

## Quotation Advert

Opening Date: 2019-09-11

Closing Date: 2019-09-17

Closing Time: 11:00

### INSTITUTION DETAILS

Institution Name: Head Office Quotations

Province: KwaZulu-Natal

Department or Entity: Department of Health

Division or section: Central Supply Chain Management

Place where goods / services is required:

Date Submitted: 2019-09-09

### ITEM CATEGORY AND DETAILS

Quotation Number: ZNQ:  
700/19/20-H

Item Category: Goods

Item Description: Supply , deliver and install Simulator, multiparameter

Quantity (if supplies): 2

### COMPULSORY BRIEFING SESSION / SITE VISIT

Select Type: Not Applicable

Date :

Time:

Venue:

QUOTES CAN BE COLLECTED FROM: [www.kznhealth.gov.za](http://www.kznhealth.gov.za)

QUOTES SHOULD BE DELIVERED TO: 310 Jabu Ndlovu Street, Pietermaritzburg 3201 or email to Melanie.grewe

### ENQUIRIES REGARDING THE ADVERT MAY BE DIRECTED TO:

Name: Zama Zindela

Email: zama.zindela@kznhealth.gov.za

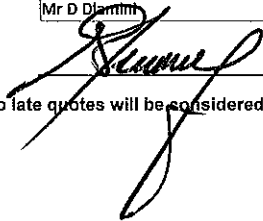
Contact Number:

033 815 8418





**Finance Manager Name:**

Mr D Dlamini

**Finance Manager Signature:**



No late quotes will be considered

 Submit |  Save | Save As... |  Close |  Print Preview

Print this page



ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS / SERVICES / WORKS OFFERED? [IF YES ENCLOSE PROOF]

OFFICIAL PRICE PAGE FOR QUOTATIONS

SIGNATURE OF BIDDER ..... DATE.....  
 [By signing this document I hereby agree to all terms and conditions]

CAPACITY UNDER WHICH THIS QUOTE IS SIGNED.....

Item No	Quantity	Description	Brand & model	Country of manufacture	Price	
					R	c
1	2	To supply, deliver and install Simulator, multi parameter for DR Pixley ka Seme Hospital				
		NB: Kindly complete H.T.S spec attached				
		Original documents required in a sealed envelope with current CSD summary report reflecting banking details, certified copy of B-BBEE certificate by verified agency and accredited by SANAS , Tax Clearance certificate or SARS pin				
		Responses to be delivered:310 Jabu Ndlovu street,old boys Model,Quotation tender box OR email to sally.crihton@kznhealth.gov.za or melanie.grewe@kznhealth.gov.za				
VALUE ADDED TAX (Only if VAT Vendor)						
TOTAL QUOTATION PRICE (VALIDITY PERIOD 60 Days)						

Does This Offer Comply With The Specification?	Does The Article Conform To The S.A.N.S. / S.A.B.S. Specification?
Is The Price Firm?	State Delivery Period E.G. E.G. 1day, 1week

<p>Enquiries regarding the quote may be directed to:</p> <p>Contact Person: <u>ZAMA ZINDELA</u> Tel: <u>033-8158407</u></p>	<p>Enquiries regarding technical information may be directed to:</p> <p>Contact Person: <u>N SINGH</u> Tel: <u>033-8467478</u></p>
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**DECLARATION OF INTEREST**

1. Any legal person, including persons employed by the state<sup>1</sup>, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to quote (includes a price quotation, advertised competitive quote, limited quote or proposal). In view of possible allegations of favouritism, should the resulting quote, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-
  - the bidder is employed by the state; and/or
  - the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the quote(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the quote.

2. In order to give effect to the above, the following questionnaire must be completed and submitted with the quote.

- |  |   |
|--|---|
| 2.1. Full Name of bidder/representative.....                             | 2.4. Company Registration Number: ..... |
| 2.2. Identity Number: .....  | 2.5. Tax Reference Number: .....        |
| 2.3. Position occupied in the Company (director, trustee, shareholder?); | 2.6. VAT Registration Number: .....     |

2.7. The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / persal numbers must be indicated in paragraph 3 below. [TICK APPLICABLE]

2.8. Are you or any person connected with the bidder presently employed by the state? YES NO

2.8.1. If so, furnish the following particulars:  
 Name of person / director / trustee / shareholder/ member: .....  
 Name of state institution at which you or the person connected to the bidder is employed:.....  
 Position occupied in the state institution: ..... Any other particulars:.....

2.8.2. If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector? YES NO

2.8.2.1. If yes, did you attach proof of such authority to the quote document?

*(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the quote.)*

2.8.2.2. If no, furnish reasons for non-submission of such proof: .....

2.9. Did you or your spouse, or any of the company's directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months? YES NO

2.9.1. If so, furnish particulars:.....

2.10. Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this quote? YES NO

2.10.1. If so, furnish particulars:.....

2.11. Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this quote? YES NO

2.11.1. If so, furnish particulars:.....

2.12. Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract? YES NO

2.12.1. If so, furnish particulars:.....

**3. Full details of directors / trustees / members / shareholders.**

NB: The Department Of Health will validate details of directors / trustees / members / shareholders on CSD. It is the suppliers' responsibility to ensure that their details are up-to-date and verified on CSD. If the Department cannot validate the information on CSD, the quote will not be considered and passed over as non-compliant according to National Treasury Instruction Note 4 (a) 2016/17.

**4 DECLARATION**

I, THE UNDERSIGNED (NAME).....CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2.

I ACCEPT THAT THE STATE MAY REJECT THE QUOTE OR ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....	.....	.....	.....
Name of bidder	Signature	Position	Date

<sup>1</sup>"State" means -

- |   |   |
|---|---|
| a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999); | c) provincial legislature;                                    |
| b) any municipality or municipal entity;  | d) national Assembly or the national Council of provinces; or |
|   | e) Parliament.  |

<sup>2</sup>"Shareholder" means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.

SPECIAL CONTRACT CONDITIONS OF QUOTATIONS

1. AMENDMENT OF CONTRACT

1.1. Any amendment to or renunciation of the provisions of the contract shall at all times be done in writing and shall be signed by both parties.

2. CHANGE OF ADDRESS

2.1. Bidders must advise the Department of Health (institution where the offer was submitted) should their address (*domicilium citandi et executandi*) details change from the time of bidding to the expiry of the contract.

3. GENERAL CONDITIONS ATTACHED TO THIS QUOTATION

- 3.1. The institution is under no obligation to accept the lowest or any quote.
- 3.2. The price quoted must include VAT (if VAT vendor). However, it must be noted that the department reserves the right to evaluate all quotations excluding VAT as some bidders may not be VAT vendors.
- 3.3. The bidder must ensure the correctness & validity of quote:
  - (i) *that the price(s), rate(s) & preference quoted cover all for the work/item (s) & accept that any mistakes regarding the price (s) & calculations will be at the bidder's risk*
- 3.4. The bidder must accept full responsibility for the proper execution & fulfilment of all obligations conditions devolving on under this agreement, as the Principal (s) liable for the due fulfilment of this contract.
- 3.5. This quotation will be evaluated based on the 80/20 points system, specification & correctness of information. All required documentation must be completed in full and submitted.
- 3.6. Offers must comply strictly with the specification.
- 3.7. Only offers that meet or are greater than the specification will be considered.
- 3.8. Late quotes will not be considered.
- 3.9. Expired product/s will not be accepted. All products supplied must be valid for a minimum period of six months.
- 3.10. A bidder not registered on the Central Suppliers Database or verification has failed will not be considered.
- 3.11. All delivery costs must be included in the quote price, for delivery at the prescribed destination.
- 3.12. Only firm prices will be accepted. Such prices must remain firm for the contract period. Non-firm prices (including rates of exchange variations) will not be considered.
- 3.13. In cases where different delivery points influence the pricing, a separate pricing schedule must be submitted for each delivery point.
- 3.14. In the event of a bidder having multiple quotes, only the cheapest according to specification will be considered. Furthermore a verification will be done to identify if bidders have multiple companies and are quoting (cover-quoting) for this bid. In such instances only the cheapest bid according to specification will be considered.

4. SAMPLES

- 4.1. In the case of the quote document stipulating that samples are required, the supplier will be informed in due course when samples should be provided to the institution. (This decreases the time of safety and storage risk that may be incurred by the respective institution). The bidders sample will be retained if such bidder wins the contract.
  - (i) If a company/s who has not won the quote requires their samples, they must advise the institution in writing of such.
  - (ii) If samples are not collected within three months of close of quote the institution reserves the right to dispose of them at their discretion.
- 4.2. **Samples must be made available when requested in writing or if stipulated on the document.**
  - (i) If a Bidder fails to provide a sample of their product on offer for scrutiny against the set specification when requested, their offer will be rejected. All testing will be for the account of the bidder.

5. COMPULSORY SITE INSPECTION / BRIEFING SESSION

5.1. Bidders who fail to attend the compulsory meeting will be disqualified from the evaluation process.

- (i) The institution has determined that a compulsory site meeting  will not take place
- (ii) Date  /  /  Time :  Place

Institution Stamp:	Institution Site Inspection / briefing session Official  Full Name: .....  Signature: .....  Date: .....
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## 6. STATEMENT OF SUPPLIES AND SERVICES

- 6.1. The contractor shall, when requested to do so, furnish particulars of supplies delivered or services executed. If he/she fails to do so, the Department may, without prejudice to any other rights which it may have, institute inquiries at the expense of the contractor to obtain the required particulars.

## 7. SUBMISSION AND COMPLETION OF SBD 6.1

- 7.1. Should a bidder wish to qualify for preference points they must complete a SBD 6.1 document. Failure by a bidder to provide all relevant information required, will result in such a bidder not being considered for preference point's allocation. The preferences applicable on the closing date will be utilized. Any changes after the closing date will not be considered for that particular quote.

## 8. TAX COMPLIANCE REQUIREMENTS

- 8.1. In the event that the tax compliance status has failed on CSD, *it is the suppliers' responsibility to provide a SARS pin in order for the institution to validate the tax compliance status of the supplier.*
- 8.2. In the event that the institution cannot validate the suppliers' tax clearance on SARS as well as the Central Suppliers Database, *the quote will not be considered and passed over as non-compliant according to National Treasury Instruction Note 4 (a) 2016/17.*

## 9. TAX INVOICE

- 9.1. A tax invoice shall be in the currency of the Republic of South Africa and shall contain the following particulars:

- (i) the name, address and registration number of the supplier;
- (ii) the name and address of the recipient;
- (iii) an individual serialized number and the date upon which the tax invoice is issued;
- (iv) a description and quantity or volume of the goods or services supplied;
- (v) the official department order number issued to the supplier;
- (vi) the value of the supply, the amount of tax charged;
- (vii) the words tax invoice in a prominent place.

## 10. PATENT RIGHTS

- 10.1. The supplier shall indemnify the **KZN Department of Health** (hereafter known as the purchaser) against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

## 11. PENALTIES

- 11.1. if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract.

## 12. TERMINATION FOR DEFAULT

- 12.1. The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:
- (i) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract,
  - (ii) if the supplier fails to perform any other obligation(s) under the contract; or
  - (iii) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
- 12.2. In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services.
- 12.3. Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.

**FAILURE TO COMPLY WITH ABOVE WILL RESULT IN YOUR QUOTE BEING PASSED OVER.**

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017**

This preference form must form part of all quotes invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

**NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.**

**1. GENERAL CONDITIONS**

- 1.1 The following preference point systems are applicable to all quotes:
- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- 1.2 The value of this quote is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable.
- 1.3 Points for this quote shall be awarded for:
- (a) Price; and
  - (b) B-BBEE Status Level of Contributor.
- 1.4 The maximum points for this quote is allocated as follows:

	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
<b>Total points for Price and B-BBEE must not exceed</b>	<b>100</b>

- 1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the quote, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.6 The purchaser reserves the right to require of a bidder, either before a quote is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

**2. DEFINITIONS**

- (a) **"B-BBEE"** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **"B-BBEE status level of contributor"** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **"bid"** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) **"EME"** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **"functionality"** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) **"prices"** includes all applicable taxes less all unconditional discounts;
- (h) **"proof of B-BBEE status level of contributor"** means:
  - 1) B-BBEE Status level certificate issued by an authorized body or person;
  - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
  - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **"QSE"** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) **"rand value"** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;



**3. POINTS AWARDED FOR PRICE**

**3.1 THE 80/20 PREFERENCE POINT SYSTEMS**

A maximum of 80 points is allocated for price on the following basis:

$$P_s = 80 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right) \text{ Where}$$

- P<sub>s</sub> = Points scored for price of bid under consideration
- P<sub>t</sub> = Price of bid under consideration
- P<sub>min</sub> = Price of lowest acceptable bid

**4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR**

4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (80/20 system)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

**5. BID DECLARATION**

5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

**6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1**

6.1 B-BBEE Status Level of Contributor: = .....(maximum of 20 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

**7. SUB-CONTRACTING**

(Tick applicable box)

7.1 Will any portion of the contract be sub-contracted?

YES		NO	
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7.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted.....%
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....

8. Whether the sub-contractor is an EME or QSE

(Tick applicable box)

iv) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations,2017:

YES		NO	
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Designated Group: An EME or QSE which is at least 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

9. DECLARATION WITH REGARD TO COMPANY/FIRM

9.1 Name of company/firm:.....

9.2 VAT registration number:.....

9.3 Company registration number:.....

9.4 TYPE OF COMPANY/ FIRM [TICK APPLICABLE BOX]

- Partnership/Joint Venture / Consortium
- One person business/sole propriety
- Close corporation
- Company
- (Pty) Limited

9.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....  
.....

9.6 COMPANY CLASSIFICATION [TICK APPLICABLE BOX]

- Manufacturer
- Supplier
- Professional service provider
- Other service providers, e.g. transporter, etc.

9.7 Total number of years the company/firm has been in business:.....

9.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
  - (a) disqualify the person from the bidding process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution.

WITNESSES
1. ....
2. ....

..... SIGNATURE(S) OF BIDDERS(S)
DATE: .....
ADDRESS..... ..... .....

**Revised: 2019/04/24**

Ae 10286

**PROVINCE OF KWAZULU-NATAL**  
**DEPARTMENT OF HEALTH**  
**HEALTH TECHNOLOGY SERVICES**

**SPECIFICATION FOR:**

**UMDNS: 19030**

**SIMULATORS – MULTIPARAMETER MONITOR including NIBP and SPO2**

**SPECIFICATION: H.T.U. – C.E. NO. T/E 11**

*Tenderer to Sign and Date every page*

## **TECHNICAL SPECIFICATION:**

### **Clause T1**

**The multi-parameter simulator being tendered for must be of robust construction; it must be very user friendly and simple to operate; it must comprise the latest technology; have a rechargeable battery pack and provide patient simulations for the following parameters:**

- a. ECG
- b. Arrhythmias
- c. Pacemaker Waveforms
- d. Invasive Blood Pressures (IBP)
- e. Respiration
- f. Temperature
- g. Non-invasive Blood Pressure (NIBP)
- h. SPO2 (Oxygen Saturation/Pulse Rate)

N.B. Tenderer must state any additional parameters that can be simulated and be of extra benefit.

#### **TENDERER'S COMMENTS:**

**Clause T2: The ECG simulation on the unit being tendered for must be available as follows:**

#### **Clause T2.1**

A twelve (12) lead **ECG** simulation must be provided via 10 universal ECG jacks that are colour coded to IEC standards.

#### **TENDERER'S COMMENTS:**

#### **Clause T2.2**

The heart rate must be user selectable in a minimum range of 20 to 300**BPM**.

N.B. Tenderer must state the steps in which this heart rate is user selectable.

#### **TENDERER'S COMMENTS:**

#### **Clause T2.3**

The **ECG** amplitudes must be user selectable in the range 0,5mV to 5.0mV.

N.B. Tenderer must state the steps in which the **ECG** amplitude is selectable.

#### **TENDERER'S COMMENTS:**

***Tenderer to Sign and Date every page***

**Clause T2.4**

ECG waveform selections must be provided from Adult to Paediatrics.

**TENDERER'S COMMENTS:**

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**Clause T2.5: ECG performance must provide:**

- a. Square wave of 2Hz and 0,125Hz.
- b. Pulse of at least 30 and 60 BPM with 60ms pulse width.
- c. Sine waves in a user selectable range of at least 0,5Hz to 60Hz.
- d. Triangle wave of at least 2Hz.

**TENDERER'S COMMENTS:**

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**Clause T2.6**

ST segment elevation must be available in the range – 0,8mV to + 0,8mV in 0,1mV steps.

**TENDERER'S COMMENTS:**

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**Clause T2.7**

The ECG posts must be integrated into the simulator and allow for easy and secure 10-lead ECG Snap and Lead connections.

**TENDERER'S COMMENTS:**

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*Tenderer to Sign and Date every page*

**Clause T3**

**ARRHYTHMIA simulation selections must provide the following:**

- T3.1 Sinus Arrhythmia.
- T3.2 Atrial (PAC).
- T3.3 Atrial Tachycardia.
- T3.4 Atrial Flutter.
- T3.5 Premature Nodal Contraction (PNC).
- T3.6 Supraventricular Tachycardia.
- T3.7 PVC1 Left Ventricular Focus.
- T3.8 PVC1 Early, LV Focus.
- T3.9 PVC1 R on T, LV Focus.
- T3.10 Missed Beat.
- T3.11 PVC2 Right Ventricular Focus.
- T3.12 PVC2 Early, RV Focus.
- T3.13 PVC2 R on T, RV Focus.
- T3.14 Multifocal PVC's.
- T3.15 Atrial Fibrillation Coarse / Fine.
- T3.16 PVC's (6, 12 or 24 per minute)
- T3.17 Frequent Multifocal PVC's.
- T3.18 Bigeminy.
- T3.19 Trigeminy.
- T3.20 Multiple PVC's (One time run of 2, 5 or 11 PVC's)
- T3.21 Ventricular Tachycardia.
- T3.22 Ventricular Fibrillation Coarse / Fine.
- T3.23 Asystole.
- T3.24 Conduction Defect

**TENDERER'S COMMENTS:**

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**Clause T4**

**The pacemaker simulations must provide the following MINIMUM functions:**

T4.1	Asynchronous Pacemaker	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
T4.2	Pacer Non Function.	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
T4.3	Pacer Non Capture.	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
T4.4	Demand Occasional Sinus.	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
T4.5	Demand Frequent Sinus.	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
T4.6	AV Sequential.	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>

N.B. The tenderer must place a tick (✓) in the appropriate box. Failure to do so will disqualify the tenderer.

**TENDERER'S COMMENTS:**

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***Tenderer to Sign and Date every page***

**Clause T5**

**A minimum of two Invasive Blood Pressure channels must be provided, and the unit being tendered for must be available as follows:**

**Clause T5.1**

The channels must provide a transducer sensitivity of 5 or 40  $\mu\text{V} / \text{V} / \text{mmHg}$ .

**TENDERER'S COMMENTS:**

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**Clause T5.2**

Static Pressure levels for **both IBP channels** must be available in a stepped range of at least  $-5\text{mmHg}$  to at least  $+250\text{mmHg}$  in 1 mmHg steps.

**TENDERER'S COMMENTS:**

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**Clause T5.3**

Systolic and Diastolic pressure levels must be independently adjustable, in 1 mmHg steps, for any selected Dynamic Waveform.

**TENDERER'S COMMENTS:**

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**Clause T5.4**

**Dynamic waveform selections must be provided as follows:**

- T5.4.1 Arterial: 120/80.
- T5.4.2 Radial Artery: 120/80.
- T5.4.3 Left Ventricle: 120/00.
- T5.4.4 Right Ventricle: 25/00.
- T5.4.5 Central Venous (CVP): 15/10.
- T5.4.6 Pulmonary Artery: 25/10.
- T5.4.7 Pulmonary Artery Wedge: 10/2.

**TENDERER'S COMMENTS:**

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**Clause T5.5**

The tenderer must provide the catalogue number, the price inclusive of **V.A.T.** and the correct descriptions of all the available **IBP** interface cables for the different makes of monitors on a separate schedule.

**TENDERER'S COMMENTS:**

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**Clause T6**

**Respiration simulation must provide the following:**

**Clause T6.1**

Baseline Impedance in a stepped range of at least 500 ohm to at least 1500 ohm for leads I, II and III must be provided.

**TENDERER'S COMMENTS:**

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**Clause T6.2**

The impedance variations must be typically in a range of: 1 to 5 Ohm

**TENDERER'S COMMENTS:**

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**Clause T6.3**

The respiration rate must be available in a stepped range of at least 10 BrPM to at least 140 BrPM and 0 BrPM for apnea.

**TENDERER'S COMMENTS:**

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**Clause T6.4**

**Apnea selections must be typically as follows:**

12 seconds; 22 seconds; 32 seconds and continuous.

**TENDERER'S COMMENTS:**

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**Clause T7**

**Temperature simulation must be available as follows:**

**Clause T7.1**

The temperature simulation must provide compatibility with both **YSI** Series 400 and 700.

**TENDERER'S COMMENTS:**

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**Clause T7.2**

The temperature simulation must be available in a stepped range of at least 30°C to at least 40°C.

**TENDERER'S COMMENTS:**

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**Clause T7.3**

The tenderer must provide the catalogue number, the price inclusive of **V.A.T.** and the correct descriptions of all the available **TEMP** interface cables for the different makes of monitors on a separate schedule.

**TENDERER'S COMMENTS:**

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**Clause T8**

**Non-Invasive Blood Pressure (NIBP) simulation must be available as follows:**

**Clause T8.1**

The **NIBP** Simulator being tendered for must be suitable for testing and verifying all makes of Adult, Paediatric and Neonatal **NIBP** Monitors employing the oscillometric methods of measurement.

**TENDERER'S COMMENTS:**

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**Clause T8.2**

**Dynamic Non-Invasive Blood Pressure:**

The unit must be able to simulate normal, hypertensive and hypotensive dynamic, non-invasive blood pressures and the simulations must represent typical Adult and Neonatal patients.

**TENDERER'S COMMENTS:**

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**Clause T8.3**

The unit being tendered for must include an internal pump for Static calibration, Leak Tests and Overpressure tests.

**TENDERER'S COMMENTS:**

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**Clause T8.4**

The unit being tendered for must deliver independent **SYSTOLIC / DIASTOLIC** pressure simulations and it must be possible to change these in steps of 1mmHg.

**TENDERER'S COMMENTS:**

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**Clause T8.5**

The unit must be able to provide Preprogrammed Target Value selections for SYSTOLIC / DIASTOLIC (MAP) Simulations typically as follows in mmHg:

60/30	(40)	150/100	(117)
80/50	(60)	200/150	(167)
100/65	(77)	255/195	(215)
120/80	(93)		

N.B. Tenderer must state the selectable Target Values for **NIBP** simulations, if it differs from values above.

**TENDERER'S COMMENTS:**

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**Clause T9**

The NIBP Display Graphics must include the following:

**Clause T9.1**

Dynamic Real-Time **NIBP** Cuff Pressure waveform.

**TENDERER'S COMMENTS:**

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**Clause T9.2**

The Displayed NIBP Real-Time Parameters must be summarised and include the following:

Peak Cuff Pressure in mmHg.

**TENDERER'S COMMENTS:**

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**Clause T9.3**

Inflate / Deflate time in seconds.

**TENDERER'S COMMENTS:**

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**Clause T9.4**

Inflate / Deflate Rate in mmHg / second.

**TENDERER'S COMMENTS:**

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**Clause T9.5**

Total measurement Time in seconds.

**TENDERER'S COMMENTS:**

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**Clause T10**

The unit must have the ability to carry out **SYSTEM LEAK TESTING**, which must incorporate the following features:

**Clause T10.1**

Adjustable Target Pressure setting, with a maximum pressure setting of 400mmHg.

**TENDERER'S COMMENTS:**

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**Clause T10.2**

System Leak Test result, to display the Leak Rate in mmHg / minute.

**TENDERER'S COMMENTS:**

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**Clause T11**

The unit must have the ability to carry out **PRESSURE RELIEF TESTING**, which must incorporate the following features:

**Clause T11.1**

The unit must have the ability to test the operation of the monitor's relief valve for a **MAXIMUM PRESSURE** of 400mmHg.

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**TENDERER'S COMMENTS:**

**Clause T12**

The cuff mandrels for attachment of the cuffs, for both **ADULT and NEONATE**, must be supplied as standard with the **SIMULATOR** on offer.

**TENDERER'S COMMENTS:**

**Clause T12.1**

Compatible cuff adapters and tubing, for connecting the **NIBP** device to the simulator, must be available and supplied at no extra charge to the final tender price.

**TENDERER'S COMMENTS:**

**Clause T13**

**Non-Invasive Pulse Oximeter simulation must be available as follows:**

**Clause T13.1**

The unit offered provides Oximeter SpO2 optical emitter and detector capability (artificial finger), which generates an optical signal to verify that the electronics within the pulse oximeter probe are functional and presents pulse oximeter equipment with a signal, so that the operator can observe the resulting displayed value of SpO2, and compare it to the expected values.

The unit must be capable of simulating / testing the following manufacturers of Pulse Oximeters: **BCI**, Datex, Nellcor, Nihon Kohden, Nonin, Ohmeda, Masimo technology, Hewlett Packard, Philips, Mindray and GE.

State all the other makes of Pulse Oximeters, if any that the unit being tendered for could test.

**TENDERER'S COMMENTS:**

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**Clause T13.2**

The unit must be upgradeable in the future, should new makes of non-invasive Pulse Oximeters be introduced, in order to make testing of them possible.

**TENDERER'S COMMENTS:**

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**Clause T13.3**

The unit must have Preset R-curves for the makes and models of Pulse Oximeters mentioned in **Clause T13.1**.

NB: Tenderer to state if any Preset or Customisable R-curves can be uploaded to the unit.

**TENDERER'S COMMENTS:**

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**Clause T13.4**

Tenderer to state if Auto sequences are available for performance testing of SPO2 parameters.

**TENDERER'S COMMENTS:**

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**Clause T13.5**

Oxygen Saturation (SpO<sub>2</sub>) range of 30 – 100% with a resolution of 1%.

**TENDERER'S COMMENTS:**

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**Clause T13.6**

Pulse / Heart rate in a minimum range of 30 – 250 BPM with a resolution of 1 BPM and accuracy of  $\pm 1\%$  of setting. Tenderer must state the accuracy.

**TENDERER'S COMMENTS:**

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**Clause T14**

The **DISPLAY** of the unit being tendered for must be of a reasonable size and it must provide clear viewing under all lighting conditions. Tenderer to specify the type of display offered with this unit.

**TENDERER'S COMMENTS:**

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**Clause T15**

The weight of the unit being tendered for must not exceed 2Kg inclusive of the internal battery. Tenderers must state the exact weight of the unit offered.

**TENDERER'S COMMENTS:**

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**Clause T16**

Tenderer must state the type of re-chargeable battery employed and the average operating time.

**TENDERER'S COMMENTS:**

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**Clause T17**

The unit being tendered for must be supplied with a carry case. Tenderer must state if the carry case is the soft or hard type. **The cost of the carry case must be included in the Total Final Tender Price.**

**TENDERER'S COMMENTS:**

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**Clause T18**

Optional accessories offered by the tenderer must be supplied on the separate schedule with a full description of optional accessories with catalogue number and price inclusive of **V.A.T.**

**TENDERER'S COMMENTS:**

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**Clause T19**

The unit must have a communication port / connectivity (Wired or Wireless), which will enable connection to a PC for automation test software and firmware upgrades.

NB: Tenderer to state the name/make of Automation Test Software. The price must be added to the schedule of optional accessories.

**TENDERER'S COMMENTS:**

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**Clause T20**

The automation test software, used with the unit, must be able to integrate with various Computerised Maintenance Management System (CMMS) software's, which is an advantage for future implementation.

NB: Tenderer to provide the name and make of various CMMS programs currently compatible with the unit.

**TENDERER'S COMMENTS:**

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**Clause T21**

The successful tenderer must undertake to provide the Health Technology Unit – Clinical Engineering's in house technicians, comprehensive training on the use of the device tendered for, in order that the technicians must become fully acquainted with the full technical support capability of this unit.

**TENDERER'S COMMENTS:**

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**Clause T22**

Tenderer to indicate if they have a local calibration / repair facility to perform repairs or calibration of the device being tendered for, and tenderer to specify the location of this facility in South Africa.

**TENDERER'S COMMENTS:**

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**Clause T23**

Tenderer to state the frequency of calibration required for the tendered device and the approximate cost of each calibration.

**TENDERER'S COMMENTS:**

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## **SCHEDULE OF OPTIONAL ACCESSORIES**

**Tenderers must quote the price of the optional accessories and items listed as well as any other accessories that may be useful to the end users. The receiving Institutions may purchase individual accessories necessary for their particular Institution.**

Cat No	Item	Price including VAT

***Tenderer to Sign and Date every page***

# DETAILED TECHNICAL SPECIFICATION

## GENERAL INFORMATION REQUIRED

**FAILURE TO COMPLETE THIS PART WILL DISQUALIFY THE TENDERER**

Make \_\_\_\_\_

Model Number /Part Number for: \_\_\_\_\_

Country of Origin \_\_\_\_\_

Price of: \_\_\_\_\_

Local (Durban) Agent \_\_\_\_\_

Delivery Period \_\_\_\_\_

R S A Import Permit Holder \_\_\_\_\_

TENDERER \_\_\_\_\_

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

ADDRESS \_\_\_\_\_

TELEPHONE NO. \_\_\_\_\_ FAX NO. \_\_\_\_\_

CONTACT PERSON \_\_\_\_\_  
(PLEASE PRINT)

***Tenderer to Sign and Date every page***