



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
CTG MACHINE

➤ **PRODUCT SPECIFICATIONS**

➤ Performance specification

○ Ultrasound

- Technique
 - Ultrasound pulse Doppler with autocorrelation
- Pulse repetition rate
 - 2KHz
- Pulse duration
 - 92μs
- Ultrasound frequency
 - 1.0 ± 10% MHz
- Ultrasound signal range
 - 3.5μV Vpp – 350 μV Vpp
- Max output power
 - <15mW
- FHR measurement range
 - 50 – 240 bpm
 - Resolution : 1 bpm
 - Accuracy : ± 1bpm

○ DECG

- Technique
 - Peak – peak detection technique
- DFHR measurement range
 - 30 – 240 bpm
- Resolution
 - 1 bpm
- Accuracy

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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- ± 1 bpm
- TOCO
 - Toco range
 - 0 – 100%
 - Non linear error
 - $\pm 10\%$
 - Resolution
 - 1%
- Fetal movement
 - Technique
 - Pulsed Doppler ultrasound
 - Fm mode
 - Automatic or manual
 - AFM mode
 - Trace or blackmark
 - Display range
 - 0 – 999
- ECG
 - HR measurement range
 - 30 – 240 bpm
 - HR measuring accuracy
 - ± 2 bpm
 - ECG waveform
 - Manual control ECG waveform display
 - Sweep speed
 - 25 mm/s
 - Sensitivity
 - 2.5 mm/mV

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- 5mm/mV
- 10mm/mV
- 20mm/mV
- AUTO gain
- SpO2
 - Measurement range
 - 50 – 100 %
 - Resolution
 - 1%
 - Measurement accuracy
 - 90 – 100% : ±2%
 - 70 – 90 %: ±4%
 - PR measurement range
 - 30 – 240 bpm
 - Accuracy: ± 3 bpm
- Physical specification
 - Dimesion
 - Not larger than 350 x 350 x 150 DWH
 - Weight
 - Not heavier than 6.5 kgs
 - Power supply
 - 220 – 240 Vac
 - Battery
 - 14.8Vdc/ at least 5000 mAh
 - Ingress protection
 - Main unit
 - At least IPX1

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Minimum Technical Requirements for
CTG MACHINE

- US & TOCO transducers
 - At least IPX8
- Display
 - LCD size
 - Not smaller than 12 inches
 - Pixel : 800H x 600V
- Standard compliance
 - ISO 81060-2:2013: Non-invasive sphygmomanometer
 - IEC/EN 60601-2-27: Electrocardiographic monitoring equipment
 - IEC/EN 60601-2-37: Basic safety and essential performance of ultrasonic diagnostic equipment

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STANDARD ACCESSORIES:

NOTE: accessories sets is per unit

- Ultrasound gel 1 bottle
- 10 packs thermal paper
- Automatic voltage regulator
- Trolley

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

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- 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.
- 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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