



Republic of the Philippines
Department of Health
MARGOSATUBIG REGIONAL HOSPITAL
Margosatubig, Zamboanga del Sur



(0981) 141-4419

mrh_gov@yahoo.com.ph/mrhgov@gmail.com

<http://mrh.doh.gov.ph>

Date: _____

Validity: 60 days

Minimum Technical Requirements for
FETAL AND MATERNAL MONITOR

PRODUCT SPECIFICATIONS

- Display
 - At least 15 inches
 - 1920 x 1080 Pixel
- Fetal heart rate
 - Range
 - 50 – 240 bpm
 - Resolution
 - 1 bpm
 - Accuracy
 - ± 2 bpm
 - Istpa
 - $<100 \text{ mW/cm}^2$
 - Output power
 - $<15\text{mW}$
 - Effective radiating area (12 crystals)
 - $942 \pm 15\% \text{ mm}^2$
 - Dielectric strength
 - At least 4000 Vrms
- TOCO
 - Range
 - 0 – 100
 - Non-linear error
 - $\pm 10\%$
 - Resolution
 - 1%
 - Dielectric strength
 - At least 4000 Vrms

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PREPARED & REVIEWED BY

END USER: _____
DESIGNATION: _____

JAMES CARLTY D. LABADAN, ECE
CHAIRPERSON

KEVIN S. CATAGUE, ECE
VICE-CHAIRPERSON

JOEL L. LUNA
MEMBER

IVAN PAUL L. TANO, ECE
MEMBER

CRIS ABEL M. GUEVARRA, MPA
MEMBER

APPROVED BY:

RICHARD B. SISON, MD, MHA, FPCHA, FPSMS
Medical Center Chief II

Philhealth Accredited
REVISION: 7

FM-MCC-005

EFFECTIVITY DATE: APRIL 1, 2024



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Minimum Technical Requirements for
FETAL AND MATERNAL MONITOR

- MFM & AFM
 - Display range
 - 0 – 999
 - FM mode
 - Automatic
 - Manual
 - AFM mode
 - Trace or black mark
 - AMF technique
 - Pulsed doppler ultrasound
- MECG
 - MHR measurement range
 - 30 – 240 bpm
 - MHR measuring accuracy
 - ± 2 bpm
 - Resolution
 - 1 bpm
 - MHR alarm limits
 - 28 – 243 bpm
- SpO₂
 - Range
 - 50 – 100%
 - Resolution
 - 1%
 - PR measurement range
 - 30 – 240 bpm
 - Resolution: 1 bpm
 - Accuracy: ± 30 bpm

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Minimum Technical Requirements for
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- NIBP
 - Measurement
 - Systolic pressure
 - Diastolic pressure
 - MAP
 - Measurement method
 - Auto
 - Manual
- Recorder specification
 - Paper
 - Z-fold thermosensitive
 - Paper width
 - Not wider than 152 mm
 - Printing width
 - At least 110 mm
- Transducers
 - Wireless transducer
 - Shock resistance at least 1.5 meter drop
- Power requirement
 - 220-240Vac
 - Rechargeable lithium-ion battery (main unit)
 - Can last up to 2 hours
 - At least 5100 mAh nominal capacity
 - At least 300 battery cycle
 - Transducer
 - Rechargeable Lithium-ion battery
 - At least 8 hours working time
 - Wireless charging

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Minimum Technical Requirements for
FETAL AND MATERNAL MONITOR

- At least 1600 nominal capacity
- At least 300 life cycle
- Central monitoring system
 - Hardware
 - CPU: at least i5 or equivalent technology
 - RAM: at least 8GB
 - SDD: at least 1TB
 - Operating system: windows 11
 - Display: at least 21 inches
 - Printer: inkjet with continuous ink system
 - UPS: at least 1.5KVA
 - Speaker
 - Computer desk and Stool
 - Software performance
 - Waveform storage and review: up to 24 hours
 - Trend: up to 1400 groups
 - NIBP measurement storage and review: up to 200 groups
 - Event list: up to 1000 groups
 - Record storage: up to 200,000 records
 - Alarm type
 - Physiological alarm
 - Technical alarm
 - Alarm mode
 - 3 levels audible and visual alarm
- Standard compliance
 - IEC 60601-2-27:2011

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STANDARD ACCESSORIES:

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Minimum Technical Requirements for
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NOTE: accessories sets is per unit

- Three (3) pieces US transducer (wireless)
- One (1) piece TOCO transducer (wireless)
- One (1) piece marker
- Four (4) piece transducer belt
- One (1) piece ECG cable
- One (1) piece SpO2 sensor
- One (1) piece NIBP cuff
- One (1) piece NIBP tube
- Uninterruptible power supply

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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
- Down time of machine will be added as extension of the warranty.

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Minimum Technical Requirements for
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- With calibration certificate (When necessary)
- Supplier must respond to a service call before 72 hours and should be onsite not more than 7 days.
- **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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