g. Low battery, single port use etc
- Compression Parameters: 45 mmHG (ankle), 40 mmHg (calf), 30 mmHg (thigh)
- Sequential, Gradient, Circumferential
- 130 mmHg foot compression with cycle of 5 sec
- Automatic pressure adjustment
- Compact & Portable, patient bed handing system

Accessories

With all standard accessories: -

- Foot (L, M) Qty-10 Each
- Calf (L, M, S) Qty-10 Each
- Thigh (L,M) Qty-10 Each

BLOOD WARMER**SUPERIOR PERFORMING TECHNOLOGY**

- Should Deliver normothermic fluids to the patients at routine surgical flow rates of 50-5,000 ml/hr
- Patented triple lumen patient line prevents fluid cool down associated with hot-plate technologies.
- 2.4 m (8 ft.) warm patient line must provide convenient positioning of your in the theatre, during surgery.
- Disposable only requires 20 ml priming volume.
- Simple lock-in disposable.
- Swivel lure allows easy patient connection.
- Rotatable Drain Tube allows easy drainage of solution from reservoir.
- Durable case is easy to clean.

SUPPLIED WITH STANDARD ACCESSORIES.

Origin: USA, Europe, Japan & Uk

BODY WARMER**WARMING UNIT**

- The warming unit should be very powerful, silent and provides a constant temperature to patient within only 60 seconds. The default start up temperature should be 38°C.
- The unit should have the over-temperature alarm with additional standard built-in safety factor, the under-temperature alarm, guaranteeing that the temperature which has been set is delivered to the patient.

Parameters:

- Voltage 220-240VAC
- Frequency 50/60Hz
- Current 3A
- Average Power 525W
- Dimensions 276mm 385mm 239mm
- Weight (-+)6.0kg
- Hose length 1.8m
- Power cord length 4.0m
- Set temperature 32°C, 38°C, 43°C or Ambient Air
- Filtration HEPA, 0.3µm, 99.99%, H13 conform EN 1822
- Limited Warranty 3 years
- Classification 93/42/EEC & 2007/47/EC - Class IIb
- Classification IEC 60601-1 - Class 1, Body Floating (BF)
- Classification IEC 60529 - IP21

POLE WITH BASKET

- Dimensions pole 1000mm height, □ 25mm
- Dimensions Base □ 600mm
- Castors 5, anti-static, latex free, 2 brakes
- Basket dimensions 230mm 230mm 250mm
- Weight (-+) 6.7kg

BLANKETS

- System should have a range of blankets for different applications and could be used for pre-, per-, and post-operative warming.

- **DESCRIPTION/SIZES**

- Adult
- Paediatric
- Lower Body
- Upper Body
- Half Upper Body
- Torso
- Surgical Access (sterile)
- Surgical Access
- Tube

- **REFLECTIVE BLANKET**: The system should have a range of reflective blankets, equipped with a reflective top layer, increasing heating capacity and reflecting patient's radiant body heat, preserving body temperature.

- **DESCRIPTION/SIZES**

- Adult
- Paediatric
- Lower Body
- Upper Body
- Half Upper Body

- A range of blankets consisting of under bodies which should allow to place patient on top of the under body.

- **DESCRIPTION/SIZES**

- Neonatal
- Full Underbody
- Underbody

SUPPLIED WITH: Supply with All accessories, Operation and Service Manual. 01 Year Warrant with Parts.

ECG MACHINE**TECHNICAL SPECIFICATIONS**

- 12 lead interpretative ECG
- 7.0-Inch color backlit LCD
- 12ch ECG recording
- Multi – Languages
- Built-in-high-resolution printer printing density:200 dpi
- Rechargeable battery Backup about 30 Minutes with fully charges battery
- Software managed system PC interface: LAN & USB /SD card
- Full alphanumeric capability keyboard
- Firmware upgrade using USB/SD memory card
- Z-fold type ECG recording paper
- Up to 400 ECG files can be stored in the internal memory
- Full alphanumeric keyboard for operation convenience.
- Real – time continuous recording paper
- Can be print through External network printer
- Can be transfer the ECG data top a PC using a wired LAN or an USB Wi-Fi adapter
- Using the LAN or SD card. ECG can be transmitted to PC from the cardiograph for ECG management
- DICOM image, PDG files system report printing capability
- 18 AC 220 V / 50 Hz operated

ACCESSORIES

- Offer should be complete with all the standard accessories and ancillary services (such as installation, commissioning etc)

ORIGION

- USA, Europe, Japan, UK

WARRANTY

- 1 year with parts including Parts and all accessories

DEFIBRILLATORTECHNICAL SPECIFICATIONS

- **Biphasic** transthoracic (external) defibrillator with LCD color display.
- **Synchronized** output with ECG.
- **Charging Indicator** on External paddles
- **Quick selection** of Defibrillation mode to AED and vice versa through rotary switch (For quick energy selection).
- The energy range should be adjustable for peds and adults up to **270Joules**
- ChargingTimefor200Jshould be less than **04 sec**
- The ECG **baseline recovers within 3 seconds** after defibrillation.
- Screen Size of approx. At least **6"inch or more**.
- Display of HR, **ECG through paddles** and Lead I,II & III patient cable.
- Built in recorder for printing on standard **50mm** paper.
- **Alarms** for High and low Heart rate, low battery warning.
- Built in rechargeable battery with minimum 100 shocks energy.
- **Auto tester/** self-check
- External Paddles (Adult and Paeds)
- **AED Facility** with Voice mode.
- **Pacing Facility**
- Pulse Oximetry.
- Capnography (EtCO2)
- External Pacemaker
- Electric Supply 220V/50HZ

ACCESSORIES:

- Complete with standard accessories, including reusable paddles type Adult & Pediatric.

SUPPLIED WITH: ECG Cable, Gel and Paper, Operation and Service Manual.

Warranty: 1 year with parts including all accessories

COUNTRY OF ORIGIN AND MANUFACTURER

- USA/ Europe / Japan/ UK, US FDA, CE(MDD), JIS/MHLW

VIDEO LARYNGOSCOPE

- Grip handle must be classic pistol grip type
- Blades
- Atleast 2 curved blades sizes for adult
- Atleast 02 curved blades sizes for pediatrics.
- One straight blade size
- The blades lens must have anti-fog system
- Video Screen monitor upto 3.5 inches high resolution.
- The connection between the monitor and blade lens must be through RCA cables and atleast 20 inches length.
- Power Supply: Rechargeable battery with charger.

SUPPLIED WITH: Supply with all standard accessories, Operating and Service Manuals.

CRASH TROLLEY**TECHNICAL SPECIFICATIONS**

- For the storage of medication by ward nursing staff
- Different Compartments of medicine with labeling
- Body structure made from aluminum/ powder coated SS
- Separable drawers
- Central locking for all drawers
- Lockable casters.
- 04 Corner bumpers
- ABS bin attachable with trolley
- Size at least 2.5x 2.5 feet with 4 drawers.

MEDICINE TROLLEY**TECHNICAL SPECIFICATIONS**

- For the storage of medication by ward nursing staff
- Different Compartments of medicine with labeling
- Body structure made from aluminum/ powder coated SS
- Separable drawers
- Central locking for all drawers
- Lockable casters.
- 04 Corner bumpers
- ABS bin attachable with trolley
- Size at least 2.5x 2.5 feet with 4 drawers.

OXYGEN CYLINDER**TECHNICAL SPECIFICATION**

- Easy to operate
- Light in weight
- Portable (Can be easily carried anywhere)
- Oxygen Cylinder with pressure gauge, control valve and oxygen pipes
- Oxygen cylinder water capacity upto 47 Liters.
- Oxygen gas storage capacity upto 6.79 M3 (cubic meter)
- Gas working pressure 2000 Bar
- Oxygen testing pressure 3500 Bar
- Cylinder Dia must be 11"
- Cylinder size must be 240 Cft
 - All cylinders must be tested from supplier as per international standers.

PORTABLE SUCTION MACHINE (BASIC WITH TWO BOTS)

- The pump should have accurate vacuum setting with the membrane vacuum regulator
- Should have piston/cylinder system for a vibration free and quiet system
- The vacuum range should start from – 80 KPa/-600 mm Hg
- The flow rate should be up to 18 Liter/min
- Should have ISO or CE certification
- Relative Humidity 20-95%
- Portable machine with 02 Jars

SUPPLIED WITH: Supply with all accessories, operation and service manual

- ***01 Year Warranty with Parts***

COUNTRY OF ORIGIN

- Europe, USA, Japan and UK

SYRINGE PUMP

Should be able to control the administration of intravenous fluids in very small amounts and at a carefully regulated rate over long periods.

- Maximum flow of up to 1200 ml/h
- Expanded number of applications e.g. supplementary feeding, blood transfusions, chemotherapy and infusion of therapeutic drugs.
- Compatible with a wide make of syringes
- Plunger monitor
- Pressure Alarm for detection of occlusion
- Computer Integration System
- Electromagnetic compatibility (MRI)
- Safety mechanisms (power switch)
- Replaceable battery
- Up till 7 special functions including operation reminder, auto power off, alarm repeat, buzzer setting, power source switch alarm, history function, and key lock function

Syringe Sizes (ml)

10,20,30,50

SUPPLIED WITH

- Pole clamp
- Power cord
- Operating manual

Country of Origin

- Japan, USA, Europe or UK

INFUSION PUMP

- Flow rate range should be from 1.0 – 1200 ml/h.
- Flow rate should be set as a drop count(drops/min) or in mL/h.
- Should have occlusion detection pressure.
- Should have air in line detection sensitivity.
- Should not need to be attached with a protective ground.
- Volume limit range should not be less than 9999 ml.
- Alarms should include: Empty container, Occlusion, Door open, free flow, flow error, reminder, air in line, low battery, infusion complete, power source switch, operator error and other device malfunction alarms.
- Special Functions: KVO, Auto power off, Alarm repeat, Data storage setting, Buzzer setting, power supply switched, Key lock, History, Maintenance timer, Battery refresh, Nurse call.
- Power supply should be 240 V and 50/60 Hz.
- Should have backup battery for instant switching from AC to DC.

SUPPLIED WITH: Sensor, power cord, pole clamp, multi pump mount, nurse call cable, infusion stand, DC power cable and operating manual.

Country of Origin:

- Japan, Europe, USA or UK