**REPUBLIC OF KENYA** 



# MANDERA COUNTY GOVERNMENT

# TENDER FOR SUPPLY, DELIVERY AND INSTALLATION OF MEDICAL EQUIPMENTS TO ACCIDENT & EMERGENCY UNITS AT MANDERA COUNTY REFERRAL HOSPITAL & ELWAK REFERRAL HOSPITAL

# **TENDER DOCUMENTS**

TENDER NO: MCG/OT/09/2018-2019

October, 2018

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# Introduction

- 1.1 This Standard Tender Document has been prepared for use by public entities in Kenya
- 1.2 The following general directions should be observed when using the document.
  - (a) Specific details should be furnished in the Invitation to Tender and in the special conditions of contract. The final documents to be provided to the tenderers should not have blank spaces or give options
    - (b) The Instructions to Tenderers and the general conditions of contract should remain unchanged. Any necessary amendments to these parts should be made through the special conditions of contract and the appendix to instructions to tenderers.
- 1.3 (a) Information contained in the Invitation to Tender shall conform to the data and information in the tender documents to enable potential tenderers to decide whether or not to participate and shall indicate any important tender requirements.

(b) The Invitation to Tender shall be issued as an advertisement in accordance with the regulations or a letter of invitation addressed to tenderers who have expressed interest following the invitation for expression of interest for which the invitation is issued.

# SECTION I INVITATION TO TENDER

# Tender reference no. : MCG/OT/09/2018-2019

**Tender Name:** TENDER FOR SUPPLY, DELIVERY AND INSTALLATION OF MEDICAL EQUIPMENTS TO ACCIDENT & EMERGENCY UNITS AT MANDERA COUNTY REFERRAL HOSPITAL & ELWAK REFERRAL HOSPITAL

1.1 The Mandera <u>County Government</u> invites sealed tenders for **SUPPLY AND DELIVERY OF** TENDER FOR SUPPLY, DELIVERY AND INSTALLATION OF MEDICAL EQUIPMENTS TO ACCIDENT & EMERGENCY UNITS AT MANDERA COUNTY REFERRAL HOSPITAL & ELWAK REFERRAL HOSPITAL

- 1.2 Interested eligible candidates may obtain and inspect tender documents from our website <u>www.mandera.go.ke</u>. For any more information/clarification interested applicants can visit the office of the **Director of Supply Chain Management, Treasury Building Mandera,** during normal working hours.
- 1.3 Prices quoted should be net inclusive of all taxes, must be in Kenya shillings and shall remain valid for the contract period.
- 1.4 Original and a copy of tender documents are to be enclosed in plain sealed envelopes marked with Tender name and reference number and deposited in the Tender Box located at the supply chain management office in Mandera or to be addressed to

#### County Chief Officer Accounting and Financial Services, P.O. Box 13 Mandera

So as to be received on or before WEDNESDAY, 31<sup>ST</sup> October 2018 at 10.00 Am
 Tenders will be opened immediately thereafter in the presence of the candidates or their representatives who choose to attend at a location as will be designated.

# Ag. Director Supply Chain Management

### For <u>County Chief Officer Accounting and Financial Services</u>

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# SECTION II - INSTRUCTIONS TO TENDERERS

### 2.1 Eligible Tenderers

- 2.1.1 This Invitation for Tenders is open to all tenderers eligible as described in the Invitation to Tender. Successful tenderers shall complete the supply of goods by the intended completion date specified in the Schedule of Requirements Section VI.
- 2.1.2 The procuring entity's employees, committee members, board members and their relative (spouse and children) are not eligible to participate in the tender.
- 2.1.3 Tenderers shall provide the qualification information statement that the tenderer (including all members of a joint venture and subcontractors) is not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring entity to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods under this Invitation for tenders.
- 2.1.4 Tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices.

### 2.2 Eligible Goods

- 2.2.1 All goods to be supplied under the contract shall have their origin in eligible source countries.
- 2.2.2 For purposes of this clause, "origin" means the place where the goods are mined, grown, or produced. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially-recognized product results that is substantially different in basic characteristics or in purpose or utility from its components
- 2.2.3 The origin of goods is distinct from the nationality of the tenderer.

### 2.3 **Cost of Tendering**

- 2.3.1 The Tenderer shall bear all costs associated with the preparation and submission of its tender, and the procuring entity, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.
- 2.3.2 The price to be charged for the tender document shall not exceed Kshs.5,000/=
- 2.3.3 All firms found capable of performing the contract satisfactorily in accordance with the set prequalification criteria shall be prequalified.

### 2.4. The Tender Document

- 2.4.1 The tender document comprises the documents listed below and addenda issued in accordance with clause 2.6 of these instructions to Tenderers
  - (i) Invitation to Tender
  - (ii) Instructions to tenderers
  - (iii) General Conditions of Contract

- (iv) Special Conditions of Contract
- (v) Schedule of requirements
- (vi) Technical Specifications
- (vii) Tender Form and Price Schedules
- (viii) Tender Security Form
- (ix) Contract Form
- (x) Performance Security Form
- (xi) Bank Guarantee for Advance Payment Form
- (xii) Manufacturer's Authorization Form
- (xiii) Confidential Business Questionnaire
- 2.4.2 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the tender documents. Failure to furnish all information required by the tender documents or to submit a tender not substantially responsive to the tender documents in every respect will be at the tenderers risk and may result in the rejection of its tender.

# 2.5 **Clarification of Documents**

- 2.5.1 A prospective tenderer requiring any clarification of the tender document may notify the Procuring entity in writing or by post at the entity's address indicated in the Invitation to Tender. The Procuring entity will respond in writing to any request for clarification of the tender documents, which it receives not later than seven (7) days prior to the deadline for the submission of tenders, prescribed by the procuring entity. Written copies of the Procuring entities response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective tenderers that have received the tender document.
- 2.5.2 The procuring entity shall reply to any clarifications sought by the tenderer within 3 days of receiving the request to enable the tenderer to make timely submission of its tender.

### 2.6 **Amendment of Documents**

- 2.6.1 At any time prior to the deadline for submission of tenders, the Procuring entity, for any reason, whether at its own initiative or in response to a clarification requested by a prospective tenderer, may modify the tender documents by amendment.
- 2.6.2 All prospective candidates that have received the tender documents will be notified of the amendment in writing or by post and will be binding on them.
- 2.6.3 In order to allow prospective tenderers reasonable time in which to take the amendment into account in preparing their tenders, the Procuring entity, at its discretion, may extend the deadline for the submission of tenders.

# 2.7 Language of Tender

2.7.1 The tender prepared by the tenderer, as well as all correspondence and documents relating to the tender exchange by the tenderer and the Procuring entity, shall be

written in English language, provided that any printed literature furnished by the tenderer may be written in another language provided they are accompanied by an accurate English translation of the relevant passages in which case, for purposes of interpretation of the tender, the English translation shall govern.

# 2.8 **Documents Comprising of Tender**

- 2.8.1 The tender prepared by the tenderers shall comprise the following components
  - (a) a Tender Form and a Price Schedule completed in accordance with paragraph 2.9, 2.10 and 2.11 below
  - (b) documentary evidence established in accordance with paragraph 2.1 that the tenderer is eligible to tender and is qualified to perform the contract if its tender is accepted;
  - (c) documentary evidence established in accordance with paragraph 2.2 that the goods and ancillary services to be supplied by the tenderer are eligible goods and services and conform to the tender documents; and
  - (d) tender security furnished in accordance with paragraph 2.14

# 2.9 **Tender Forms**

2.9.1 The tenderer shall complete the Tender Form and the appropriate Price Schedule furnished in the tender documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, quantity, and prices.

# 2.10 **Tender Prices**

- 2.10.1 The tenderer shall indicate on the appropriate Price Schedule the unit prices and total tender price of the goods it proposes to supply under the contract
- 2.10.2 Prices indicated on the Price Schedule shall include all costs including taxes, insurances and delivery to the premises of the entity.
- 2.10.3 Prices quoted by the tenderer shall be fixed during the Tender's performance of the contract and not subject to variation on any account. A tender submitted with an adjustable price quotation will be treated as non-responsive and will be rejected, pursuant to paragraph 2.22
- 2.10.4 The validity period of the tender shall be 60 days from the date of opening of the tender.

# 2.11 **Tender Currencies**

2.11.1 Prices shall be quoted in Kenya Shillings unless otherwise specified in the Appendix to Instructions to Tenderers.

# 2.12 Tenderers Eligibility and Qualifications

2.12.1Pursuant to paragraph 2.1. The tenderer shall furnish, as part of its tender, documents establishing the tenderers eligibility to tender and Its qualifications to perform the contract if it's tender is accepted.

- 2.12.2The documentary evidence of the tenderers eligibility to tender shall establish to the Procuring entity's satisfaction that the tenderer, at the time of submission of its tender, is from an eligible source country as defined under paragraph 2.1
- 2.12.3The documentary evidence of the tenderers qualifications to perform the contract if its tender is accepted shall be established to the Procuring entity's satisfaction;
  - (a) that, in the case of a tenderer offering to supply goods under the contract which the tenderer did not manufacture or otherwise produce, the tenderer has been duly authorized by the goods' Manufacturer or producer to supply the goods.
  - (b) that the tenderer has the financial, technical, and production capability necessary to perform the contract;
  - (c) that, in the case of a tenderer not doing business within Kenya, the tenderer is or will be (if awarded the contract) represented by an Agent in Kenya equipped, and able to carry out the Tenderer's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications.

# 2.13 Goods Eligibility and Conformity to Tender Documents

- 2.13.1 Pursuant to paragraph 2.2 of this section, the tenderer shall furnish, as part of its tender documents establishing the eligibility and conformity to the tender documents of all goods which the tenderer proposes to supply under the contract
- 2.13.2 The documentary evidence of the eligibility of the goods shall consist of a statement in the Price Schedule of the country of origin of the goods and services offered which shall be confirmed by a certificate of origin issued at the time of shipment.
- 2.13.3 The documentary evidence of conformity of the goods to the tender documents may be in the form of literature, drawings, and data, and shall consist of:
  - (a) a detailed description of the essential technical and performance characteristic of the goods;
  - (b) a list giving full particulars, including available source and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period of two (2) years, following commencement of the use of the goods by the Procuring entity; and
  - (c) a clause-by-clause commentary on the Procuring entity's Technical Specifications demonstrating substantial responsiveness of the goods and service to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.
- 2.13.4 For purposes of the documentary evidence to be furnished pursuant to paragraph 2.13.3(c) above, the tenderer shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Procurement entity in its Technical Specifications, are intended to be descriptive only and not restrictive. The tenderer may substitute alternative standards, brand names, and/or catalogue numbers in

its tender, provided that it demonstrates to the Procurement entity's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

# 2.14 Tender Security

- 2.14.1 The tenderer shall furnish, as part of its tender, a tender security for the amount specified in the Appendix to Invitation to Tenderers.
- 2.14.2 The tender security shall be in the amount of 0.5 2 per cent of the tender price.
- 2.14.3 The tender security is required to protect the Procuring entity against the risk of Tenderer's conduct which would warrant the security's forfeiture, pursuant to paragraph 2.14.7
- 2.14.4 The tender security shall be denominated in Kenya Shillings or in another freely convertible currency, and shall be in the form of a bank guarantee or a bank draft issued by a reputable bank located in Kenya or abroad, or a guarantee issued by a reputable insurance company in the form provided in the tender documents or another form acceptable to the Procuring entity and valid for thirty (30) days beyond the validity of the tender.
- 2.14.5 Any tender not secured in accordance with paragraph 2.14.1 and 2.14.3 will be rejected by the Procuring entity as non responsive, pursuant to paragraph 2.22
- 2.14.6 Unsuccessful Tenderer's tender security will be discharged or returned as promptly as possible as but not later than thirty (30) days after the expiration of the period of tender validity prescribed by the Procuring entity.
- 2.14.7 The successful Tenderer's tender security will be discharged upon the tenderer signing the contract, pursuant to paragraph 2.27 and furnishing the performance security, pursuant to paragraph 2.28
- 2.14.8 The tender security may be forfeited:
  - (a) if a tenderer withdraws its tender during the period of tender validity specified by the procuring entity on the Tender Form; or
  - (b) in the case of a successful tenderer, if the tenderer fails:
    - (i) to sign the contract in accordance with paragraph 2.27 or
      - (ii) to furnish performance security in accordance with paragraph 2.28

### 2.15 Validity of Tenders

- 2.15.1 Tenders shall remain valid for 90 days or as specified in the Invitation to tender after the date of tender opening prescribed by the Procuring entity, pursuant to paragraph 2.18. A tender valid for a shorter period shall be rejected by the Procuring entity as non responsive.
- 2.15.2 In exceptional circumstances, the Procuring entity may solicit the Tenderer's consent to an extension of the period of validity. The request and the responses

thereto shall be made in writing. The tender security provided under paragraph 2.14 shall also be suitably extended. A tenderer may refuse the request without forfeiting its tender security. A tenderer granting the request will not be required nor permitted to modify its tender.

# 2.16 Format and Signing of Tender

- 2.16.1 The Procuring entity shall prepare two copies of the tender, clearly marking each "ORIGINAL TENDER" and "COPY OF TENDER," as appropriate. In the event of any discrepancy between them, the original shall govern.
- 2.16.2 The original and all copies of the tender shall be typed or written in indelible ink and shall be signed by the tenderer or a person or persons duly authorized to bind the tenderer to the contract. The latter authorization shall be indicated by written power-of-attorney accompanying the tender. All pages of the tender, except for unamended printed literature, shall be initialed by the person or persons signing the tender.
- 2.16.3 The tender shall have no interlineations, erasures, or overwriting except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person or persons signing the tender.

# 2.17 Sealing and Marking of Tenders

- 2.17.1 The Tenderer shall seal the original and each copy of the tender in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes shall then be sealed in an outer envelope.
- 2.17.2 The inner and outer envelopes shall:
  - (a) Be addressed to the Procuring entity at the address given in the Invitation to Tender:
  - (c) bear, tender number and name in the Invitation for Tenders and the words, "DO NOT OPEN BEFORE," WEDNESDAY, 31<sup>ST</sup> October 2018 at 10.00 Am
- 2.17.3 The inner envelopes shall also indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared "late".
- 2.17.4 If the outer envelope is not sealed and marked as required by paragraph 2.17.2, the Procuring entity will assume no responsibility for the tender's misplacement or premature opening.

### 2.18 **Deadline for Submission of Tenders**

Tenders must be received by the Procuring entity at the address specified under paragraph 2.17.2 no later than WEDNESDAY, 31<sup>ST</sup> October 2018 at 10.00 Am

2.18.1 The Procuring entity may, at its discretion, extend this deadline for the submission of tenders by amending the tender documents in accordance with paragraph 2.6, in which case all rights and obligations of the Procuring entity and

candidates previously subject to the deadline will therefore be subject to the deadline as extended

# 2.19 Modification and Withdrawal of Tenders

- 2.19.1 The tenderer may modify or withdraw its tender after the tender's submission, provided that written notice of the modification, including substitution or withdrawal of the tenders, is received by the Procuring Entity prior to the deadline prescribed for submission of tenders.
- 2.19.2 The Tenderer's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of paragraph 2.17. A withdrawal notice may also be sent by cable, telex but followed by a signed confirmation copy, postmarked not later than the deadline for submission of tenders.
- 2.19.3 No tender may be modified after the deadline for submission of tenders.
- 2.19.4 No tender may be withdrawn in the interval between the deadline for submission of tenders and the expiration of the period of tender validity specified by the tenderer on the Tender Form. Withdrawal of a tender during this interval may result in the Tenderer's forfeiture of its tender security, pursuant to paragraph 2.14.7
- 2.19.5 The procuring entity may at any time terminate procurement proceedings before contract award and shall not be liable to any person for the termination.
- 2.19.6 The procuring entity shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.

### 2.20 Opening of Tenders

2.20.1 The Procuring entity will open all tenders in the presence of tenderers' representatives who choose to attend, at Wednesday, 31<sup>st</sup> October, 2018 at 10.00AM and in the location specified in the Invitation to Tender.

The tenderers' representatives who are present shall sign a register evidencing their attendance.

- 2.20.2 The tenderers' names, tender modifications or withdrawals, tender prices, discounts and the presence or absence of requisite tender security and such other details as the Procuring entity, at its discretion, may consider appropriate, will be announced at the opening.
- 2.20.3 The Procuring entity will prepare minutes of the tender opening.

### 2.21 Clarification of Tenders

- 2.21.1 To assist in the examination, evaluation and comparison of tenders the Procuring entity may, at its discretion, ask the tenderer for a clarification of its tender. The request for clarification and the response shall be in writing, and no change in the prices or substance of the tender shall be sought, offered, or permitted.
- 2.21.2 Any effort by the tenderer to influence the Procuring entity in the Procuring entity's tender evaluation, tender comparison or contract award decisions may result in the rejection of the tenderers' tender.

# 2.22 Preliminary Examination

- 2.22.1 The Procuring entity will examine the tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the tenders are generally in order.
- 2.22.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantify, the unit price shall prevail, and the total price shall be corrected. If the candidate does not accept the correction of the errors, its tender will be rejected, and its tender security forfeited. If there is a discrepancy between words and figures the amount in words will prevail
- 2.22.3 The Procuring entity may waive any minor informality or non-conformity or irregularity in a tender which does not constitute a material deviation, provided such waiver does not prejudice or effect the relative ranking of any tenderer.
- 2.22.4 Prior to the detailed evaluation, pursuant to paragraph 2.23 the Procuring entity will determine the substantial responsiveness of each tender to the tender documents. For purposes of these paragraphs, a substantially responsive tender is one, which conforms to all the terms and conditions of the tender documents without material deviations. The Procuring entity's determination of a tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence.
- 2.22.5 If a tender is not substantially responsive, it will be rejected by the Procuring entity and may not subsequently be made responsive by the tenderer by correction of the non conformity.

### 2.23 Conversion to Single Currency

2.23.1 Where other currencies are used, the procuring entity will convert these currencies to Kenya Shillings using the selling exchange rate on the ate of tender closing provided by the Central Bank of Kenya.

### 2.24 Evaluation and Comparison of Tenders

2.24.1 The Procuring entity will evaluate and compare the tenders which have been determined to be substantially responsive, pursuant to paragraph 2.22

- 2.24.2 The tender evaluation committee shall evaluate the tender within 30 days of the validity period from the date of opening the tender.
- 2.24.3 A tenderer who gives false information in the tender document about its qualification or who refuses to enter into a contract after notification of contract award shall be considered for debarment from participating in future public procurement.

# 2.25 Preference

2.25.1 Preference where allowed in the evaluation of tenders shall not exceed 15%

# 2.26 Contacting the Procuring entity

- 2.26.1 Subject to paragraph 2.21 no tenderer shall contact the Procuring entity on any matter related to its tender, from the time of the tender opening to the time the contract is awarded.
- 2.26.2 Any effort by a tenderer to influence the Procuring entity in its decisions on tender, evaluation, tender comparison, or contract award may result in the rejection of the Tenderer's tender.

# 2.27 Award of Contract

### (a) **Post-qualification**

- 2.27.1 In the absence of pre-qualification, the Procuring entity will determine to its satisfaction whether the tenderer that is selected as having submitted the lowest evaluated responsive tender is qualified to perform the contract satisfactorily.
- 2.27.2 The determination will take into account the tenderer financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the tenderers qualifications submitted by the tenderer, pursuant to paragraph 2.12.3 as well as such other information as the Procuring entity deems necessary and appropriate.
- 2.27.3 An affirmative determination will be a prerequisite for award of the contract to the tenderer. A negative determination will result in rejection of the Tenderer's tender, in which event the Procuring entity will proceed to the next lowest evaluated tender to make a similar determination of that Tenderer's capabilities to perform satisfactorily.

### (b) Award Criteria

2.27.4 The Procuring entity will award the contract to the successful tenderer(s) whose tender has been determined to be substantially responsive and has been determined to be the lowest evaluated tender, provided further that the tenderer is determined to be qualified to perform the contract satisfactorily.

### (c) **Procuring entity's Right to Vary quantities**

2.27.5 The Procuring entity reserves the right at the time of contract award to increase or decrease the quantity of goods originally specified in the Schedule of requirements without any change in unit price or other terms and conditions

### (d) **Procuring entity's Right to accept or Reject any or All Tenders**

2.27.6 The Procuring entity reserves the right to accept or reject any tender, and to annul the tendering process and reject all tenders at any time prior to contract award, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for the Procuring entity's action

# 2.28 Notification of Award

- 2.28.1 Prior to the expiration of the period of tender validity, the Procuring entity will notify the successful tenderer in writing that its tender has been accepted.
- 2.28.2 The notification of award will constitute the formation of the Contract but will have to wait until the contract is finally signed by both parties
- 2.28.3 Upon the successful Tenderer's furnishing of the performance security pursuant to paragraph 2.28, the Procuring entity will promptly notify each unsuccessful Tenderer and will discharge its tender security, pursuant to paragraph 2.14

# 2.29 Signing of Contract

- 2.29.1 At the same time as the Procuring entity notifies the successful tenderer that its tender has been accepted, the Procuring entity will send the tenderer the Contract Form provided in the tender documents, incorporating all agreements between the parties.
- 2.29.2 The parties to the contract shall have it signed within 30 days from the date of notification of contract award unless thee is an administrative review request.
- 2.29.3 Within thirty (30) days of receipt of the Contract Form, the successful tenderer shall sign and date the contract and return it to the Procuring entity.

### 2.30 Performance Security

- 2.30.1 Within Thirty (30) days of the receipt of notification of award from the Procuring entity, the successful tenderer shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the tender documents, or in another form acceptable to the Procuring entity.
- 2.30.2 Failure of the successful tenderer to comply with the requirements of paragraph 2.27 or paragraph 2.28 shall constitute sufficient grounds for the annulment of the award and forfeiture of the tender security, in which event the Procuring entity may make the award to the next lowest evaluated Candidate or call for new tenders.

# 2.31 Corrupt or Fraudulent Practices

- 2.31.1 The Procuring entity requires that tenderers observe the highest standard of ethics during the procurement process and execution of contracts when used in the present regulations, the following terms are defined as follows;
  - (i) "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution; and
  - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring entity, and includes collusive practice among tenderer (prior to or after tender submission) designed to establish tender prices at artificial noncompetitive levels and to deprive the Procuring entity of the benefits of free and open competition;
- 2.31.2 The procuring entity will reject a proposal for award if it determines that the tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- 2.31.3 Further a tenderer who is found to have indulged in corrupt or fraudulent practices risks being debarred from participating in public procurement in Kenya.

# **Appendix to Instructions to Tenderers**

# Notes on the Appendix to the Instruction to Tenderers

1. The Appendix to instructions to tenderers is intended to assist the procuring entity in providing specific information in relation to the corresponding clause in the instructions to Tenderers included in Section II and has to be prepared for each specific procurement.

2. The procuring entity should specify in the appendix information and requirements specific to the circumstances of the procuring entity, the goods to be procured and the tender evaluation criteria that will apply to the tenders.

3. In preparing the Appendix the following aspects should be taken into consideration;

(a) The information that specifies and complements provisions of Section II to be incorporated

(b) Amendments and/or supplements if any, to provisions of Section II as necessitated by the circumstances of the goods to procured to be also incorporated

be

4. Section II should remain unchanged and can only be amended through the Appendix.

5. Clauses to be included in this part must be consistent with the public procurement law and the regulations.

# **Appendix to Instructions to Tenderers**

The following information regarding the particulars of the tender shall complement supplement or amend the provisions of the instructions to tenderers. Wherever there is a conflict between the provision of the instructions to tenderers and the provisions of the appendix, the provisions of the appendix herein shall prevail over those of the instructions to tenderers.

INSTRUCTIONS TO TENDERERS REFERENCE	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
2.1.1	OPEN TENDER
2.14.1	The bidder shall submit a minimum bid security of KES1, 000,000 from a reputable bank or recognized insurance company.
2.18.1	The Bidder shall submit original and a copy of the tender document, clearly marking each "ORIGINAL TENDER" and "COPY OF TENDER" on or before WEDNESDAY, 31 <sup>ST</sup> October 2018 at 10.00 Am Both documents (Original & Copy) shall bear all the attachments required.

# PRELIMINARY REQUIREMENTS

- 1. All entries must be typed or written in ink. Mistakes must not be erased but should be crossed out and corrections made and initialed by the persons signing the tender.
- 2. The form of bid **shall** be duly filled, signed and stamped by an individual entrusted with the powers of attorney.
- 3. Each bid should be submitted in a plain sealed envelope with the Tender Number and Name endorsed on the outside.
- **4.** The bidder shall attach a duly filled, signed and stamped confidential business questionnaire by an individual entrusted with the powers of attorney.
- 5. The form of power of attorney shall be duly filled, signed and stamped.
- 6. The tender document shall be submitted complete, intact with no page alterations.
- 7. Tenderers shall ensure that the submitted bid (documents) is (are) serialized .i.e (each page in the submitted bid shall have serial identification).
- 8. All submitted forms and documents shall be duly filled, signed (where applicable) and stamped.

# **Bidders shall attach copies of the under listed documents endorsed** (signed and stamped) by commissioner of oaths/advocate registered in Kenya.

- 9. Valid current year business permits.
- 10. Valid current year tax compliance certificate.
- **11.**Certificate of incorporation.
- **12.** PIN/VAT certificate from KRA.
- 13. Registration with Relevant Bodies

14. Financial audited accounts for the previous three years endorsed, signed and stamped by a registered external auditor.

# Bidders that will not comply with the above criteria shall be considered non-responsive.

# MINIMUM REQUIREMENTS

In the technical requirements tables, bidders should indicate their capacity bearing in mind that these tables bear the minimum requirements for this tender.

No.	KEY personnel Position	Total Work Experience (years)	In Similar Works Experience (years)
1	Project Director (Key Partner/Director)	10	8
2	One Site Agent / Contract manager (Registered Medical Engineer)	8	5
4	2 No. Foreman (must be holders of at least Diploma in Electrical engineering or equivalent).	5	5

# **TECHNICAL REQUIREMENTS**

In the technical requirements below, bidders shall fill the tables appropriately failure to which the bids will be considered non-responsive. All the attached proof/copies of documents shall be endorsed, signed and stamped by Commissioner of Oaths/Advocate to ensure validity.

**15.** Bidders shall List and attach valid proof of at least three similar projects of similar magnitude undertaken in the last three years in table below with a valid proof of award and completion of the projects.

Serial No.	Projects	Clients Name, Address & Telephone No.	Value of the project (Kshs.)	Year(s) the Project was undertaken
1.				
2.				
3.				

# 16. SCHEDULE OF RELEVANT PLANT AND EQUIPMENTS

Bidders shall state below the key relevant plant/Equipment that will be immediately available for this works what plants will be available and what further plant/equipment will be acquired or hired for the works should the contractor be judged qualified by the County and awarded the contract. Bidders shall attach proof for the under listed plant and equipment. The equipments stated below must be more than those indicated in the minimum requirements.

Description, Size, Capacity	No.	Present Location	Remarks

### Signed by Bidder

.....

Name of Signatory

.....

Date.....

#### 17. SCHEDULE OF KEY PERSONNEL WITHIN YOUR ESTABLISHMENT

Bidders shall insert in the spaces below at least five key personnel to be engaged in this contract if awarded. State qualification and experience of each personnel and also attach their credentials/CV and supportive documents for reference.

Category (to	Name of Person	Qualification	Number of Persons
Work as)			

Bidders must fill in the various categories in the minimum requirements table for key personnel. For unskilled labor, only the total number is required to be entered in the form above. Qualifications will be verified prior to award of the contract. Where personnel are substituted during the contract or before the award of the contract, only substitute person with equivalent or higher qualifications will be approved or accepted by the County.

All attached copies shall be endorsed, signed & stamped by commissioner of oaths/advocate. Sign.....

51511.....

Date.....

Bidders who shall not meet the above technical requirement will be considered non-responsive.

# EVALUATION AND COMPARISON OF TENDERS

Evaluation and comparison of tenders: the following evaluation criteria shall be applied not withstanding any other requirements in the tender documents

# a) Mandatory requirement(MR)

### The following requirements must be met by the tenderer

# PRELIMINARY EVALUATION CRITERIA

S/No	REQUIREMENTS	Score Mandatory	<b>B1</b>	B2	<b>B3</b>	<b>B4</b>	B5	<b>B6</b>	B7	<b>B8</b>
	Dully filled confidential business questionnaire	Mandatory (Yes/No)								
	Form of tender duly filled, signed and stamped	Mandatory (Yes/No)								
	Tenderers shall ensure that the submitted bid (documents) is (are) serialized .i.e (each page in the submitted bid shall have serial identification).	Mandatory (Yes/No)								
	The form of power of attorney shall be duly filled, signed and stamped.	Mandatory (Yes/No)								
	Submission of tender document in original and copy.	Mandatory (Yes/No)								
	All entries must be typed or written in ink. Mistakes must not be erased but should be crossed out and corrections made and initialed by the persons signed the tender.	Mandatory (Yes/No)								
	Bid security	Mandatory (Yes/No)								
	Bidders shall attach copies of the under listed of commissioner of oaths/ advocates registered in	locuments endo Kenva	orsed	(sign	ed an	d sta	mpe	l) by		
	Valid current year business permits	Mandatory (Yes/No)								
	Valid current year tax compliance certificate	Mandatory (Yes/No)								
	Certificate of incorporations	Mandatory (Yes/No)								
	Pin/Vat certificate from KRA	Mandatory (Yes/No)								
	Firms copy of certificate of registration as a contractor	Mandatory (Yes/No)								

KEY
Bidder 1:B1
Bidder 2:B2
Bidder 3:B3
Bidder 4:B4
Bidder 5:B5
Bidder 6:B6
Bidder 7:B7
Bidder 8:B8

**NB:** At this stage, the tender's submission will either be responsive or non-responsive. The non-responsive submission will be eliminated from the entire evaluation process and will not be considered further.

# **TECHNICAL EVALUATION CRITERIA SUMMARY**

<u>No.</u>	REQUIREMENTS	Scorecard (70 Marks)	B1	<b>B2</b>	<b>B</b> 3
1	Form of Power of Attorney dully filled, stamped and Signed by person entrusted with power of Attorney or Commissioner of Oaths.	10 Marks			
2	Dully filled confidential business questionnaire.	10 Marks			
3	An authorization letter from the manufacturer signed and stamped on the manufacturer's letter head.	10 Marks			
4	Attach 1 year WARRANTY CERTIFICATE from the Manufacturer.	10 Marks			
5	Attach an engagement/Commitment letter from the supplier for maintenance for 2 years at his own cost.	10 Marks			
6	Personnel.				
а	Contract manager with at least five years' experience in works of an equivalent nature and volume, including no less than three years as Manager- <b>Must be a registered Medical Engineer</b>	10 Marks			
7	Prior Experience of this nature.	10 Marks			
	Total Score				
	Rank				

# b) Technical evaluations scores

This sections (technical evaluation) will be marked out of 85 or 85/85\*70 and will be determined the technical scorers (TS). Note: at this stage any firm that failed to score above 70% 0r 49/70 shall NOT be evaluated financially

# **B)** Financial evaluation scores

At this stage the tender's submission will either be responsive or non responsive. The non-responsive submission will be eliminated.

No.	Audited report (Last 2 years) (10 marks)	Correction of arithmetical errors (5 marks)	Bank statement (last 6 months) (5 marks)	Liquid assets and/or credit facilities (10 marks)	Score (30Marks)	Total
B1						
B2						
B3						
<b>B</b> 4						
B5						
<b>B</b> 6						
<b>B</b> 7						
<b>B</b> 8						

# FINANCIAL EVALUATION CRITERIA SUMMARY

# COMBINED TECHNICAL AND FINANCIAL SCORES

<b>BIDDER NO</b>	SCORES (TECHNICAL)	SCORES FINANCIAL	TOTAL	RANK
B1				
B2				
B3				
B4				
B5				
B6				
B7				
B8				

# **Table of Clauses**

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### SECTION III - GENERAL CONDITIONS OF CONTRACT

#### 3.1 **Definitions**

- 3.1.1 In this Contract, the following terms shall be interpreted as indicated:-
  - (a) "The Contract" means the agreement entered into between the Procuring entity and the tenderer, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
  - (b) "The Contract Price" means the price payable to the tenderer under the Contract for the full and proper performance of its contractual obligations
  - (c) "The Goods" means all of the equipment, machinery, and/or other materials, which the tenderer is required to supply to the Procuring entity under the Contract.
  - (d) "The Procuring entity" means the organization purchasing the Goods under this Contract.
  - (e) "The Tenderer' means the individual or firm supplying the Goods under this Contract.

# 3.2 **Application**

3.2.1 These General Conditions shall apply in all Contracts made by the Procuring entity for the procurement installation and commissioning of equipment

### 3.3 Country of Origin

- 3.3.1 For purposes of this clause, "Origin" means the place where the Goods were mined, grown or produced.
- 3.3.2 The origin of Goods and Services is distinct from the nationality of the tenderer.

#### 3.4 Standards

3.4.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications.

### 3.5 Use of Contract Documents and Information

- 3.5.1 The tenderer shall not, without the Procuring entity's prior written consent, disclose the Contract, or any provision therefore, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring entity in connection therewith, to any person other than a person employed by the tenderer in the performance of the Contract.
- 3.5.2 The tenderer shall not, without the Procuring entity's prior written consent, make use of any document or information enumerated in paragraph 3.5.1 above

3.5.3 Any document, other than the Contract itself, enumerated in paragraph 3.5.1 shall remain the property of the Procuring entity and shall be returned (all copies) to the Procuring entity on completion of the Tenderer's performance under the Contract if so required by the Procuring entity

# 3.6 Patent Rights

3.6.1 The tenderer shall indemnify the Procuring entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the Procuring entity's country

# 3.7 **Performance Security**

- 3.7.1 Within thirty (30) days of receipt of the notification of Contract award, the successful tenderer shall furnish to the Procuring entity the performance security in the amount specified in Special Conditions of Contract.
- 3.7.2 The proceeds of the performance security shall be payable to the Procuring entity as compensation for any loss resulting from the Tenderer's failure to complete its obligations under the Contract.
- 3.7.3 The performance security shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Procuring entity and shall be in the form of a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in Kenya or abroad, acceptable to the Procuring entity, in the form provided in the tender documents.
- 3.7.4 The performance security will be discharged by the Procuring entity and returned to the Candidate not later than thirty (30) days following the date of completion of the Tenderer's performance obligations under the Contract, including any warranty obligations, under the Contract

# 3.8 Inspection and Tests

- 3.8.1 The Procuring entity or its representative shall have the right to inspect and/or to test the goods to confirm their conformity to the Contract specifications. The Procuring entity shall notify the tenderer in writing in a timely manner, of the identity of any representatives retained for these purposes.
- 3.8.2 The inspections and tests may be conducted in the premises of the tenderer or its subcontractor(s), at point of delivery, and/or at the Goods' final destination If conducted on the premises of the tenderer or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring entity.
- 3.8.3 Should any inspected or tested goods fail to conform to the Specifications, the Procuring entity may reject the equipment, and the tenderer shall either replace the rejected equipment or make alterations necessary to make specification requirements free of costs to the Procuring entity.

- 3.8.4 The Procuring entity's right to inspect, test and where necessary, reject the goods after the Goods' arrival shall in no way be limited or waived by reason of the equipment having previously been inspected, tested and passed by the Procuring entity or its representative prior to the equipment delivery.
- 3.8.5 Nothing in paragraph 3.8 shall in any way release the tenderer from any warranty or other obligations under this Contract.

# 3.9 Packing

- 3.9.1 The tenderer shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract.
- 3.9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract

### 3.10 **Delivery and Documents**

3.10.1 Delivery of the Goods shall be made by the tenderer in accordance with the terms specified by Procuring entity in its Schedule of Requirements and the Special Conditions of Contract

#### 3.11 Insurance

3.11.1 The Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacturer or acquisition, transportation, storage, and delivery in the manner specified in the Special conditions of contract.

### 3.12 **Payment**

- 3.12.1 The method and conditions of payment to be made to the tenderer under this Contract shall be specified in Special Conditions of Contract
- 3.12.2 Payments shall be made promptly by the Procuring entity as specified in the contract

### 3.13 Prices

- 3.13.1 Prices charged by the tenderer for goods delivered and services performed under the Contract shall not, with the exception of any price adjustments authorized in Special Conditions of Contract, vary from the prices by the tenderer in its tender.
- 3.13.2 Contract price variations shall not be allowed for contracts not exceeding one year (12 months)
- 3.13.3 Where contract price variation is allowed, the variation shall not exceed 10% of the original contract price.

3.13.4 Price variation request shall be processed by the procuring entity within 30 days of receiving the request.

# 3.14. Assignment

3.14.1 The tenderer shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Procuring entity's prior written consent

### 3.15 Subcontracts

3.15.1 The tenderer shall notify the Procuring entity in writing of all subcontracts awarded under this Contract if not already specified in the tender. Such notification, in the original tender or later, shall not relieve the tenderer from any liability or obligation under the Contract

# **3.16** Termination for default

- 3.16.1 The Procuring entity may, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the tenderer, terminate this Contract in whole or in part
  - (a) if the tenderer fails to deliver any or all of the goods within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring entity
  - (b) if the tenderer fails to perform any other obligation(s) under the Contract
  - (c) if the tenderer, in the judgment of the Procuring entity has engaged in corrupt or fraudulent practices in competing for or in executing the Contract
- 3.16.2 In the event the Procuring entity terminates the Contract in whole or in part, it may procure, upon such terms and in such manner as it deems appropriate, equipment similar to those undelivered, and the tenderer shall be liable to the Procuring entity for any excess costs for such similar goods.

### 3.17 Liquidated Damages

3.17.1. If the tenderer fails to deliver any or all of the goods within the period(s) specified in the contract, the procuring entity shall, without prejudice to its other remedies under the contract, deduct from the contract prices liquidated damages sum equivalent to 0.5% of the delivered price of the delayed items up to a maximum deduction of 10% of the delayed goods. After this the tenderer may consider termination of the contract.

### 3.18 Resolution of Disputes

- 3.18.1 The procuring entity and the tenderer shall make every effort to resolve amicably by direct informal negotiation and disagreement or dispute arising between them under or in connection with the contract
- 3.18.2 If, after thirty (30) days from the commencement of such informal negotiations both parties have been unable to resolve amicably a contract dispute, either party may require adjudication in an agreed national or international forum, and/or international arbitration.

# 3.19 Language and Law

3.19.1 The language of the contract and the law governing the contract shall be English language and the Laws of Kenya respectively unless otherwise stated.

### 3.20 Force Majeure

3.20.1 The tenderer shall not be liable for forfeiture of its performance security or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

### SECTION IV - SPECIAL CONDITIONS OF CONTRACT

### Notes on Special Conditions of Contract

The clauses in this section are intended to assist the procuring entity in providing contract-specific information in relation to corresponding clauses in the General Conditions of Contract.

The provisions of Section IV complement the General Conditions of Contract included in Section III, specifying contractual requirements linked to the special circumstances of the procuring entity and the goods being procured. In preparing Section IV, the following aspects should be taken into consideration.

- (a) Information that complement provisions of Section III must be incorporated and
- (b) Amendments and/or supplements to provisions of Section III, as necessitated by the circumstances of the goods being procured must also be incorporated.

### SECTION IV - SPECIAL CONDITIONS OF CONTRACT

- 4.1. Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, between the GCC and the SCC, the provisions of the SCC herein shall prevail over these in the GCC.
- 42. Special conditions of contract as relates to the GCC

REFERENCE OF GCC	SPECIAL CONDITIONS OF CONTRACT
3.7.1	Performance security shall be 5% of the tenderer's sum.
3.12.1	Payment will be done as follows: 55% upon full delivery and installation of the items and the remaining 45% to be paid 1 year after delivery and installation of items
3.18.1	As 3.18.1

# SECTION V - TECHNICAL SPECIFICATIONS

# 5.1 General

- 5.1.1 These specifications describe the requirements for goods. Tenderers are requested to submit with their offers the detailed specifications, drawings, catalogues, etc for the products they intend to supply
- 5.1.2 Tenderers must indicate on the specifications sheets whether the equipment offered comply with each specified requirement.
- 5.1.3 All the dimensions and capacities of the equipment to be supplied shall not be less than those required in these specifications. Deviations from the basic requirements, if any shall be explained in detail in writing with the offer, with supporting data such as calculation sheets, etc. The procuring entity reserves the right to reject the products, if such deviations shall be found critical to the use and operation of the products.
- 5.1.4 The tenderers are requested to present information along with their offers as follows:
  - (i) Shortest possible delivery period of each product
  - (ii) Information on proper representative and/or workshop for back-up service/repair and maintenance including their names and addresses.

#### SECTION VI - SCHEDULE OF REQUIREMENTS

THE EMPLOYER IS

Name:	<b>GOVERNOR - Mandera County Government</b>
Address:	P.O Box 13, MANDERA

Name of Authorized Representative:		County Executive Committee Member – Health Services	
Cell phone:	••••••		
E-mail:/Fax:	•••••		

Name of Alter	native Representative: Chief Officer – Health Services
Cell phone:	
E-mail:/Fax:	•••••

The Project Manager is:	County Director – Health services
Address:	P.O. BOX 13, MANDERA
Cell phone:	•••••

The name (and identification number) of the Contract is: TENDER FOR SUPPLY, DELIVERY AND INSTALLATION OF MEDICAL EQUIPMENTS TO ACCIDENT & EMERGENCY UNITS AT MANDERA COUNTY REFERRAL HOSPITAL & ELWAK REFERRAL HOSPITAL

The works consist of: TENDER FOR SUPPLY, DELIVERY AND INSTALLATION OF MEDICAL EQUIPMENTS TO ACCIDENT & EMERGENCY UNITS AT MANDERA COUNTY REFERRAL HOSPITAL & ELWAK REFERRAL HOSPITAL

The Start Date shall be AGREED WITH THE PROJECT MANAGER

The Intended Completion Date for the whole of the Works shall be **Sixteen** (16) Weeks from the commencement date as agreed with the Project Manager.

The Contractor shall submit a revised program for the Works within **SEVEN** (7) days of delivery of the Letter of Acceptance.

The Site Possession Date shall be **AGREED WITH THE PROJECT MANAGER** The Defects Liability period is 180 days

The minimum insurance covers shall be; "ALL RISKS INSURANCE"

The period between Program updates is **15** days. The amount to be withheld for late submission of an updated Program is **FULL CERTIFICATE** 

The proportion of payments retained is **10%** percent.

The Price Adjustment Clause SHALL NOT apply

The liquidated damages for the whole of the Works is Kshs. 1,000.00 (per week)

The Performance Security shall be for the following minimum amounts equivalent as a percentage of the Contract Price **5 percent** (%)

The Completion Period for the Goods is Sixteen (16) Weeks

The rate of exchange for calculation of foreign currency payments is **not applicable** 

The schedule of basic rates used in pricing by the Contractor is as attached [Contractor to attach].

Advance Payment SHALL NOT be granted.

The Bidder should submit **ONLY ONE (1 NO.) ORIGINAL AND A COPY** of the Bills of Quantities as indicated in Clause 4.1 of the Instruction to Tenderers.

This Tender must be accompanied by a Bid Bond or else the tender shall be disqualified.
# SECTION VII - PRICE SCHEDULE FOR GOODS

Name of tenderer \_\_\_\_\_ Tender Number \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

1	2	3	4	5	6	7
Item	Description	Country of origin	Quantity	Unit price	Total Price EXW per item (cols. 4x5)	Unit price of other incidental services payable

# Signature of tenderer \_\_\_\_\_

*Note:* In case of discrepancy between unit price and total, the unit price shall prevail.

# SECTION VIII - STANDARD FORMS

#### Notes on the sample Forms

1. Form of Tender - The form of tender must be completed by the tenderer and submitted with the tender documents. It must also be duly signed by duly authorized representatives of the tenderer.

2. Confidential Business Questionnaire Form - This form must be completed by the tenderer and submitted with the tender documents.

3. Tender Security Form - When required by the tender documents the tender shall provide the tender security either in the form included herein or in another format acceptable to the procuring entity.

4. Contract Form - The Contract Form shall not be completed by the tenderer at the time of submitting the tender. The Contract Form shall be completed after contract award and should incorporate the accepted contract price.

5. Performance Security Form - The performance security form should not be completed by the tenderers at the time of tender preparation. Only the successful tenderer will be required to provide performance security in the form provided herein or in another form acceptable to the procuring entity.

6. Bank Guarantee for Advance Payment Form - When Advance payment is requested for by the successful bidder and agreed by the procuring entity, this form must be completed fully and duly signed by the authorized officials of the bank.

7. Manufacturers Authorization Form - When required by the ender documents this form must be completed and submitted with the tender documents. This form will be completed by the manufacturer of the goods where the tenderer is an agent.

#### 8.1 FORM OF TENDER

Date \_\_\_\_\_ Tender No. \_\_\_\_\_

То: \_\_\_\_\_

[name and address of procuring entity]

Gentlemen and/or Ladies:

1.Having examined the tender documents, we, the undersigned, offer to supply and<br/>deliverdeliverdocumentsforthesumof

..... (total tender amount in words and figures) or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Tender.

2. We undertake, if our Tender is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

3. If our Tender is accepted, we will obtain the guarantee of a bank in a sum of equivalent to \_\_\_\_\_\_ percent of the Contract Price for the due performance of the Contract , in the form prescribed by **Mandera County Government** 

4. We agree to abid by this Tender for a period of ......days from the date fixed for tender opening of the Instructions to tenderers, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

5. This Tender, together with your written acceptance thereof and your notification of award, shall constitute a Contract, between us. Subject to signing of the Contract by the parties.

6. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_

[signature] [in the capacity of] Duly authorized to sign tender for an on behalf of \_\_\_\_\_

## 8.2 **CONFIDENTIAL BUSINESS QUESTIONNAIRE FORM**

You are requested to give the particulars indicated in Part 1 and either Part 2(a), 2(b) or 2 (c ) whichever applied to your type of business

You are advised that it is a serious offence to give false information on this form

Part 1 – General: **Business** Name ..... Location of business premises. ..... Plot No..... Street/Road ..... Postal Address ...... Tel No. ..... Fax ..... E mail ..... Nature of Business ..... Registration Certificate No. ..... Maximum value of business which you can handle at any one time - Kshs. ..... Name of your bankers ..... Branch .....

	Part 2 (a) – Sole Proprietor
Your name in full	Age
Nationality	Country of origin
• Ci	tizenship details
• Civen details of partne	Part 2 (b) Partnership
Name	Nationality
Citizenship Details 1	Shares
2	••••
3	···· ······
4	•••••
	Part 2 (c ) – Registered Company
Private or Public	

State the nominal and issued capital of company-Nominal Kshs. Issued Kshs. .... Given details of all directors as follows Name Nationality Citizenship Details Shares 1..... 2. ..... 3. ..... 4. . . . . . . . . . . . . 5 . . . . . . . . . . . ..... Date ...... Signature of Candidate 

• If a Kenya Citizen, indicate under "Citizenship Details" whether by Birth, Naturalization or registration.

# 8.3 LETTER OF ACCEPTANCE [letterhead paper of the Employer]

\_\_\_\_\_[date]

To: \_

[name of the Contractor]

[address of the Contractor]

Dear Sir,

You are hereby instructed to proceed with the execution of the said Works in accordance with the Contract documents.

Authorized Signature .....

Name and Title of Signatory .....

Attachment : Agreement

# 8.4 FORM OF AGREEMENT

THIS AGREEMENT, made the \_\_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_ between **MANDERA COUNTY GOVERNMENT** of[or whose registered office is situated at] **P.O BOX 13, MANDERA,KENYA** (hereinafter called "the Employer") of the one part AND \_\_\_\_\_\_ of[or whose registered office

is situated at]\_\_\_\_\_\_(hereinafter called "the Contractor") of the other part.

WHEREAS THE Employer is desirous that the Contractor executes TENDER FOR SUPPLY, DELIVERY AND INSTALLATION OF MEDICAL EQUIPMENTS TO ACCIDENT & EMERGENCY UNITS AT MANDERA COUNTY REFERRAL HOSPITAL & ELWAK REFERRAL HOSPITAL **MCG/OT/09/2018-2019** 

(name and identification number of Contract ) (hereinafter called "the Works") located at **Mandera County**[Place/location of the Works]and the Employer has accepted the tender submitted by the Contractor for the execution and completion of such Works and the remedying of any defects therein for the Contract Price of Kshs\_\_\_\_\_[Amount in figures],Kenya Shillings\_\_\_\_\_[Amount in words].

NOW THIS AGREEMENT WITNESSETH as follows:

- 1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
- 2. The following documents shall be deemed to form and shall be read and construed as part of this Agreement i.e.
  - (i) Letter of Acceptance
  - (ii) Form of Tender
  - (iii) Conditions of Contract Part I
  - (iv) Conditions of Contract Part II and Appendix to Conditions of Contract
  - (v) Specifications
  - (vi) Drawings
  - (vii) Priced Bills of Quantities
- In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The common Seal of	_	
Was hereunto affixed in the presence of		
Signed Sealed, and Delivered by the said		
Binding Signature of Employer		
Binding Signature of Contractor		
In the presence of (i) Name		
Address		
Signature		
[ii] Name		
Address		
Signature		

#### 8.5 FORM OF TENDER SECURITY

KNOW ALL PEOPLE by these presents that WE ..... having our registered .....(hereinafter called "the Bank"), office at are bound unto .....(hereinafter called "the Employer") in the sum of Kshs..... for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents sealed with the Common Seal of the said Bank this ...... Day of ......20.....

THE CONDITIONS of this obligation are:

- 1. If after tender opening the tenderer withdraws his tender during the period of tender validity specified in the instructions to tenderers Or
- 2. If the tenderer, having been notified of the acceptance of his tender by the Employer during the period of tender validity:
  - (a) fails or refuses to execute the form of Agreement in accordance with the Instructions to Tenderers, if required; or
  - (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers;

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including thirty (30) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the said date.

[date[

[signature of the Bank]

[witness]

[seal]

# 8.6 **PERFORMANCE BANK GUARANTEE**

То:	(Name of Employer)	(Date)
	(Address of Employer)	

Dear Sir,

WHEREAS \_\_\_\_\_\_\_(hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. \_\_\_\_\_\_ dated \_\_\_\_\_ to execute \_\_\_\_\_\_ (hereinafter called "the Works");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognised bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of Kshs. \_\_\_\_\_\_\_ (amount of Guarantee in figures) Kenya Shillings\_\_\_\_\_\_\_ (amount of Guarantee in words), and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of Kenya Shillings \_\_\_\_\_\_\_ (amount of Guarantee in words) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change, addition or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any change, addition, or modification.

This guarantee shall be valid until the date of issue of the Certificate of Completion.

SIGNATURE AND SEAL OF THE GUARANTOR \_\_\_\_\_

Name of Bank \_\_\_\_\_

Address \_\_\_\_\_ Date \_\_\_\_\_

# 8.7 BANK GUARANTEE FOR ADVANCE PAYMENT

To:	[name of Employer]	(Date)
	[address of Employer]	

Gentlemen,

Ref: \_

\_\_\_\_\_[name of Contract]

In accordance with the provisions of the Conditions of Contract of the above-mentioned \_\_\_\_\_[name and Address of Contractor] Contract, We,\_\_\_ (hereinafter called "the Contractor") shall deposit with \_[name of Employer] a bank guarantee to guarantee his proper and faithful performance under the said Contract in an amount of figurers| Kshs.\_\_\_\_\_amount of Guarantee in Kenva Shillings [amount of Guarantee in words].

 We, \_\_\_\_\_\_\_[bank or financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to \_\_\_\_\_\_\_ [name of Employer] on his first demand without whatsoever right of objection on our part and without his first claim to the Contractor, in the amount not exceeding Kshs\_\_\_\_\_\_\_ [amount of Guarantee in figures]

 Kenya
 Shillings

*words*], such amount to be reduced periodically by the amounts recovered by you from the proceeds of the Contract.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between \_\_\_\_\_\_ [name of Employer] and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

No drawing may be made by you under this guarantee until we have received notice in writing from you that an advance payment of the amount listed above has been paid to the Contractor pursuant to the Contract.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until

\_\_\_\_\_(name of Employer) receives full payment

of the same amount from the Contract.

Yours faithfully,

Signature and Seal \_\_\_\_\_

Name of the Bank or financial institution \_\_\_\_\_

Address _	
Date	
Witness:	Name:
	Address:
	Signature:
	Date:

# 8.8 MANUFACTURER'S AUTHORIZATION FORM

To Mandera county government P.o box 13-70300 Mandera

WHEREAS[ name of the<br/>manufacturer] who are established and reputable manufacturers of<br/>and/or description of the goods] having factories at<br/>factory] do hereby authorize<br/>submit a tender, and subsequently negotiate and sign the Contract with you against tender No.<br/>[reference of the Tender] for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per the General Conditions of Contract for the goods offered for supply by the above firm against this Invitation for Tenders.

[Signature for and on behalf of manufacturer]

*Note:* This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person competent.

## 8.9 LETTER OF NOTIFICATION OF AWARD

Address of Procuring Entity

То:\_\_\_\_\_

\_\_\_\_\_

RE: Tender No.\_\_\_\_\_

Tender Name\_\_\_\_\_

This is to notify that the contract/s stated below under the above mentioned tender have been awarded to you.

- 1. Please acknowledge receipt of this letter of notification signifying your acceptance.
- 2. The contract/contracts shall be signed by the parties within 30 days of the date of this letter but not earlier than 14 days from the date of the letter.
- 3. You may contact the officer(s) whose particulars appear below on the subject matter of this letter of notification of award.

(FULL PARTICULARS)

SIGNED FOR ACCOUNTING OFFICER

#### FORM RB 1

# REPUBLIC OF KENYA PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

APPLICATION NO.....OF......20.....

#### BETWEEN

.....APPLICANT

#### AND

......RESPONDENT (Procuring Entity)

**REQUEST FOR REVIEW** 

I/We.....,the above named Applicant(s), of address: Physical address......Fax No.....Tel. No......Email ....., hereby request the Public Procurement Administrative Review Board to review the whole/part of the above mentioned decision on the following grounds , namely:-

1. 2.

etc.

By this memorandum, the Applicant requests the Board for an order/orders that: -

1.

2.

etc

SIGNED ......(Applicant)

Dated on......day of ....../...20...

# FOR OFFICIAL USE ONLY

Lodged with the Secretary Public Procurement Administrative Review Board on ...... day of .......20......

SIGNED Board Secretary

# 9.1 FORM OF POWER OF ATTORNEY

# (All bidders shall complete this form otherwise, their bids shall be considered nonresponsive)

We	e (Name of Bidder)		
having our Building) d	offices located in uly authorize.	(Na	me of Town and
and on beh execution of MEDICAL EO HOSPITAL &	nalf of the bidder) to act for and o of works as stipulated TENDER I QUIPMENTS TO ACCIDENT & EMERO ELWAK REFERRAL HOSPITAL <b>MCG/</b>	(Name of person appoint our behalf on all matters FOR SUPPLY, DELIVERY AND GENCY UNITS AT MANDERA C OT/09/2018/2019.	pertaining to the INSTALLATION OF OUNTY REFERRAL
Duly signed	d and delivered:		
Name of ap	pointed attorney:		_
Signature o	of appointed attorney:		
Witnessed	by:		
1.	Name of First Company Director	:	
	Signature:		
2.	Name of Second Company Direc	tor:	
	Signature:		
	Company Seal:		
SIGNED Board Sect	retary		

# **BILLS OF QUANTITIES**

#### **TECHNICAL SPECIFICATIONS** 1. ICU ELECTRIC 5 Function BED

The ICU Bed should be 5 function column model electric bed with the following:

a. Backrest, leg rest, auto contour, height (up - down), Electronic CPR, Trendelenburg and reverse Trendelenburg positions are controlled by 2 DC and 2 Column motors.

b. Positions controlled by "Hand Remote Control" (located on head side rails) and "Nurse Remote Control" (located by the foot end).

c. Head and foot boards made of PP plastic and easily clearable. These parts can also be assembled and disassembled easily.

d. Lying surface consists of 4 pieces easily clearable ABS plastic.

e. 4 pieces folding side rails are made of PP plastic and have release system assisted by gas spring.

f. Automatic back sliding and leg sliding functions to be availed in the bed.

g. Must be provided with battery to provide continuous energy in case of electricity cut off. 24V battery backup.

h. Metal chassis is epoxy polyester electrostatic painted and covered with ABS plastic.

i. Bumpers to be located at each corner of the bed to protect the bed against crushes.

j. Accessory sockets located at each corner of the bed for IV poles or traction sets.

k. One adjustable IV pole to be provided with the bed.

1. Drainage bag holders at both sides of the bed.

m. Angle indicator on each side rail part.

n. 4 patient restraint strap holders (2 on each side).

# **DIMENSIONS:**

- Full Length: 220 cm
- Full Width: 105 cm
- Minimum Height: 48 cm
- Maximum Height: 88 cm
- Mattress Length : 190 cm
- Mattress Width : 90 cm
- Weight Capacity: 250 kg

# **OPERATING ANGLES:**

- Back Movement: 0°- 70°
- Leg Movement: 0°- 30°
- Vascular Position
- Knee Movement
- Height Adjustment
- Trendelenburg & Reverse Trendelenburg: 0°- 17°
- Cardiac Position

# **CONTROL PANELS:**

• Backrest, legrest, automatic contour and height (up -down) positions adjustable electronically by Hand Remote Control.

• Backrest, legrest, height (up - down), trendelenburg, reverse trendelenburg and CPR positions adjustable electronically by Nurse Remote Control.

• All functions of the bed to be lockable by remote control keys.

# **BRAKE AND STEER SYSTEM:**

a. Brakes to be applied on all four castors (all castors lockable). Ø125 mm, 360° swivel wheels with central brake system and directional lock

b. All four castors to be free to rotate and swivel.

c. STEER System whereby three castors can rotate and swivel, the steering castor can only rotate but cannot swivel.

## **MATTRESS:**

• Waterproof and zipped cover,

- CNC cut,

- Adaptable to all movements
  32 kg/m3 density foam
  90 cm x 110 cm x 11 cm (h)

**ELECTRIC FEATURES** 

AC Voltage: 220-230 V, Frequency: 50 HZ

Warranty: 1 year Should be CE certified.

#### 2. ICU Ventilator

#### **Intensive Care Ventilator Description**

State of the art ventilator for use in intensive care, critical care, intermediate care and emergency care

Have a Built-in air source turbine technology with maximum continuous flow  $\geq$  260 L/min for invasive and non-invasive ventilation

Have capability to support single-limb and dual-limb circuits

Have an inbuilt Nebulizer and integrated Humidifier

Life-supporting ventilation of adult, pediatric and neonatal patients  $\geq 2$  mL tidal volume

Have a Wide-range oxygen supply 0 ... 7 bar (0 ... 100 psi)

Weight  $\leq 10$ kg for intra-hospital transport ventilation

Independent battery operation  $\geq$ 4 hours

Operating concept must be modern, easy to use and self-explaining.

Have a Color touch screen  $\geq 13$  inch

Automatic barometric compensation

Complete automatic self-check upon startup

Ventilator Modes to be provided

Have Non-invasive (NIV) ventilation with automatic leakage compensation  $\geq 100$  L/min

CPAP / PEEP (INV and NIV)

Pressure supported ventilation (PSV) (INV and NIV)

Pressure controlled / assisted / SIMV ventilation (INV and NIV)

Volume controlled / assisted / SIMV ventilation

APRV with pressure support (Airway Pressure Release Ventilation) (INV and NIV)

Pressure

PRVC (pressure regulated volume controlled) (INV and NIV)

Have Time controlled dual mode (e.g. day/night)

Have Dual control mode (spontaneous / mandatory)

Have NIV mask adaptation mode

Inspiratory and expiratory hold

Automatic O<sub>2</sub> increase to 100% for 2 minutes

#### **Patient Monitoring**

Have Simultaneous display of up to 8 curves or loops

Able to monitor these Curves Flow Volume CO<sub>2</sub>

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#### 2. ICU Ventilator

Loops Volume / Flow Pressure / Flow

#### Pressure / Volume

Screen that allows free configuration of curves and monitoring parameters

Patient-proximal flow measurement

Exhalation monitoring: Tidal Volume, Minute Volume, Peak Flow

Timing monitoring: Rate, Insp. Time, Exp. Time, I:E

Pressure monitoring: Peak, Plateau, Mean, PEEP,

Lung mechanics: Compliance (static and dynamic), Resistance (insp. and exp.) Lung overdistention parameter

NIV and spontaneous monitoring: % spontaneous breaths, spontaneous inspiration time, spontaneous. exp. volume, RSBI (Tobin Index)

Maneuver-related monitoring: AutoPEEP, P0.1, NIF negative inspiratory force,

Waveform freeze and cursor measurements

Trending data recording  $\geq$  3 months of all monitoring parameters

#### **Control Settings**

Capability for automatic initial settings according to selected patient type, height and pathology

FiO<sub>2</sub> 21 ... 100 %O<sub>2</sub>

Tidal Volume 10 ... 2500 mL

Inspiratory pressure  $0 \dots 80$  mbar (cmH<sub>2</sub>O)

PEEP  $0 \dots 40 \text{ mbar (cmH}_2\text{O})$ 

Respiratory rate 1 ... 100 bpm

Flow trigger sensitivity 0.1 ... 20 L/min

Pressure trigger sensitivity 0.1 ... 15 mbar

Exhalation sensitivity 5 ... 90 % of peak flow Automatic

#### Alarms

Automatic initial alarm settings according to selected patient type, height and pathology

Alarm lights visible from all angles

Alarm history  $\geq$  2000 alarms

Capable to automatically adjust directly related alarms on change of ventilation settings

EtCO<sub>2</sub> high/low, inCO<sub>2</sub> high

Accessories

Have a Trolley, support arm and cylinder holder

Silicone Breathing Circuit, filters, masks - 2 sets

#### 2. ICU Ventilator

O<sub>2</sub> supply hose

O<sub>2</sub> input filter and water trap

Fixation for oxygen cylinder

Test lung Adult Adult adjustable Pediatric / Infant adjustable Neonatal

Must be CE marked and FDA approved.

Warranty: Minimum of 1 year.

Vendor must submit evidence of trained personnel for service and applications.

Show past contracts of similar model offered.

#### 3. Fluid Warmer Specifications

High performance warming system is capable of delivering fluids or blood at a continuous 40 degrees celsius from keep-vein-open (KVO) to 200 mL/minute.

The warmer unit is extremely compact and fits in the palm of your hand.

Unlike competitor warmers that heat fluids from the IV pole, the enFlow Fluid Warmer is placed close to the patient which helps prevent loss of heat while the IV fluid travels to the IV site.

Enflow recommends that the fluid warmer be placed 9 inches from the IV site.

The EnFlow Power Unit (sold separately from the warmer) mounts on the IV pole and displays the heated fluid temperature.

The fluid warmer is reusable with the purchase of disposable cartridges that contain the heating element that is inserted into the warmer with each use.

Warranty: 1 year

Must be ISO, CE, FDA approved **Specification** 

#### 4. INFUSION PUMP SPECIFICATIONS

Infusion Modes: Continuous, 25- steps, TPN, Intermittent.

Piston Mechanism

Color Display Size (W/H): 3.7x4.9 cm

Flow Rate Accuracy: ± 5 %

Resolution (W/H): 240x320 pixels

Flow Rate Range: 0.1 - 1200 ml/h

## **Programmable Infusion Time:** 100 hrs

Volume to be Infused: 0.1 - 9999 ml

KVO Rate: 0 (OFF) - 5 ml/h

**Ultrasonic Air Sensor:** Air bubble size 0.1 - 1 ml

Occlusion Pressure: 100-1500 mmHg

**Post-Occlusion Bolus Protection** 

Pressure Sensor mechanism.

Pump Alarms/Alerts: Air-in-Line, Occlusion (up/down stream), End Program, Low Battery, End Battery, Pump Unattended, Door Open, Lock Mode, Missing Key.

Power Supply: 240V AC, 50/60 Hz Battery Rechargeable Li-Polymer 7.4V 1800 mAh. Life at 125ml /h: Up to 17 hrs

**RS232 Serial Port** 

Weight (with standard battery): 390 g

Warranty: Minimum of 1 year

Must be certified by CE and ISO certified.

#### 5. SYRINGE PUMP SPECIFICATIONS

# Infusion Modes: Lock On, Lock off, rate mode and Time mode.

Linear Syringe Driver Mechanism

Display Size (W/H): 5.1x2.8 cm

**Resolution (W/H):** 128x64 pixels

Syringe Size: 2 – 60 ml

Flow Rate Accuracy:  $\pm 2 \%$ 

Syringe Brands: All brands programmable

Flow Rate Range: 0.1 - 1500 ml/h

# Programmable Infusion Time: 10 mins - 100 hrs

KVO Rate: 0 (off) to 2ml/hr

Max Syringe Travel: 106 mm

Occlusion Pressure: 100 – 1500 mmHg

Pump Alarms/Alerts: Syringe not Recognized, Occlusion, End Program, Near End/Nearly Complete, End Syringe Travel, Low Battery, End Battery.

Power Supply: 240V AC, 50/60 Hz Battery Rechargeable Li-Polymer 7.4V 1800 mAh. Life at 125ml /h: Up to 15 hrs

**RS232 Serial Port** 

Weight (with battery): 411 g

Dimensions; pump only (H/W/D): 205 x 98 x 45 mm

Warranty: Minimum of 1 year.

Must be certified by CE and ISO.

## 6. PATIENT MONITOR SPECIFICATIONS

#### Display

Type: 12.1 inch wide colour LCD Resolution: 1024 x 600, WSVGA Waveforms: maximum 14 Sweep speed: Circulatory: 6.25, 12.5, 25, 50 mm/s Respiratory: 6.25, 12.5, 25 mm/s Waveform Display: Stationary trace mode.

#### Operation

Touch screen method Jog dial with push key 5 fixed keys: NIBP Start/Stop, Home, Menu, Previous display and Alarm silence.

#### Parameters

Waveform: ECG, IBP (max 2 ch), SpO<sub>2</sub>, RESP.

Measurement: HR, ST, VPC, IBP, SpO<sub>2</sub>, RR, PR, APNEA, NIBP, TEMP (max 4 ch), CO<sub>2</sub>, and CO. Arrhythmia analysis: ASYSTOLE, VF, VT, Slow VT, RUN, Tachy, Brady, Bigeminy, Frequent, Couplet, Trigeminy and PAUSE.

# ECG

Measuring range: Adult/Child: 0, 12 to 300 bpm Neonate: 0, 30 to 300 bpm Measurement accuracy: ±3 bpm Size: 1/4, 1/2, 1, 2 and 4 HR Display response time: Adult/Child: 6 sec

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Neonate: 3 sec Defibrillation proof provided.

# Respiration

Measurement Method: Impedance Measuring range: 0, 4 to 150 Bpm Measurement accuracy:  $\pm 3$  Bpm

# SpO<sub>2</sub>

Measuring method: 2 Wavelength Pulse wave Module: Nellcor/Masimo technology Measuring range: 1 ~ 100% Measurement accuracy:  $\pm 3\%$  (Nellcor)/ $\pm 2\%$  (Masimo) PR measurement range: 20 ~ 250bpm PR accuracy: ±3bpm

# Temperature

Measurement Method: Thermistor Measuring range: 0 to 45 °C Measurement accuracy: ±0.2 °C Number of channels: 4 max.

#### **Invasive Blood Pressure**

Measuring range: -50 to 300 mmHg Measurement accuracy:  $\pm 1 \text{ mmHg}$ PR measurement range: Adult: 12 to 300bpm Neonate: 30 to 300bpm PR accuracy:  $\pm 1$  bpm or  $\pm 3\%$ Number of channels: 2 max.

#### **Non-Invasive BP**

Measuring method: Oscillometric Measuring range: Adult: 10 to 280 mmHg Child: 10 to 180 mmHg Neonate: 10 to 130 mmHg Static Pressure accuracy: ±3 mmHg PR measurement range: 40 to 240bpm PR accuracy: ±5% Safety Mechanism: Adult: 300 mmHg or above Child: 210 mmHg or above Neonate: 150 mmHg or above

# **Graph Trend**

24 hours/ 4 selectable groups/ 34 items

# **Tabular Trend**

24 hours/ 6 selectable groups/ 85 items

# External connection

Serial connector (COM1~2) CF / SD card slots DS-LAN connector AUX connector Status I/O connector (II-1)

## Dimensions

Main unit: 300 (W) x 265 (H) x 75 (D) mm

# Weight

3.5 Kg

# Power

Power requirements: AC 100 ~ 240V, 50/60Hz Power consumption: 60 VA max. Battery operation time: 3 hours

## **Environmental condition**

Operating environment: Ambient temperature: 10 to 40°C Relative humidity: 30 to 85% Transport/Storage: Ambient temperature: -10 to 60°C Relative humidity: 10 to 95%

## Safety

General Standard: EN 60601-1: 1990 EN 60601-1-1: 2001 Electrical Shock Protection: Class I Conformity: CE Marking per 93/42/EEC Directive

# Usable lifetime

6 years according to the self-certification.

# Accessories to be provided:

ECG Relay cable 1pc SPO2 Sensor 1pc Body Surface Temperature Probe 1pc Wall mount for monitor to be wall mounted

# Must be ISO and FDA approved.

Warranty: Minimum of 1 year.

# Training and Installation should be included.

# 7. Central Monitoring System 16 monitor monitoring Specifications

Intelligent central multi-bed and multi-physiological parameter monitoring system.

Wire or wireless networking with the patient monitors within the HDU and ICU.

Central station should have facility to display upto 20 real time waves at a time and monitor up to 16 beds at the same time

Central station should have separate patient window for viewing detailed real-time or stored data for individual patient

Should have 240 hr stored patient data monitoring – trends

Should have 24 hr event review facility

Should have multi lead arrhythmia and ST review facility.

Should have 50 alarms strips storage per bed.

Should offer wave review with 24 hr full disclosure

Should support HL7 output

To have an optional facility for dual display for detailed analysis of individual bed without compromising on full ICU monitoring.

Remote display (Slave) facility should be available if necessary

Real time recording through dual channel recorder should be possible.

Should have facility for interfacing a laser printer for printing patient information and trend formats. To

have advanced arrhythmia analysis package

Should have 12 Lead ECG Monitoring.

Continuous full disclosure of up to 4 configurable waves per patient

Alarm condition should be stored with waveforms (up to 4 waves per event)

Should operate on Microsoft Windows NT workstation operating system

Should be supplied with UPS back up.

# Central Station Should be supplied with:

(2) Double display 17" flat screen TFT display with resolution of 1024x768 pixels

Laser printer and Recorder

UPS

Entire networking and cabling with hardware and wireless connectivity to monitors in HDU, ICU.

Warranty: 1 year

Must be FDA approved and ISO certified.

# 8. <u>DEFIBRILLATOR</u>

# **Features**

- · Biphasic technology.
- · Truncated Exponential Waveform adapted to patient's impedance.
- · Simple and intuitive.
- · Portable and lightweight.
- $\cdot$  Control of the defibrillator and the printer from the paddles.
- · Integrated pediatric paddles.
- Operates from the mains (AC), from a vehicle battery (DC) and with its internal battery.
- $\cdot$  Auto test when switched on and during operation.

Compact Flash" memory car Only two buttons in AED mode VT/VF alarm. Visual and acoustic messages. Selector cover: Manual or AED.

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# **Accessories**

- $\cdot$  4-lead patient cable.
- $\cdot$  5-lead patient cable (standard).
- · 10-lead patient cable.
- · Internal paddles.
- Multifunction electrodes.
- · Carrying case.
- · Ambulance bracket (EN 1789 certified).

# Technical Specifications

## **GENERAL**

- Dimensions 310 mm (W) x 249 mm(D) x 195 mm (H)
- Weight Unit with printer, multifunction disposable electrodes and without battery: 5.2 Kg
- External reusable paddles: 0.95 Kg
- Battery: 0.8 Kg

# **MONITOR**

- ECG monitoring :4, 5 or 10 lead patient cable, paddles or multifunction disposable electrodes
- Sensitivity :0.5 -1 2 4 cm/mV
- Heart rate: 0 to 300 ppm
- Configurable alarms: Heart rate, pulse oximetry (only for equipment's with this option) and VT/VF alarm (only for equipment's with AED option)
- Bandwidth: 0.67-40 Hz or 0.05-150 Hz (diagnostic, only on printer)
- Common mode rejection :100 dB at 50/60 Hz

# **SCREEN**

- Size:115 x 86 mm (1/4 VGA) 5.7 inches
- Resolution: 320 x 240 points
- Sweep rate: 25 mm/sec
- Display time: 4.5 sec (x 2 in cascade mode)

# **DEFIBRILLATOR**

- Waveform :Biphasic truncated exponential adapted to the patient's impedance
- Manual Energy: 1 2 3 5 7 9 10 15 20 30 50 70 100 125 150 200 J (nominal at a resistance of 50 ohms)
- Synchronized cardioversion: Discharge begins within 60 msec of the QRS peak
- Paddle options :Reusable external adult paddles (paediatric paddles integrated)

Multifunction disposable electrodes

Reusable internal paddles (optional)

- AED: Defibrillable rhythm detection algorithm meets AHA and IEC requirements
- Max energy level:200 J
- Charging time Less :than 5 sec. at 200 J with a new and fully charged battery
- Resuscitation guidelines: Factory set Guideline 2010 (ERC/AHA)

# PACE MAKER

Stimulation mode: On Demand and Fixed with selectable frequency and current

- Frequency :30 to 180 ppm
- Current: 0 to 150 mA
- Waveform :Type: Rectangular constant current Duration: 40 ms
- Refractory period: 340 ms from 30 to 80 ppm 240 ms from 85 to 180 ppm

## **RECORDER**

- Paper :50 mm thermal
- Speed: 10, 25 and 50 mm/sec
- Operating mode: Manual, automatic, 8 second delay

#### **DATA STORAGE**

Compact Flash memory card: Minimum capacity 16 MB

- Information: Continuous ECG signal and events
- Audio (optional only in automatic mode)

100 last events with the associated ECG signal

#### **PULSE FREQUENCY**

- Range :25 -240 ppm
- Accuracy during: ± 2 ppm
- Accuracy during: ± 5 ppm

#### BATTERY

- NIMH BATTERY: Rechargeable
- Capacity :
- more than 130 discharges at 200 J
- Monitoring: More than 150 minutes
- Monitoring plus Pacemaker (60 ppm and 60 mA): More than 120 minutes

#### **CHARGE STATUS AND LOW BATTERY INDICATOR**

- Charging time: 3 hours
- AC: 100 240 VAC, 50/60 Hz
- DC :10 -16 VDC

#### **Environment**

- Operating temperature: 0 to 50 °C
- Storage temperature: -20 to 60 °C
- Relative humidity: 10 to 95 % (not condensed)
- Shocks: IEC 60068-2-27
- Vibration :IEC 60068-2-64

Warranty: 1 year Should be CE certified

#### 9. Suction Machine Specifications

Motor: Oiless and maintenance free piston pump.

Noise Level: 61.5Db.

Power Consumption: 220 V.

Max. Flow Rate: 401/min

Weight: 6.20kgs.

Electric with 2x2Litre Jars.

Provided with 10 antibacterial filter.

Size: 32 x 99 x 30cm.

Vacuum Range: 600mm Hg, 0.80 Bar 80 kPa.

Warranty: 1 year.

## 10. BLOOD GAS ANALYZER SPECIFICATIONS

#### **MEASURED PARAMETERS-**

po2 pCO2 PH Total Hemoglobin (tHb) Barometric pressure Na+ K+ Ca++ Li+ Cl-Glucose Lactate. **INPUT PARAMETER-Patient Temperatures** Hemoglobin (tHb) Fraction of inspired Oxygen (FIO2), Respiratory Quotient (RQ).

# CALCULATED PARAMETERS-

Hydrogen ion conc. (H+) Actual Bicarbonate (HCO3-A) Base excess (BE) Standard base excess (SBE) Total CO2 (TCO2) Buffer base (BB) O2 saturation of hemoglobin (O2sat) O2 content of concentration (O2CT) Partial O2 press at 50% O2 sat (P50) Alveolar to arterial oxygen- tension grade (AaDO2) Anion gap (A- GAP) SHUNT Acid base status Hematocrit (Hct)

DATA OUTPUT Display-illuminated, LCD display Printer- Inbuilt thermoprinter Interface- RS 232 CALIBRATION Automatic SPECIMEN

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Specimen container- capillary and syringe delivery Specimen type- whole blood, serum, plasma/respiratory gas.

ELECTRICAL DATA

Voltage -230V Frequency – 50/60Hz Ambient temperatures 12°c -32°c

Warranty: 1 year ISO, CE certified

## 11. ANAESTHESIA WITH MONITOR SPECIFICATIONS

#### **General Description**

Compact, highly efficient, easily operable, built to last anaesthesia trolley equipped with the high performance bag in bottle ventilator with advanced ventilation modes both volume-controlled and pressure-controlled complete with all accessories for low and high flow anaesthesia, adult, paediatric and infant application including a patient monitor unit.

#### Composition

Main unit 6" OVGA display with control knob ORC Rotameter (with 25% oxygen safeguard and oxygen alarm) Selectatec Vaporizer mounting system with 2 vaporizers Halothane and Isufloren APL arm with Y-piece connector and bag hook Writing shelf Patient tubing holder Two drawers Absorber block (CO2 bypass) with soda lime canister Common gas outlet Built-in suction system with pressure gauge Three gas pressure gauges (O2, N2O, air) Two cylinder holders at back Two gas cylinder pressure gauges at front Anti-static castors with brake

**Fresh gas delivery:** Non-decoupled + Fresh gas compensation flow system going directly to the patient protected with high pressure alarm and active anti-barotrauma safety feature without interrupting the inspiration cycle.

**Tidal volume delivery**: In **CMV/VCV** ventilation mode **10-1600ml** without the need to change bellows. Dynamic tidal volume automatic compensation system (breath-by-breath) to compensate for changes in changes in fresh gas settings, tubing and lung compliance and leaks and resistance.

**Physical specifications** Trolley dimensions

	_
Height	158 cm (62.2 in)
Width	65 cm (25.6 in)
Depth	80 cm (31.5 in)
Weight	approx. 150kg
Length	

Casters (4)

Diameter12.5 cm (4.9 in)BrakesFront casters

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Top shelf dimensions

 Height
 4.5 cm (1.8

 in)
 Width

 Width
 62.5 cm (24.6 in)

 Depth
 57 cm (22.4 in)

Writing surface dimensions

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\_\_\_\_\_

Width Depth 39.5 cm (15.6 in) 28.5 cm (11.2 in)

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Drawer (3) internal dimensions

\_\_\_\_\_

Height Width Depth

**Ventilator specifications** Type

Breathing system Breathing circuit Patient Range Fresh gas delivery

Fresh gas setting Tidal volume delivery

Compensates for fresh gas, resistance, compliance and leaks

Flow pattern

Ventilation modes

Working pressure

#### **Adjustable parameters**

Tidal Volume	10 - 1600 ml	
Incremental settings	10 to 100: per 5	ml
100 to 200: per 10 ml		
200 to 500: per 20 ml		
500 to 1600: per 50 ml	1	
Insp. Pause	0 - 50 % (per 5 9	%)
I:E Ratio	1:6 to 4:1	
Breathing Frequency	4 – 80bpm	
Peak Pressure PCV)	6 - 70 hPa	
Peak Pressure PSV)	6 - 40 hPa	
Incremental settings	6- 40/70 hPa	
PEEP		0 - 20 hPa
Pressure Trigger		OFF, -2 to -20 hPa
		(SIMV, PCV)
Flow Trigger (PSV)	-1 to -10 L/min	l
End Flow (PSV)	50 - 5 % of pea	ık flow

Decelerating flow pattern in all ventilation modes MAN/SPONT, CMV, SIMV(+VS), PCV(+PS), PSV + Apnoea backup 3 - 8 bar (43.5 - 116 psi)

Pneumatically driven, electronically

Semi-closed, Closed or Semi-open

Neonatal to morbidly obese patients

High flow, low flow or minimal flow

Balanced Bag-in-Bottle system (horizontal)

Non-decoupled + Fresh gas compensation

Dynamic tidal volume compensation system

10 cm (3.9 in)

20 cm (7.9 in)

33 cm (13 in)

controlled

system

(breath-by-breath)

#### **Displayed parameters**

Tidal Volume Minuted Volume Peak Pressure Plateau Pressure Mean Pressure PEEP Static Compliance Pressure waveform Frequency (MAN/SPONT, PSV) Pressure scale Time scale ml Lpm hPa, cm H2O hPa, cm H2O hPa, cm H2O hPa, cm H2O ml/hPa, ml/cm H2O -10 to 100 hPa, cm H2O bpm 25 / 50 / 100 hPa, cm H2O 4 / 10 / 20 seconds

#### Adjustable alarms

Upper Limit (pressure)	7 - 99 hPa
Lower Limit (pressure)	) 2 - 94 hPa (CMV, SIMV)
-	2 - 68 hPa (PCV)
	2 - 38 hPa (PSV)
Minimum Min. Volum	e 0.5 – 20LPM
High oxygen alarm	OFF, 20 - 99 %
Low oxygen alarm	18 - 97%
Apnoea alarm	OFF, after 15 seconds
(MAN/SPONT)	

#### Ventilator components

Reusable flow sensor which does not need calibration and with a warranty of minimum 5 years. In absence of a guarantee of minimum 5 years the offer should include reusable flow sensors guaranteeing minimum 5 years of operation. Lifetime of flow sensor needs to be specified.

#### Ventilator components

Integrated flow sensor

TypeDifferential pressureLife span $\geq 10$  yearsAutoclavableYes

Ventilator ScreenDisplay typeFull-colour TFTDisplay size25.4 cm (10 in)

CO2 absorber	(reusable)
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Filling capacity	1.5 L (adult)
Autoclavable	Yes
Integrated safety valve	120 hPa

CO2 bypass

Yes (automatically)

#### Vaporiser mounting blocks (3)

Type Selectatec / Dräger plug-in

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\_\_\_\_\_

Agents Halothane, Isoflurane,

Filling 260 - 360 ml capacity

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# Rotameter block (mechanical)

 O2 (cascade)
 0 - 1 L/m; 0 - 10 L/m

 N2O (single tube)
 0 - 12L/m

AIR (single tube)0 - 15 L/mSatefy systemsORC (minimum 25 % O2)Hypoxic guard (N2Ocut-off if O2 < 1.8 bar).</td>

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## **Breathing system**

Total volume  $\pm 1.8 l$  (w/o internal bag)

\_\_\_\_\_

#### **Communication port**

RS-232 compatible serial interface

#### **Electrical specifications**

Mains power

Power input240 V, 50 - 60 HzPower consumption< 100 VA</td>IEC 601 class and typeClass 1, type B

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#### **Backup power**

Battery typeSealed lead-acidRun time $\geq 1.5 h$ Life span $\pm 5$  years at 20°C

# **Pneumatic specifications**

Front common gas outlet
Connector	22 mm OD. 15 mm ID
Activated by	Selector FRONT / ABS
Pressure gauges	
Dinalina ()2	0 - 10 bar (0 - 145 psi)
Pipenne O2	
Pipeline N2O	0 - 10  bar (0 - 145  ps)
Pipeline N2O Pipeline AIR	0 - 10 bar (0 - 145 psi) 0 - 10 bar (0 - 145 psi)

3 - 8 bar (43.5 - 116 psi)
NIST + any fitting
NIST (standard)
Maximum 3
Automatic (O2 /

O2 flush

Range  $\geq$  35 L/m Type Non-decoupled = 100 % O2 to patient

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APL valve

Range 0 - 60 hPaEnvironmental specificationsOperating temperatureStorage temperatureAmbient pressureRelative humidityElectromagnetic compatibility

10 - 40 °C -20 - 70°C 570 - 1060 hPa 10 - 95 % (non-condensing) Complies with all requirements of EN 60601-1-2

#### PATIENT MONITOR

Parameters: ECG, RESP, TEMP, SpO2, NIBP and ETCO2.

**Display:** Size: 15 inch colour LCD Waveforms: Maximum 3 waveforms Display method: Stationary trace mode Sweep speed: Circulatory: ECG, SpO2 (12.5, 25 and 50 mm/s). Respiratory: RESP (6.25, 12.5 and 25 mm/s).

**Operation:** Jog dial with push key 5 fixed keys: Alarm silence, NIBP Start/Stop, NIBP interval, Home and Menu Print key.

**ECG:** Lead type 3, 4 or 5 lead Input impedance  $2.5M\Omega$  or more Maximum input range10mV p-p or more

**RESP:** Measurement Method Impedance Measurement Range 0 - 150 Bpm Measurement Accuracy ± 3 Bpm

**TEMP:** Measurement Method - Thermistor Measurement Range 0 -  $50^{\circ}$ C Measurement Accuracy  $\pm 0.2^{\circ}$ C

**SpO2:** Module: Nellcor SpO2 technology Measurement Method: 2 Wavelength Pulsation Measurement Range: 1 -100% Measurement Accuracy:  $\pm 2\%$  (70 - 100%) PR measurement Range: 20 -300 bpm PR measurement Accuracy:  $\pm 3$  bpm (20  $\Box$  250 bpm).  $\pm 0$  bpm (251  $\Box$  300 bpm)

#### NIBP

Measurement Method: Oscillometric Measurement Range: Adult: 0 - 300 mmHg Child: 0 - 210 mmHg Neonate: 0 - 150 mmHg Measurement Accuracy: ± 3 mmHg

#### General

Dimensions225 (W) x 201 (H) x 142 (H) mm Weight: Approximately 3 Kg 74 | P a g e Power requirements: AC 240 V, 50/60Hz Battery operation: Approximately 4 hours Monitor to have a telemetry connector system.

#### Accessories to be provided:

Sodalime 4.5Kg 2pcs Mapleson Breathing Circuits 2 each. Jackson Rees Circuits 2 each. PVC hose O2, 3mtr. + NIST + BS 1pc PVC hose N2O, 3mtr. + NIST + BS 1pc PVC hose AIR, 3mtr. + NIST + BS MA4 1pc PVC hose VAC, 3mtr. + NIST + BS 1pc ECG Relay cable 1pc SPO2 Sensor 1pc ETCO2 Module 1pc Body Surface Temperature Probe 1pc

# Must be CE marked. Warranty: Minimum of 1 year. Vendor must submit evidence of trained personnel for service and applications. Training and Installation should be included.

12. Autoclave 80 Litres

#### Autoclave, table top model, 80Ltrs

General Description Automatic controlled steam sterilizer suitable for sterilization of wrapped or unwrapped Solid instrument, class A cavity instruments (dental, endoscopic), implantable devices, such as dressing fabric, rubber tube, surgical instruments. The autoclave should be table top model with high-grade stainless steel materials and a sterilizer chamber capacity of about 80 Liters

**Performance Specifications** 

ApplicationFor sterilization of wrapped or unwrapped Solid instrument, class A cavity instruments (dental, endoscopic), implantable devices, such as dressin fabric, rubber tube.	ıg
Sterilization agent Saturated steam with inbuilt steam generator	
Sterilization cycle Fully automatic with Pre – vacuum, heating (stea	.m
pulsating), sterilization (holding), post vacuum (	lrying).
With inbuilt printer capable of printing each succ	essful
sterilization cycle	
Design temperature 144°C	
Design pressure -0.1Mpa to 0.3MPa	
Design service life 8 years/16000cycles	
Sterilization chamber Cylindrical type, about 80 liters, all high grade st	ainless
design and capacity steel SUS304 construction	
Chamber thermal Viscose insulating layer	
Chamber heat Laminate heating film	

	Test interface port Water tank Sterilization Chamber door Control unit	<ul> <li>RC1/4 port</li> <li>Built in water tank, with water quality monitoring system</li> <li>Automatic lock and unlock, with safety interlock, front opening.</li> <li>Film panel operation, with large LCD (minim3 inch)</li> <li>display of cycle progress i.e. temperature, pressures and time.</li> <li>With different programmable cycle programs for</li> <li>different type of loads.</li> <li>PLC control, modularization design</li> </ul>
	Detection device Steam generator Water to steam generator	Pressure sensor, display the pressure on the screen In built, Electrical heating single phase 240V, 50 Hz Distilled water or pure water
	Printer	In built thermal printer capable of printing each successful cycle. Automatically save 6 cycle date when lack paper.
	Safety features	The autoclave should have major safety features such as: Safety pressure relief valve, overheating protection Door lock under pressure safety interlocking
	Physical characteristics	
	Main unit	Table top design
	External dimensions	About 105cm x 75 cm x 56cm (WxHxD)
	Operating environment Power Requirements	240V, A/c 50 Hz, Single phase, with PE
	Ambient temperature	$10^{\circ}$ C to $40^{\circ}$ C
	Relative humidity	40% to 90%
6	Accessories	
	Stainless steel tray.	3
6.1	Printing papers	10 Rolls
8	Sterilizing Drums	2 pcs compatible with the autoclave to be provided

# Warranty: 1 year Must be CE/ISO certified 13. <u>DIATHERMY 300W SPECIFICATIONS</u>

1	Nominal initial power – monopolar max. 300 W
2	Bipolar 100 W
3	Nominal frequency 350 kHz
4	Working regimes:
5	mono-polar scission
6	mono polar scission with coagulation
7	possibility to choose degree of coagulation
8	mono coagulation – soft, forced and spray
9	bi-polar coagulation –soft, forced and section
10	Automatic regulation of working regime depending on: type of tissue, scission velocity and parameters of the electrode used;
11	Automatic start with bi-polar coagulation with possibility to choose the start time
12	Neutral electrode loop control per electric current and impedance
13	Possibility to operate by pedal and manual buttons
14	Auto test of the instrument and the accessories functionality
15	Alarm in case of errors
16	Possibility to program the appliance depending on the individual needs and requirements.
17	Completion of the Electric Coagulator
18	neutral electrode – multiple
19	neutral electrode cable
20	two-step pedal
21	electrode handle with two buttons
22	electrode handle cable
23	electrodes for scission and coagulation
24	a set with a standard bipolar pincers
25	Each bipolar pincer 19 cm, straight
26	bi-polar pincers cable
27	All accessories for operation must be supplied
28	Warranty: 1 year
29	Must be CE certified

#### 14.

# **Operating Theatre Table Specifications**

Operating table designed for carrying out treatments, dressing interventions and operations of general surgery.

All exposed metallic parts shall be made from stainless, acid proof steel and with antistatic pressure management mattress 6cm thick.

The table base shall be mobile and shall have central brakes with floor lock for stability.

Back rest and leg rest inclination angle, carbon fiber kidney elevator, Trendelenburg and reverse-Trendelenburg positions and height adjustment of the table top shall be activated by electro - hydraulic system.

The table top shall be translucent for x-rays with 5 separate Sections including a shoulder section.

Table top length 2072 mm

Table top width 520mm

Minimal height of the table 680mm

Maximal height of the table 1120mm

Trendelenburg 30°

Reverse Trendelenburg 30°

Lateral tilt at least 20°

Back rest inclination angle +80° to 50°

Head rest inclination angle 60° up

Head rest inclination angle 90° down

Leg (Up/Down): 20°/90°

Leg (Open, 2pieces):  $0^{\circ}$  -  $180^{\circ}$ 

Kidney Elevator (Up): 0 – 120mm

Weight Capacity: at least 227 Kg / 500lbs

Power requirements: 240 VAC  $\pm 10$  %, 50Hz. Fully rechargeable battery set to last for approx. 20 full operation cycles.

# Table to be provided with complete Orthopedic traction system

#### Accessories:

Anaesthetic Screen with clamp with telescopic tubes : 1

Body restraint Strap with clamp : 1

Padded Shoulder supports : 2

Padded Leg support with swivel type clamp : 2

Padded arm Rests 450 -500 mm long with two arm Clamps : 2

Padded Lateral support with universal attachment Clamp : 2

Warranty: 3 years

Must be CE/ISO certified

#### **15. Theatre Operating Lights Specifications**

Ceiling Mounted, Dual dome LED Technology Central illuminance (100 cm) [lx]:

160,000 / 120,000

Electrical dimming capability from/to [lx]	48,000 - 160,000
Colour temperature [K]	4,500
Focusable size of light field size d10 at a distance 1 m [mm]	200-330
Electrical field adjustment	yes
Colour rendering index Ra in any colour temperature configuration	96
Red rendering index R9	96
Depth of illumination without additional focussing (L1+L2) at 20 % [mm]	1,100
Depth of illumination without additional focussing (L1+L2) at 60 % [mm]	1,100
Weight of light head [kg]	18
Light head power consumption [W]	66
LED lifetime [h]	> 50,000
Temperature increase at head height	<1°C
Field of illumination	2,940 cm <sup>2</sup>
Tolerance	±10%

Warranty: 1 year ISO / CE certified

# 16. Dressing Trolley

- Size: 76L x 46W x 81H cms
- Mild Steel Frame Work, epoxy powder coated
- Stainless Steel Shelves
- With One Bucket and One Bowl
- On Castors

# **17. Emergency Trolley**

- Multipurpose Trolley with various useful compartments, shelves & drawers
- With Compartments for Medicines, medical consumables & various utilities
- With Three or more Shelves to keep Surgical Machines
- Cylinder Cage
- On Castors
- With Push Handle

# 18. Mayo's Instrument Trolley

- Stainless steel framework
- Stainless Steel Tray
- Tray Size: 56L x 40W cms
- Height Adjustable by Knob
- On castors

#### **19. Patient Stretcher Trolley**

- Overall Size: 180L x 56W x 81H cms
- Frame work made of tubular M.S. Pipe
- Swing away type Safety Side Railing
- Adjustable I.V. rod, Utility Tray, Cylinder Cage
- Removable Stretcher Top
- Foam padded Top
- Trolley mount on 15 cms Diameter Castors Two with Brakes
- Epoxy Powder Coated Finish

#### 20. THEATRE HOSPITAL BED FOR RECOVERY

Hospital Fowler Bed 1 function, backlift Size : 210L x 90W x 60H cms. Framework of steel, 4 section top. Finish : Beautiful Epoxy Powder Coating. Castors : 125mm diameter two with Brakes Provided with Mattress, Drip stand

#### 21. General Surgical Instruments for Orthopaedics

Made of high quality stainless steel grade Configuration of set to be as specified below

	ORTHO MAJOR SET	
S.NO	PARTICULAR	QUANTITY
1	SS TRAY - BIG 12" x15"	2
2	SS BOWL -BIG	2
3	KIDNEY TRAY - LARGE	2
4	KIDNEY TRAY - MEDIUM	2
5	TOWEL CLIP	12
6	SPONGE HOLDER	6
7	BP HANDLE NO. 3,4 AND 7	6
	LENGAN BAG RETRACTOR -	
8	SMALL,MEDIUM,LARGE	3
9	C-ZERNEY RETRACTOR	1
10	SUCTION TIP - NO. 15	2
11	ADSON FORCEP - NON TOOTHED 12 CM	2
12	ADSON FORCEP - TOOTHED 12 CM	2
	DISSECTING FORCEP - NON TOOTHED	
13	12CM,15CM,20CM	2
	DISSECTING FORCEP - TOOTHED 12CM,15	
14	CM,20CM	6
15	PERIOSTAL ELEVATOR - CURVED	2
16	PERIOSTAL ELEVATOR - STRAIGHT	2
17	MOSQUITO ARTERY - CURVED 10 CM	10
18	MOSQUITO ARTERY - STRAIGHT 10 CM	10
19	ARTERY FORCEP - CURVED 12 CM	6
20	ARTERY FORCEP - STRAIGHT 12 CM	6

21	ARTERY FORCEP - CURVED 15 CM	6
22	ARTERY FORCEP - STRAIGHT 15 CM	6
23	ARTERY FORCEP - CURVED 18CM	6
24	ARTERY FORCEP - STRAIGHT 18CM	6
25	ALLIS FORCEP - 12 CM,15CM,20 CM	6
	KOCHERS CLAMP - STRAIGHT 12CM,15 CM,20	
26	CM	12
77	KOCHERS CLAMP - CURVED 12CM,15CM,20	12
27	EM BABCOCK FORCEP - 15 CM 20 CM	2
20	NEEDLE HOLDER - HEAVY 18 CM 15	
29	CM,12CM	6
30	NEEDLE HOLDER - FINE TIP 12 CM	2
31	METZ SCISSOR - CURVED 20 CM	2
32	METZ SCISSOR - STRAIGHT 20 CM	2
33	METZ SCISSOR - CURVED 15 CM	2
34	METZ SCISSOR - STRAIGHT 15 CM	2
35	MAYO SCISSOR - CURVED 15 CM	2
36	MAYO SCISSOR - STRAIGHT 15 CM	2
37	MIXTARD ARTERY - 12 CM	2
38	MIXTARD ARTERY - 15 CM	2
38	Lamboeet bone holding forceps 26cm	1
40	Lane bone holding forcep with rachet 32cm	1
41	Stille lower bone rounger forceps 23cm curved	1
42	Ruskin-liston bone cutting forceps 16.5 cm	1
43	Osteteome set	1
44	Screw driver set	1
45	Currete bone set	1
46	Drill bit, bone, twist,	1
47	Drill, bone, hand operated	1
48	Saw, Amputation, 350mm	1
49	liston amputation knife Amputation,	1
50	Introducer for steinmans pins	1
51	Scissors, wire cutting, 130mm	1
52	Mallet (Hammer)	1
53	Gauge (Bone)	1
54	Bone levers	1
55	Hand drill	1
56	Backmann retractor hinged blade 4x4, 21cm	1
57	Gigli saw handle, apair	1
58	K NAILS. Different sizes	2 of each size
59	Electrical Drill	1

22. Amputation set	
ITEM DESCRIPTION	QTY
Liston bone cuttingforceps	4
Straight 140mm	
Straight 220mm	
Curved 140mm	
Curved 220mm	
Briston periosteal elevator	1
Bone Rongeurforceps:	2
Angular 230mm $\pm$ 10	
Straight 230 mm ±10	
Large Heygroove bone holding forceps	2
Sequestrum forceps	1
Bone file large	1
Amputation sheild	1
Butcher saw or charriere 35mm	1
Army amputation saw	1
Gigli saw handle, apair	1

23. Large Fragment Set	QTY
Bone reduction forceps large 240mm with thread lock.	2
Bone reduction forceps small 160mm with thread lock.	2
Plate and bone holding forceps large [270mm].	2
Plate and bone holding forceps medium [260mm].	2
Plate and bone holding forceps small [250mm].	2
Malleolar forceps with pointed tips.	1
Aluminum case with its cover perforated.	1
Sharp hook.	1
Combination wrech, width across flat, 11mm.	1
Articulated tension device with gauge 20mm span.	1
Counter sink large 4.5mm	1
Hex screw driver large with wooden handle for quick coupling	
width across 3.5mm.	1
Universal drill guide 4.5/3.2mm.	
Depth gauge with sleeve for 4.5mm and 6.5mm screws.	1
Drill sleeve double 6.5mm/3.2mm.	1
Drill sleeve double neutral and load drill guide3.2mm	1
Screwdriver Shaft, hexagonal, large 100mm	1
Bending Press	1

# 24. Small Fragment Set

Name of Item	QTY
Aluminium Case, perforated	1
Drill Bit, 2.5mm dia., for quick coupling 110/85mm	4
Drill Bit, 3.5mm dia., for quick coupling 110/85mm	4

Countersink Shaft 3.5 72mm	1
Tap for Cortex Screws 3.5mm	2
Tap for Cancellous Bone Screws 4.0mm	2
T-Handle with quick coupling 80mm	2
Double Drill Sleeve 3.5/2.5	1
Insert Drill Sleeve 3.5/2.5 42mm Drill Bit 2.5mm dia.	1
Screwdriver, hexagonal, small, with Holding Sleeve	1
Screwdriver Shaft, hexagonal, small, for quick coupling	1
Screwdriver beyagonal small with groove 200mm	1
Holding Sleeve 80mm	1
Depth Gauge for Screws 2.7mm to 4.0mm	1
Sharn Hook 155mm	1
Screw Forcens, self-retaining 85mm	1
DCP Drill Sleeve 3.5 for neutral and load position	1
Bending Iron slit widths 4 5/2 5mm 150mm for Plates 2.7 and	1
3.5	1
Bending Iron, slit widths 2.5/4.5mm 150mm, for Plates 2.7 and	
3.5	1
Bending Pliers for Plates 2.4 to 4.0mm	1
Bending Template for DCP 3.5 and LC-DCP 3.5 80mm	1
Bending Template for DCP 3.5 and LC-DCP 3.5 110mm	1
Wire Bending Pliers 150mm	1
Bending Iron, for Kirschner Wires 1.25 to 2.5mm dia. 120mm	1
Bending Pliers for Reconstruction Plates 2.7 and 3.5m	1
SMALL CORTICALS CREW SIZE	
SMALL CANCELLOUS SCREWS [SHORT THREAD]SIZE	
CONCELLOUS SCREW 4.0MM (FULLY THREADED)	
PLATES	
Clover leaveplates	
One third tubular platessizes	
One third tubular platessizes	
Dynamic compression plate3.5mm	
T- Plates R &L	
CORTEX crews – Sizes as per platehole	

# 25. Kuntscher instrumentation set

Container Tray	1
diamond point awl.	1
Femur 10mm	1
Reamer	1
Slotted hammer	1
slotted nail driver	1
nail driver 6-8 mm	1
nail driver 9-12mm	1
nail driver 13-20mm	1
nail extractor with hooks.	1

measuring gauge	1
mallet	1

26. WIRE INSTRUMENTS SETS	QTY
Forceps for holding circlage wire[Finochietto].	1
Wire bending, cuttingplier.	1
Vise grip	1
Flat nosed parallel plier with lateral wire cutter	1
Wire cutter small 180mm.	1
Wire cutter large 220mm	1
Wire guide 45mm different sizes	1
Wire tightener.	1
Cerclage wire coil differnet sizes	1

#### 27. Diagnostic Complete Set

#### The Complete Set features

- Bayonet locking mounts for each instrument head to allow secure connection to the battery handle
- "C" cell powered, satin finish battery handle with knurled finish
- Rheostatic on/off switch
- · Complete in zippered case with fitted insert that is scuff and scratch resistant and cleans easily
- Weighs 231/2 oz (666g)

#### **Otoscope features**

- Chrome-plated Otoscope head with removable 4x magnifying lens, and insufflator fitting
- Auto-clavable, polypropylene ear specula in 2.5mm, 3.5mm, and 4.5mm sizes
- Adapter to allow use with Welch Allyn or compatible disposable specula
- Nasal speculum adapter with manual screw opening for instrumentation connects to the otoscope head

• Welch Allyn disposable polypropylene ear specula in 2.75mm and 4.25mm sizes are convenient, safe, and economical

#### **Ophthalmoscope features**

• Ophthalmoscope head with lens wheel featuring 24 corrective lenses from -25 to +40 diopters

### **Bent Arm Illuminator features**

• Chrome-plated bent arm larynx and nasopharynx illuminator for lighting the oral cavity and pharyngeal area

- One 3.0mm and one 4.0mm mirror with integral tongue depressor holder that attaches to the illuminator
- One tongue depressor attachment for the illuminator
- One disposable tongue depressor adapter for the illuminator

Warranty: 1 year

#### 28. Ambu Bag - Adult

```
Self-Inflating Bag, Patient Valve, Face Masks size 3, 4 and 5, Translucent Guedel
Airways sizes 2, 3 and 5. Oxygen Reservoir Bag. Capacity: 2.6 Litres.
Patient Connection is 22 / 15mm.
```

#### 29. Electronic Adult Weighing Scale

- Electronic professional weighing scale with 250 kg capacity.
- Heavy duty platform with 2 castors for easy movement.
- ✤ Automatic length measuring and BMI calculation.
- Battery and mains operation are supplied as standard.
- Bioelectrical impedance analysis of body fat, body water, muscle and bone mass and analysis of the fat free mass. Functions:
  - Tare,
  - hold,
  - automatic zero setting,
  - low battery indication,
  - auto switch off,
  - BMI,
  - memory,
  - RJ11 interface for electronic height measure

Capacity	250 kg
Graduation	100 g
UT	kg, lbs
Dimensions	320 x 320 mm

#### **30. Infant scale Digital**

Electronic baby and toddler weighing scale for clinic and hospital use. Digital LCD screen. Removable soft curved baby tray that gives comfortable space to babies. Allows toddlers to be weighed in a standing up position. The weight of the infants is measured precisely in 5 g steps. Functions: • Tare, • hold, • automatic zero setting, • low battery indication Capacity: 20 kg Graduation: 5 g

Dimension: 560 x 280 x 95mm

#### **31. Fiberoptic Larygnoscope Set**

- 4 Macintosh blades
- Both "AA" and "C" cell battery handles
- Foam lined, fitted case with carry handle
- Batteries included

Fiberoptic Battery Handles

- Light source in handle simplifies blade cleaning, allows for use of brighter, whiter light
- Satin handles with a knurled finish for a positive grip
- · Color coded green to signify compatibility ONLY with fiberoptic blades

#### 32. Infra-Red Thermometer

#### Thermometer features

- One-second measurement using scan/peak technology
- Large 6mm illuminated display
- •Temp range from 89.6°F 108°F +/- .2°F (32°C 42.2°C +/- .1°C)
- °F/°C switchable display
- Fever alarm at  $99.5^{\circ}F(37.5^{\circ}C)$
- Last reading memory
- Audible beep when measurement is complete
- Auto off conserves battery life
- Compact design 51/2" (13.97cm) long, weighs 1.6oz. (45.3g) including battery
- •Powered by 1.55v (CR2032) lithium battery (included)
- Includes 20 probe covers in convenient dispenser
- Desktop storage caddy

### 33. Penlight Torch

- LED lamp for bright, white illumination for true tissue rendering
- LED lamp provides 10,000 hours of use eliminating the high cost of replacement lamps
- Durable CNC machined brass housing in a striking blackmatte finish

- Measures 55/8" long, 1/2" diameter
- Positive feel power switch
- Convenient Pocket Clip
- Complete with two "AAA" batteries and an attractive gift box
- Lifetime warranty on lamp cartridge, two-year warranty on penlight

#### 34. Stethoscope Adult / Pediatric

• Convertible chestpiece provides adult diaphragm/bell or adult/pediatric diaphragm configurations

• ADC's AFD Technology provides enhanced acoustic response in both adult and pediatric diaphragm

- Stainless steel chestpiece and aural tube construction.
- Extra deep bell for unsurpassed low frequency response
- Non-chill bell and diaphragm retaining rims for patient comfort

• Cardiology headset with large bore stainless steel binaurals are fixed at 15° angle to maximize comfort and acoustic seal

- Bi-lumen (dual bore) 19" PVC tubing stays soft and flexible
- Adsoft<sup>TM</sup> threaded PVC eartips for the ultimate in wearing comfort and acoustic seal
- Includes accessory kit with bell chestpiece, extra Adsoft™ and standard eartips
- Scope ID Tag included
- Weighs 7.57 oz. (adult bell) and 8.57 oz. (pediatric diaphragm)
- Overall length 28"

#### 35. X-Ray View Box-CFL Tube Illumination

- Elegant Plastic Body
- High Quality Viewing Screen for Uniform and Soft Light
- On/Off Switch on Panel
- Automatic On/Off Switch with film insertion
- Input Power supply: AC 240V

#### 36. Wheel Chair Specification

Weight Capacity	Upto 250 Lbs.
Type of Wheelchairs	Manual
Rear Wheel Diameter	60 inch
Handle Height	90 inch
Front Wheel Diameter	1.5 inch
Frame Material	Stainless Steel
Seat Material	Rexine and Foam padding
Rear Wheel Distance	58 inch
Feature	With rear wheel brakes

#### 37. ULTRASONIC NEBULIZER FOR MEDICAL USE SPECIFICATIONS

#### TECHNICAL DATA

COMPRESSOR: PISTON COMPRESSOR MAX PRESSURE: 350 kPa OPERATING PRESSURE: 0 - 130 kPa AIR FLOW: 17 lt/min OPERATING CYCLE: CONTINUOUS NOISE LEVEL: 60 dBA DIMENSIONS: 37 x 10 x 24H cm WEIGHT: 2.6 kg

#### ACCESSORIES INCLUDED

FASTERJET NEBULIZER WITH VALVE SYSTEM (POLYPROPYLENE) NOSEPIECE (POLYPROPYLENE) MOUTHPIECE (POLYPROPYLENE) WITH VALVE (SILICONE) ADULT MASK (PVC DEPH FREE) CHILD MASK (PVC DEPH FREE) AIR TUBE (PVC DEPH FREE) SPARE FILTER POWER CORD

#### NEBULIZER TECHNICAL DATA

CAPACITY: 17 ml RESPIRABLE VOLUME: < 5 μm 80% MMAD (Mass Median Aerodinamic Diameter): 2, 11 μm NEB RATE: 0.35 ml/min (60kPa) – 0.80 ml/min (130kPa) RESIDUAL VOLUME: 0.7 ml

Warranty: Minimum of 1 year.

# 38. Bed Side Screen (4 Panels)

- Size: 165 H x 240 L cms
- Tubular Framework mounted on 5cms castors with Curtains
- Framework of Mild Steel, epoxy powder coated
- On Castors
- Supplied with 1 set of curtains, 4 Fold

# **39. Blood Donor Couch** (Three Sections)

- Overall Size: 150L x 50W x 46H cms
- Framework made of Stainless Steel
- Back rest & leg rest section adjustable on Ratchet / Lever
- Legs fitted with PVC Stumps
- 5 cms foam cushioned top covered with rexine
- Adjustable Arm Rest

#### 40. Drip stand with 4 hooks

# **IV / Drip Stand Material:** Stainless steel frame work. **Dimensions (mm):** 635 (W) x 1570x2560 (H). **Standard Features:** Knob screw for adjustable height. 50 mm swivel castor on 4 prong legs. Double IV hook.

#### 41. Examination Couch

- Approx Size: 180L x 60W x 75H cms
- Framework of CRC Tube
- Legs fitted with PVC stumps
- 5 cms foam cushioned top covered with rexine
- Pre-treated & Epoxy powder coated

#### 42. Medicine Trolley/Utility Trolley

- Size: 76×46×81
- Mild steel epoxy powder coated framework
- Stainless Steel shelves
- 1 Drawer below top shelf
- On castors

#### 43. <u>Fetal Doppler</u>

High performance fetal heart beat detector

Which can detect real-time

Fetal heart rate and average FHR

Should have a large LCD screen display the FHR and an audio output port connected with earphone or recorder with audio input

Uses 9V battery standby for 3 months or continual using for 5 hours

#### **FEATURES:**

Should be Light weight and portable, easy to use

Should have Large back light LCD display FHR, Built in HI-FI speaker, clear fetal heart beat sound

Should be accurate FHR detection, has real-time FHR mode and average FHR mode Optional rechargeable battery and charger

#### **Technical specifications**

Work mode: continue wave ultrasonic Doppler Frequency: 2.0 MHz±10% Max ultrasound output :< 20Mw ISPTA :<  $10 Mw/cm^2$ FHR Range: 60-210BPM (time/minute) FHR Resolution: 1 BPM FHR accuracy: ±BPM Display: 45x25mm LCD, 3 bit FHR Audio output: 0.5W Auto -off: 2 minutes Battery: 9V, recommend NANFU 6LR61 Size: 36mmx115mmx130mm Net weight: 300g (with battery) Work environment temperature:  $+5^{\circ}c-+40^{\circ}c$ Humidity:  $\leq 80\%$ Atmospheric pressure: 86kpa-106kpa

#### 44. Handheld Pulse Oximeter

- Easy Operation by 2.8" color TFT & Touch Screen
- Large Font and Waveform Display
- Patient History Data Recall
- Two Display Directions
- Graphic and Tabular Trends
- Data Transfer and Storage to PC via
- USB or Bluetooth
- Continuously Adjustable Brightness
- Audio and Visual Alarm
- SpO2 Pulse-tone Modulation (Pitch Tone)

#### **PEFORMANCE SPECIFICATIONS**

Display: 2.8\_color TFT, touch screen Resolution: 320 \_ 240 Indicator: Alarm indicator Power indicator Alarm: Probe off, Finger out, Low power Modes: Visual and Audio User-adjustable High and Low limits Display direction: Two Trend storage: Min 72 hours

#### SPO2

Measurement range: 0% ~100% Resolution: 1% Accuracy: ±2% (70~100%) Unspecified (0~69%) Alarm range: 50~100% Refreshing rate: 1s

#### PULSE RATE

**90** | P a g e

Range: 30 ~ 254 bpm Resolution: 1bpm Accuracy: ±2 bpm Alarm range: 30~250 bpm Refreshing rate: 1s

#### **ENVIRONMENT SPECIFICATIONS**

Temperature: Operating: 0\_50 °C Storage: -20\_65 °C Humidity: Operating: 10\_90 °C non-condensing Storage: 10\_95 °C non-condensing

#### POWER

Type: 3 AA Alkaline Operation time: About 9 hours for normal operation

Warranty: 1 year

#### 45. Oxygen Concentrator Specifications

Single Flow 51pm Noticeably quiet operation. Readily accessible patient controls, protected cannula fitting and recessed humidifier nook to prevent damage. Lockable flow meter. Convenient top and side handles for easy transport. Accommodating up to a 50-foot oxygen tubing plus 7-foot cannula (15.3 meters). Robust design for improved durability Easy to assemble/disassemble two-piece cabinet for ease of maintenance

Alarms indicate:

- Power failure
- High/low pressure
- Low oxygen
- Service required

Pressure-compensated flow meter to ensure accurate flow display. Pressure-relief valve and thermal protection on the compressor. Flame-retardant cabinet. Double insulated unit; two-prong plug.

High Oxygen concentration levels over the whole flow range Variable Flow rate up to 5 l/min OSD Sensor for continuously monitoring Oxygen levels

Dimensions: 62.2 x 34.2 x 30.4cm (HxWxD) Flow Rate: 0.5 – 5Litres / Min. Oxygen Concentration at 0.5 – 5Litres/min: 93% ±3%. Weight: 16.3Kg. Power: 230V/50Hz. Warranty: 1 year

#### 46. Vital Signs Monitor Specifications

#### 1. General Description

Patient Monitor suitable for use in operating theaters, HDU, wards. Should be capable of continuous measuring/ monitoring of the following parameters in adults, neonatal and pediatric.

- Temperature –
- Blood pressure –
- Pulse Rate –

The unit should be mounted on a mobile cart.

- Flexible configurations to meet different clinical needs
- Lightweight & portable design
- User-friendly interface
- Auto/Manual/Continuous/Average
- 2. Composition
- 2.1 Main unit
- 2.2 Mobile cart
- 3. Performance Specifications
- 3.1 Main Unit
- 3.1.1 The unit should be a model or type on current production capable of measuring/monitoring the following parameters

3.1.2	SpO <sub>2</sub> , with reusable	$0 - 100\% \pm 3\%$ -
	sensor	
3.1.3	Pulse Rate	$30-300 \text{ bpm} \pm 1\%$
3.1.4	Temperature	$0-50^{0}C \pm 0.1\%$
3.1.5	NIBP	Mean 10- $300$ mmHg $\pm 5$ mmHg
3.1.6	IBP	Mean $50 - 300$ mm Hg $\pm 1$ mmHg
3.2	Display	5.6 inches color TFT colour LCD,
3.2.1	Resolution about	800X 600
3.2.2		6 to 8 waveforms mode with large font
3.4	Recorder	Inbuilt, thermal array or equivalent
3.4.1		Two speed, selectable
3.4.2		Port for external printer
3.5	Networking	Port for networking with Ethernet or equivalent Or Serial
	-	Port RS 232
3.6	Input	In built with provision for connection of external
	-	Keyboard.
3.7	Storage	Capable of storing patient data and transferring to a PC
	C	for viewing or printing.
4	Safety requirements	
4.1	Audio and visual	For all parameter.
	alarm	-
4.2	Alarm setting limits	Adjustable by user
4.3	Low battery indicator	Audio and visual alarm

4.4	Internal battery	Provided, rechargeable, can operate for at least 3 hours
5	Mobile cart	On four castors $\varphi$ 60mm, two with brakes
6.1	Power Requirements	240V, A/c 50 Hz, Single phase, 3 Pin Plug, 3m long cord BS type with PE
6.2	Internal rechargeable battery	Maintenance free type, Up to 8 hours operating time
6.3	Ambient temperature	$10^{\circ} \text{ C}$ to $40^{\circ} \text{ C}$
6.4	Relative humidity	40% to 90%

Should be CE /ISO/FDA approved.

Warranty of 1 year.

#### **47. Examination Lamp LED**

Cold Lamp LED Technology

Gooseneck for ease of movement

Luminance: 55,000 lux at a distance of 50cm and 25,000 lux at 100cm (1 m)

Ra Index: >93

Illumination Field up to 50cm

Mobile with 5 castors and brake system.

LED lifetime: >50,000 hours

#### 48. ECG 12 channel Machine

ECG signals	12 standard leads according to Einthoven, Goldberg, Wilson and Cabrer	
Working mode	automatic and manual	
Printout	Should be capable to have 3/6/12 channels	
	Settable printout – accuracy thickness of printed curve lines	
	In-built printer	
	A4 printout directly on an external PCL5/6 printer option	
Analysis and interpretation	automatic analysis and interpretation in compliance with EN60601-2-51 (CSE base)	
	Depends on age and gender of a patient	
Heart pacemaker detection	Detection of heart pacemaker peaks	
	Acoustic signalling of detected beats	

Functional features	database of patients and examinations		
	menu displayed on a touch screen for easy operation		
	multilingual menu		
	continuous HR measurement presented on a screen		
	ECG examinations on an open heart available		
	ECG-M@IL function for examinations' sending to an e-		
	mail address		
	saving ECG examinations in CadioTEKA or SCP format		
	signalisation of accumulator voltage reduction		
	signalisation of accumulator charging		
	INOP signalisation independent for each electrode		
Display	full-colour, graphical LCD TFT 10.4" 480x640 with a		
	touch panel		
	presentation of 3/6/12 leads on a screen		
	reviewing saved examinations on a screen		
	presentation of analyses and interpretation on a screen		
Keyboard	membrane alphanumeric keyboard with functional keys		
Sensitivity	2.5/5/10/20 mm/mV		
Speed	5/10/25/50 mm/s		
Filters	contour line filters available: 0.15 Hz, 0.45 Hz, 0.75 Hz,		
	1.5 Hz		
	mains disturbance filter 50 Hz, 60 Hz muscular disturbances filter 25 Hz 35 Hz 45 Hz		
Donor	EASY LOAD automatic paper loading system		
raper	thermosetive way and dust free		
	210 mm wide		
Momory	memory of 2000 examinations		
Power supply	memory of 2000 examinations main supply $90 - 264 \text{ V}$ 47-63 Hz		
Tower suppry	internal accumulator with charger 21.6 V/2.2 Ah to		
	perform 300 automatic examinations		
Communication interface	USB Host x $2 - $ communication with an external PCI 5/6		
	printer and/or FlashDrive		
	USB Device – communication with PC		
	ethernet – communication with a local network		
Dimensions	(LxWxH) 370x372x94 mm		
Gross weight/packing dimensions	Weight 4.7 kg		
	8 kg / (LxWxH) 430x440x195 mm		
Standard accessories	patient cable KEKG30		
	suction electrodes EPP – set of 6		
	clamp electrodes EKK – set of 4		
	· ·		

	ECG gel – 250 g	
	ECG paper R210 – 1 pc	
	ethernet cable	
	supply cable	
Warranty	1 year	
Certifications	CE/ISO	

49.

# Foetal Monitor – Cardiotocography CTG Specifications

		TENDER SPECIFICATIONS
NAME, CATEGORY AND CODING		
1	Generic name	Cardiotocography (CTG)
2	Alternative name/s	Electronic fetal monitor
3	Keywords	Fetal heart rate (FHR), fetal movement, uterine contraction, intra-partum care
PURPOSE OF USE		
4	Clinical or other purpose	Noninvasively detect, measure, and display FHR, fetal movement, uterine contraction, SpO2, and maternal heart rate at minimum. Ideally detect, measure, and display maternal pulse rate, maternal blood pressure, and multiple births in a noninvasive way. The primary purpose of the CTG is to provide quick reassurance of fetal well- being to both the mother and the healthcare worker.
5	Level of use (if relevant)	Health centers and above.
6	Clinical department/ ward (if relevant)	Obstetrics, gynecology, and maternity wards, Gynecology physician office
7	Overview of functional requirements	CTGs are routinely used by physicians, medical doctors, nurses, and midwives to record FHR values. Abnormal readings can quickly alert them to possible complications. Alarm should be either visual or audible.
TECHNICAL		

CHARACTERISTICS		
8	Detailed	Microprocessor controlled
	requirements	equipment
		• LCD display with numeric
		information of at least fetal heart
		rate, fetal movement, uterine
		contraction, SpO2, and maternal
		heart rate.
		Integrated software to provide
		objective numerical analysis of
		CTG trace
		Audio output
		Audio volume control system
		integrated
		Ultrasound working frequency
		in the range 1 MHz to 2 MHz
		• Sensitivity to detect fetal heart
		beats should be appropriate for
		pre-natal check-ups to
		antepartum monitoring and
		during labor and delivery.
		• Heart rate measurement range
		should be between 50-240 bpm
		• SpO2 ranges 0-100% (+/- 3
		digits)
		• Toco range: 0100% (+/- 1 unit)
		• Fetal movement: 0-100.
		• Maternal heart rate: 30-240 bpm
		(+/- 1bpm)
		• At least one integrated serial
		port for PC connection and data
		transmission.
		• Cable for data transmission.
		• Memory storage capacity of at
		least 8 hours of working data.
		• Printing speed should be
		between 1cm and 3 cm per
		minute with capability to adjust
		the speed.
		• In-built printer.
9	Displayed	Numeric information of FHR,
	parameters	maternal heart rate, and maternal
		SpO2 at minimum. Size of the
		display should be 5-7 inches.
		Easily readable font size.
10	User adjustable	Volume control; power on/off.
	settings	

PHYSICAL/CHEMICAL CHARACTERISTICS		
11	Mobility, portability (if relevant)	Table-top size, easy to be carried by health workers by hand or on a trolley.
UTILITY REOUIREMENTS		
12	Electrical, water and/ or gas supply (if relevant)	Should meet Tanzania Electrical Standards (voltage of between 220-240 V and the standard frequency of 50-60 Hz) with type G adaptor System.Should have rechargeable batteries. Battery operation supports at least 8 hours of operation.
ACCESSORIES, CONSUMABLES, SPARE PARTS, OTHER COMPONENTS		
13	Accessories (if relevant)	Transducers, Toco transducers, Sizeadjustable belt, SpO2 transducers/sensors, Maternal ECG, Other accessories to be included in order to enable monitoring and measurement of FHR, fetal movement, uterine contraction, SpO2, and maternal heart rate. Need to be available for separate purchase.
14	Consumables / reagents (if relevant)	Gel and recording paper. A start- up kit that includes gel (at least 350mL) and paper (at least two rolls or packs) should be packaged with the device at time of purchase.
15	Spare parts (if relevant)	Spare parts can be ordered from domestic sources. Lead-time for spare parts should be no more than 1 week.
PACKAGING		
16	Shelf life (if relevant)	Shelf life of gel: at least 24 months from the date of manufacture. Shelf life of Thermal paper: at least 3 years from the date of manufacture.
ENVIRONMENTAL REQUIREMENTS		

17	Context- dependent requirements	Operating temperature: 10-40°C, Operating humidity: <95%
		Thermal paper: should be stored in a dark place at a relative humidity less than 65% and a temperature below 26.5°C.
TRAINING, INSTALLATION AND UTILISATION		
18	Training (if relevant)	User training is required regarding operation of the device, first-line preventive maintenance, and interpretation of results. Training to MSD and service personnel is also required in order for provide inspection upon receipt of the device, maintenance, and repair. Training of trainers should be arranged by a supplier.
19	User care (if relevant)	Capable of easy cleaning. Patient worn straps to be detachable and washable. No sterilization required. Instructions for routine care should be provided by a supplier.
WARRANTY AND MAINTENANCE		
20	Warranty	1 year full warranty

Must be ISO and FDA approved

50. 51.			Patella Hammer Wall Mounted Diagnostic System
1	1.	Pressure measurement.	Wall mounted Diagnostic set
2	2.		complete with Opthalmoscope and Otoscope with Blood

#### **CRANIOTOMY SET Ramphley Sponge Holding Forceps** 5 2 Band Parker Handle No. 4 1 Band Parker Handle No. 3 1 Band Parker Handle No. 5 Mayo Scissors 71/2" Curved 1 2 Mayo Scissors 7" Curved MacIndoes Scissors 7" Curved 2 Delicate Metzebaum Scissors Curved 7" 1 Careless Ligature Scissor 1 1 Bonney Dissecting Forceps Toothed 7" Adson Dissecting Forceps Non Toothed 5" 1 1 Adson Dissecting Forceps Toothed 5" Trevers Dissecting Forceps Non Toothed 8" 1 Cairn Artery Forceps Curved 7" 24 Cairn Artery Forceps Straight 7" 6 Allis Tissue Forceps 6" 4 2 Kocher Artery Forceps Straight 7" Back Hauls Towel Clips 51/4" 12 Cairns Rake Scalp Retractor 4 Prong 81/4" 2 Electric Drill 1 Harper Laminectomy Punch 1 Cone Laminectomy Retractor 51/4" 2 2 Cone Laminectomy Retractor 101/2" Lakellis Ronguor Double Action 93/4 1 Luer Jansen Rongour Forceps (Duckbill) 2x10mm 1 Mack socks Periosteal Elevator 1 Cushing Periosteal Elevator 2x10mm 1 Nasal Polyp Forceps Watson Williams 1 Cushing Intravertebrae Roungain Upwards2x10mm 1 Swedish Model Double Ended Dissector 1 Macdonald Dissector 1 4 Gilgil Saw Handle 4 Gilgil Saw Guide & Protector 1 Johnson Tumor Forceps Cairn Dura hook 51/2" 1 Cairn Brain Cannular with Stillet 1 1 Frazier Suction Tube 11 Fr with Stillete Frazier Suction Tube 9 Fr with Stillete 1 Stanley Boyd Scoop Double Ended 6" 1 Kilner Needle Holder51/2" 1 Mayo Needle Holder 6" 1

52.

Insulated Bayonate Bipolar Forceps	1
Bayonate Bipolar Forceps Non – Toothed (Blue Holder)	
71/4"	4
Mayo Pins 4"	4
Carbide Tip Needle Holder 5"	1
Burs No. 14	2
Ligature Clip Applying Forceps (Blue Handles)	1
Malleable Brain Retractor	4
Adson Dura Needle Holder 51/2"	1
Perforator	1
Stille Luer Ronguer (Straight)	1
Lane Dissecting Forceps Toothed 5"	1
SS tray 18" x 24"	1
penfield dissector	1
micro adson forceps serated	2
Yasargil microform bayo forceps 9mm	3
Yasargil Tumor Holding forceps	3

# KEY SPECIFICATIONS OF ENDOSCOPY (GASTROSCOPY) EQUIPMENT

#### PROCESSOR & LIGHT SOURCE QTY 1

- Processor and Light Source must be in one unit
- Processor & Light Source must be capable of providing **Narrow Band Imaging (NBI)** a natural optical light enhancement technology
- The light must be provided by a LED Light source to minimise energy consumption and also decrease sound and energy during use
- 16:9 and 16:10 output for HDTV monitor should be available
- A Portable memory slot must be available to save still images
- The system must provide Auto Peak and Average Iris modes available for observation
- The system should be able to register up to 50 patient data. Registration details should include:-
- Patient ID Patient name Sex and age Date of birth
- There must be availability of Pre Freeze to obtain least blurry image for printing
- White balance should be adjustable from the front panel of the system
- There must be availability of 2 types of structure enhancements to obtain best results
- The functions of the remote switches on the endoscope should be programmable

# **MONITOR QTY 1**

- 26 Inch full HD LCD Monitor
- Aspect Ration 16:10

# TROLLEY/ WORKSTATION QTY 1

- The workstation should be supplied with an isolation transformer which complies with BS- EN 60601- 1 and have anti static castors
- The workstation should have an articulating arm with both horizontal and vertical movement to allow the monitor to be positioned at the optimal height and position.
- Scope hangar pole must be present to enable users to rest scopes before use

1

- Must have an ergonomic and clean design

# **GASTROSCOPE QTY 1**

- Must provide for HD ( High definition ) imaging
- Must be able to provide Narrow Band Imaging
- Must have one touch **Waterproof** Connectors, to enable cleaning scopes by total immersion and no requirement of waterproof caps.
- Must have close focus of up to only 2mm from surface of mucosa
- Field of View 140Deg
- Depth of field 2- 100mm
- Distal Outer Diameter 9.2mm
- Channel Diameter 2.8mm
- Total Length of endoscope should be 1350mm
- Angulation
  - UP 210Deg
    - o DOWN
    - 90Deg o

RIGHT 100Deg

- o LEFT
- 100Deg
- Must be compatible with quoted light source/ processor

# COLONOSCOPE QTY 1

- Must provide for HD ( High definition ) imaging
- Must be able to provide Narrow Band Imaging
- Must have one touch **Waterproof** Connectors, to enable cleaning scopes by total immersion and no requirement of waterproof caps.
- Must have a variable stiffness function to assist users for easy and efficient colonic examination
- Must have an Auxiliary Water jet Channel
- Field of View 140Deg
- Depth of field 2- 100mm
- Distal Outer Diameter 12.8mm
- Channel Diameter 3.7mm
- Total Length of endoscope must be
- Angulation

0

- UP 180Deg
- o DOWN
  - 180Deg
  - RIGHT 160Deg
  - o LEFT 160Deg
- Must be compatible with quoted light source/ processor

0

# PRINTER QTY 1

- Must be an analogue Colour printer to be compatible with quoted light source/ processor
- Should have a front Panel LCD Display
- Must use Dye Sublimation Thermal Transfer Print Method for printing
- 423dpi Resolution

# MANUAL DISINFECTOR WITH LEAK TESTER QTY 1

- With an Integral Hand Pump
- Consist of three fluid containers with lids for rinse water, disinfectant and detergent
- Integral Timer with Alarm
- Customised Instrument tray to place endoscope in
- General dimensions should be approx: 930(H)X 510(D)X 960(W)mm
- Instrument Tray capacity should be of 6Litres

#### **ENDOSCOPIC DIATHERMY MACHINE QTY 1**

- Should be High frequency 330 380 kHz
- Approx Size (W  $\times$ D $\times$  H) 295  $\times$  375  $\times$ 115mm
- Monopolar output
  - Sockets 6 mm A- cord
  - Single/split neutral electrode 10 mm 2- pins
  - Cut 1/2/3 120W @ 500 Ohms
  - PulseCut slow/fast 120W @ 500 Ohms
    - SoftCoag 120W @ 100 Ohms
    - ForcedCoag 1 50 W @ 500 Ohms
    - ForcedCoag 2 120W @ 500 Ohms
- Bipolar output

0

0

- Sockets 28.8mm 2- pins and 4/8 mm coaxial
- Cut 1/2/3 120W @ 500 Ohms
- SoftCoag 120W @ 100 Ohms
- RFCoag incl. RCAP 40 W @ 100 Ohms
- Incorporates Rapid Spark Technology
- Features High Power Cut Support (HPCS) and Fast Spark Monitor (FSM)
- Should be compatible to Endoscopic Procedures

Item No	Description of Product	Qty	UNIT COST	TOTAL COST
1	ICU Bed 5 Function Electric	14		
2	ICU Ventilator	10		
3	ICU Fluid Warmer	8		
4	ICU Infusion Pump	10		
5	ICU Syringe Pump	10		
6	Bedside Patient Monitor	14		
7	Central Monitoring Station	2		
8	ICU Defibrillator	4		
9	Suction Machine	8		
10	Blood Gas Analyzer	2		
11	Anaesthesia Machine provided with Patient Monitor	2		
12	Autoclave Digital 80Litres	2		
13	Diathermy	2		
14	Electro-Hydraulic Operating Table	2		
15	LED Operating Lights Dual Dome Ceiling Mounted	2		
16	Dressing Trolley	4		
17	Emergency Trolley	10		
18	Mayo Instrument Trolley	4		
19	Patient Trolley Stretcher	4		
20	Recovery Room Bed Single Crank	4		

21	General Orthopaedic Set	2	
22	Amputation Set	2	
23	Large Fragment Set	2	
24	Small Fragment Set	2	
25	Kuntscher Instrumentation Set	2	
26	Wire Instrument Sets	2	
27	Diagnostic Set	4	
28	Ambu Bag Reusable	4	
29	Adult Weighing Scale Digital with Height Meter and BMI	4	
30	Infant Weighing Scale	4	
31	Laryngoscope	2	
32	Infra Red Gun Thermometer	4	
33	Pen Torch	6	
34	Stethoscope	14	
35	X-Ray Viewing – Single	2	
36	Wheel Chair	6	
37	Ultrasonic Nebulizer	8	
38	Ward Screens 4 Fold	6	
39	Blood Donation Bed/Chair	4	
40	Drip Stand	10	
41	Examination Couch	14	
42	Drug Medicine Trolley	4	
43	Foetal Doppler	4	

44	SPO2 Pulse Oximeter Machine	4	
45	Oxygen Concentrator	4	
46	Vital Sign Monitor	4	
47	Examination Light	10	
48	ECG Machine 12 channel	4	
49	Foetal Monitor CTG	2	
50	Patella Harmer	8	
51	Wall Mounted Ophthalmoscope and Otoscope Set Diagnostic with BP Measuring	6	
52	Craniotomy Set	2	
53	Processor & Light Source	1	
54	Monitor	1	
55	Trolley/ Workstation	1	
56	Gastroscope	1	
57	Colonoscope	1	
58	Printer	1	
59	Manual Disinfector With Leak Tester	1	
60	Endoscopic Diathermy Machine	2	
	TOTAL COST		

	ITEM DESRIPTION	TOTAL
1	SUB-TOTAL	
2	Add 16% VAT	
3	TOTAL	

In words Kenya Shillings

Contractor:	
VAT Registration No:	
Pin No:	
Address:	
Signature: Dat	e:
Witness:	
Address:	
Signature: [	Date: