

Validity: 60 days

# Minimum Technical Requirements for **PATIENT MONITOR**

### **PRODUCT SPECIFICATIONS**

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≻ ECG

- o At least 5 leads
  - Sensitivity (mm/mV)
    - 1.25
    - 2.5
    - **5**
    - **1**0
    - 20
    - **4**0
    - AUTO gain
- Sweep speed (mm/s)
  - 6.25
  - 12.5
  - 25
  - **5**0
- Bandwidth (Hz)
  - Diagnosis: 0.05 150
  - Diagnosis1: 0.05 40
  - Monitor: 0.5 40
  - Surgery: 1 20
  - Enhanced: 5 18
- CMRR (common mode rejection ratio)
  - Diagnosis: > 95 dB
  - Diagnosis 1, monitor, surgery, and enhanced: > 105 dB
- o Hum filter
- Differential input impedance
  - > 5 MΩ

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END USER: \_\_\_\_\_ DESIGNATION:

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#### Minimum Technical Requirements for PATIENT MONITOR

- Input signal range
  - ±10 mVPP
- Recovery time after defibrillation
  - < 5 seconds</p>
- ➢ Heart rate
  - Range
    - ADU: 15 to 300 bpm
    - Pedia/neonate: 15 350 bpm
  - Accuracy
    - 1 bpm
  - Resolution
    - 1 bpm
  - Sensitivity
    - ≥ 300 μ VPP
- PVC (premature ventricular contraction)
  - o Range
    - ADU: 0 300 PVCs/min
    - Pedia/Neonate: 0 350 PVCs/min
  - Resolution
    - 1 PVCs/min
- ST value
  - Range
    - 2.0 mV to +2.0 mV
    - Accuracy
      - ±0.2 mV or 10% whichever is higher
      - Resolution
        - 0.01 mV
  - QT measurement

0

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### Minimum Technical Requirements for PATIENT MONITOR

- o Range
  - 200 800 ms
- o Resolution
  - 4 ms
- Accuracy
  - ±30ms

RESP

0

0

0

0

- o Method
  - Impedance between RA-LL, RA-LA
  - Calculation
    - Manual
    - Automatic
- Baseline impedance range
  - 200 2500 Ω
  - Measuring sensitivity
    - 0.3 Ω
- Waveform bandwidth
  - 0.2 Hz 3.3Hz
- NIBP
  - o Technique
    - Oscillometry
  - o Mode
    - Manual
    - Auto
    - Continuous
    - Measuring interval in auto mode
      - 1 to 480 minutes
    - Continuous

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#### Minimum Technical Requirements for PATIENT MONITOR

- 5 minutes interval
- Measuring parameter
  - Systolic
  - Diastolic
  - MAP
  - PR
- o Pressure unit
  - kPa
  - mmHg
  - cmH2O
- o pressure range
  - systolic: 25 290 mmHg
  - diastolic: 10 250 mmHg
  - MAP: 15 260 mmHg
  - Pressure resolution
    - 1 mmHg
- Accuracy
  - ±5 mmHg
- CNBP (continuous non-invasive blood pressure)
- > SpO2

0

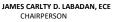
0

- Measuring range
  - 0 100%
- o Resolution
  - 1%
  - Accuracy
  - ±3%
- PR

Range

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### Minimum Technical Requirements for PATIENT MONITOR

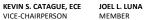
- 25 300 bpm
- Accuracy 0
  - 2 bpm
- Resolution 0
  - 1 bpm
- $\geq$ TEMP
  - Technique 0
    - Thermal resistance
  - Position 0
    - Skin
    - Oral cavity .
    - Rectum
  - 0 Channel
    - 2
  - 0 Unit
    - Degree C
    - Degree F
  - Measuring range 0
    - 0 50 degree C
  - Resolution 0
    - 0.1 degC
  - Accuracy 0
    - 0.3 degC
- Power supply  $\geq$ 
  - 220 240 Vac 0
  - Battery 0
    - At least 5 hours operation

Display

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# Minimum Technical Requirements for **PATIENT MONITOR**

- At least 15 inch color TFT touch screen
- **1920 x 1080 resolution**
- > Recorder
  - Recorder Width
    - At least 48mm
  - Paper width
    - 50 mm
  - Paper speed mm/s
    - 12.5
    - 25
    - 50
- Data storage

0

- o Trend
  - At least 2400 hours
  - NIBP measurement
    - At least 1200 sets
- Alarm events
  - At least 1000 sets
- Ingress protection
  - o IP22
- Standard compliance
  - IEC 60601 1
  - IEC 60601 1 2
  - IEC 80601 2 49

### STANDARD ACCESSORIES:

### NOTE: accessories sets is per unit

1 pack disposable electrode

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 $\geq$ 

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# Minimum Technical Requirements for **PATIENT MONITOR**

- Automatic voltage regulator
- ➢ Bp cuff
  - o 1 adult
  - 1 pediatric
  - o 1 neonate
- Temperature probe
- SpO2 probe

 $\geq$ 

- o Adult
- Pedia/Neo
- Trolley/ Wall bracket (Refer to title of PR)
- 2 pieces battery

### STANDARD REQUIREMENTS UPON SUBMISSION OF BIDDING DOCUMENTS

➢ Soft copy of user manual

### **REQUIREMENT/S IF AWARDED THE CONTRACT**

- Unit must be BRAND NEW.
- Manual in English Language
  - 2 copy of Operation manual (Hard copy)
  - Service manual with soft copy
- Training Program
  - for end-user on equipment's operation with certificate
  - Technical training with certificate (When necessary)
- > Three (3) years warranty on parts and service after commissioning and acceptance
- > Certification on the availability of spare parts for the next 5 years

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# Minimum Technical Requirements for **PATIENT MONITOR**

- > Down time of machine will be added as extension of the warranty.
- With calibration certificate (When necessary)
- Supplier must respond to a service call before 72 hours and should be onsite not more than 7 days.

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- > Section V. Special Conditions of the Contract
  - Delivery Place: Margosatubig Regional Hospital, Zamboanga del Sur
- > Section VI Schedule of Requirements
  - Completion/Delivery Period: \_\_\_\_\_ calendar days upon receipt of the Notice to Proceed including the delivery, installation, testing and commissioning, Partial delivery allowed within the completion/delivery period.

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