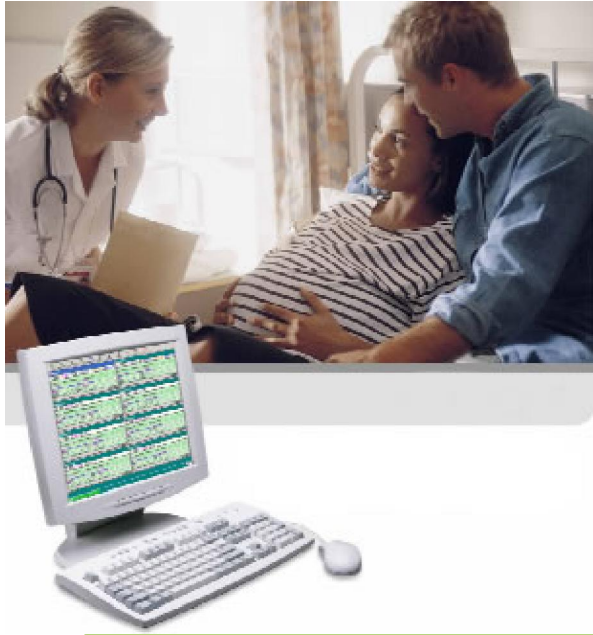


MFM-CNS Central Monitoring System



MFM-CNS is a comprehensive central network station solution for the obstetrical care environment. It is orientated around the care of pregnant women and combine real time monitoring, surveillance, alerting, reviewing, printing and patient information storage in one system. The system covers the entire range of obstetrical care; from the very first antenatal visits up to delivery. The surveillance functions present information that is collected from fetal and maternal monitors on the network and generates alerts for critical events.

MFM-CNS can be accessed from anywhere patient information is needed. Easy access to well organised information improves efficiency allowing carers to focus more on patients and achieve the best quality of care.

Bedside monitors can be connected with the MFM-CNS system which can manage large amounts of data from numerous monitors simultaneously.

There are different methods of networking; wired Ethernet, wireless LAN and mixed network options are available to meet users individual needs.

Benefits of the MFM-CNS

- Offers superior surveillance, providing continuous trace and all the measurement value displays of both foetus and mother.
- Provide audio and visual alarms, making doctors and nurses immediately aware of a critical event.
- Ensures prompt distribution and unlimited access to patient data through the electronic patient records.
- Stores monitoring data and traces for more than 10,000 patients.
- Display MFM-CNS alerts even when other clinical applications are in use.
- Save time and effort with a user friendly interface.

Specifications

Display

Three monitor interfaces.
Maximum of 7 waveforms displayed from each patient.

Alarm

Aural and visual alarm system for both maternal and fetal parameters.

Storage

Up to 24 hours of process information stored for a single patient.
Up to 200 NIBP records stored for a single patient.

Review

4 review modes

Data Management

Fuzzy / Exact search engine available

Recording

High speed and quality laser printout system to be used in conjunction with bedside printers on monitors.
Advanced paper technology. Auto print of valid data.

Network

Wired / wireless network structure available to meet individual requirements.



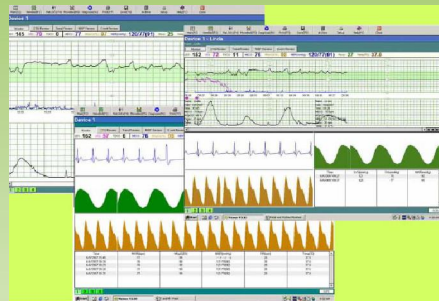
MFM-CNS Central Monitoring System

Display

- Colourful, high resolution monitor
- Information of up to 32 fetal / maternal monitors on a screen



- 3 monitoring interfaces: fetal, maternal and fetal / maternal
- Maximum of 7 traces from each bedside monitor simultaneously

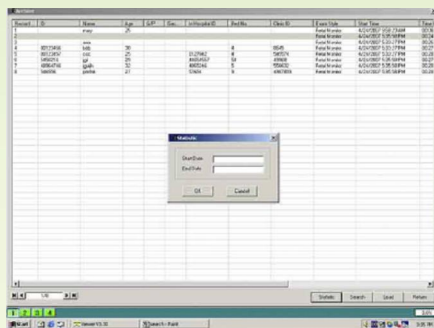


Alarm

- Aural and visual alarm system for both maternal and fetal parameters

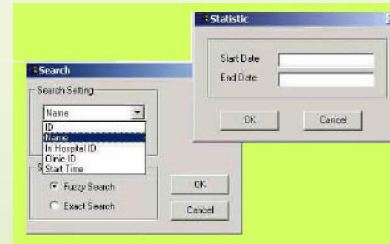
Storage

- Up to 24 hours monitoring processes for a single patient
- Up to 200 NIBP record lists for a single patient
- Large capacity storage, at least 100,000 records
- Automatic data save per minute



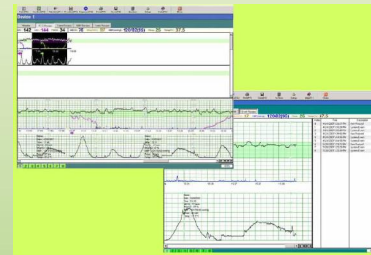
Data Management

- Support classified user function
- Fuzzy / Exact search engines

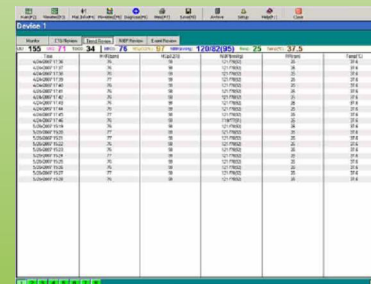


Review

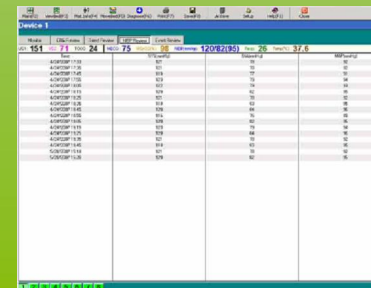
- Event review
- CTG review



Trend Review

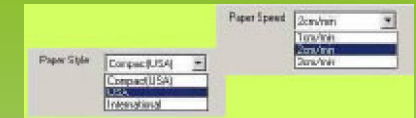


NIBP Review

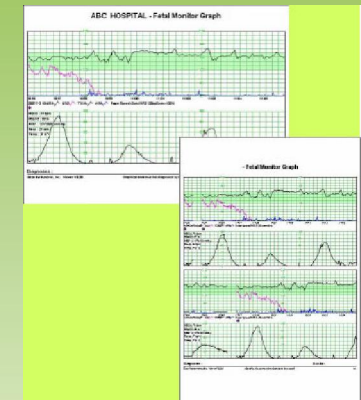


Printing

- High speed and quality laser printer can be used instead of bedside printing
- International / USA printing formats A4 / B5 paper size



- Users can select only the needed sections of traces to print, lowering printing costs.



Bed To Bed Data Transfer

- Data can be transferred to different bedside monitors on the network. This allows carers to track important information easily if the patient is needed to be moved and monitored using a different machine.



Physical Characteristics

Dimensions: 330mm x 270mm x 100mm
 Weight: Approx 3.5 Kg

Safety

Complies with: IEC 60601-1, IEC 60601-1-2
 Anti-electric Shock Type: Class 1 earthed equipment without internal power supply

Anti-electric shock degree: FHR1, FHR2, TOCO, MARK, FS IUP
 DECG

Working System: Continuous running equipment
 Display: LCD

Power Supply

Working Voltage: 100—240 VAC
 Line Frequency: 50/60 Hz
 PMax: 60 VA
 Fuse: T1.6AL

Environment

Working Temp: 5—40°C
 Relative Humidity: 80%
 Atmospheric Pressure: 86Kpa—106Kpa

DECG

Technique: Peak-peak detection technique
 FHR Range: 30-240 bpm (USA Standard)
 50—210 bpm (International Standard)
 Resolution: 1bpm
 Accuracy: +/- 1 bpm
 Input Impedance: >10M (differential, dc to 50/60Hz)
 Input Impedance: >20M (Common Mode)
 CMRR: >110dB

Mark

Manual fetal movement mark

Printing

Record Paper: Z-fold thermal paper
 Printing Width: 112mm
 Effective Printing Width: 104mm
 Paper Printing Speeds: 1/2/3 cm/min
 FHR/DECG Printout Width: 7cm (USA Standard) / 8cm (International Standard)
 FHR/DECG Scaling: 30 bpm/cm (USA Standard) / 20 bpm/cm (international standard)
 TOCO/IUP Printout Width: 3.4cm (USA Standard) / 2.4cm (International Standard)
 TOCO/IUP Scaling: 25%/0.85 cm (USA Standard)
 25%/0.6 cm (International Standard)
 Data Accuracy: +/- 5% (x axis) / +/- 1% (y axis)
 Record Message: Date, time, TOCO type, paper speed, FHR type, bed number etc

Internal IUP

Pressure Range: 0-100mmHg
 Sensitivity: 5µV/V/mmHg
 Non-linear Error: +/- 1mmHg
 Resolution: 1%
 Zero Mode: Automatic / Manual

External TOCO

TOCO Range: 0-100%, 135g strength corresponding to 100%
 Sensitivity: 3.7µV/V/mmHg
 Non-linear Error: +/- 10%
 Resolution: 1%
 Zero Mode: Automatic / Manual

AFM

Technique: Pulsed Doppler ultrasound
 Range: 0-100%
 Resolution: 1%
 Gain Control: Manual / Automatic

B
 BF
 CF