Features

Simple operation: Folded up screen, probe rack and wall mounting rack, handle for easy carrying, user-friendly GUI with 2 displaying modes and 4 color schemes.

Powerful functions: 24 hours CTG storage, fast print for stored traces, Cross Channel Verification alerts when two FHR probes process the heart rate signal from the same source.

Outstanding performance: 12-inch color screen, excellent algorithm, 12 crystal and 1MHz water-proof transducer for accurate detection.

ESF9 Fetal/Maternal Monitor
ESF9 Series Fetal & Maternal Monitor

As a high-tech fetal and maternal monitor, ESF9 offers advanced and integrated monitoring for the delivery room in hospital, private obstetrician’s office and antepartum clinic. ESF9 is designed for the obstetrical care continuum spanning from the antepartum and intrapartum state to postpartum state.

ESF9 provides you with integrated monitoring of twins’ fetal heart rates, uterine activity, fetal movement, intrauterine pressure and direct ECG as well as maternal NIBP, SpO₂, ECG and TEMP.

Our new 12-crystal waterproof ultrasound transducer produces broad beam pulsed wave, which results in better signal of fetal heart rate. Moreover, the flat surface TOCO transducer enables the pregnant women to feel more comfortable.

With rechargeable lithium-ion battery, ESF9 can sustain 2~4 hours continuous work without power supply, which makes the characteristic of portable come true.

Data of ESF9 can be automatically transmitted to MFM-CNS or Insight software.

12 inches high-resolution color LCD, folding up, touch-screen (optional)
Communication
ESFP offers various types of communication and interfaces.

MFM-CNS: Via the built-in Ethernet interface and data bus, data collected by the monitor can be transmitted to the MFM-CNS central monitoring system. With the application of MFM-CNS, nurses can monitor several patients simultaneously without walking from one room to another.

Insight software: As a data management software, Insight software provides a solution of real-time and offline data transmission to PC.

External Monitoring
ESFP offers external fetal parameters such as non-invasive ultrasound, TOCO and automatic fetal movement.

DECG and IUP
ESFP available for internal parameters measurement, DECG and IUP, providing accurate information of fetal ECG and maternal intrauterine pressure. Two optional ranges of DECG is provided, 300pm–240rpm for American standard and 500pm–210rpm for international standard.

Vibrating stimulator
Event can be displayed and recorded on CTG trends when connected with a fetal stimulator by an audio cable.

Display
There are four options for ESFP screen background, green, blue, black and orange color. Details such as baseline, acceleration, deceleration, long-term variability, short-term variability of FHR can be shown vividly on any background.

ESFP integrates maternal monitoring with fetal monitoring in order to meet the requirements of the obstetrical care continuum including antepartum, intrapartum and postpartum duration.

Printer
Via built-in long life thermal array printer, the system will print a self-test baseline for ten seconds before the system enters the monitoring system. It's compatible with 132 and 150 mm paper as well as American and international standard paper. For real-time data, it provides three kinds of recording speed, 1, 2 or 3 cm/min, while the printing speed is high up to 25 mm/sec for stored traces. In addition, it supports printing of Fetal heart rate, TOCO, Maternal heart rate and Maternal SpO₂ waveforms. Furthermore, it provides Smart Notes annotation describing the state of patients.

Caching function: when the record paper runs out, the recorder will pause. The data from that time on will be saved in the memory, and then it will resume printing when paper is loaded.
ESF9 Fetal/Maternal Monitor

- Specification

**Physical Characteristics**
- Dimensions: 347mm x 330mm x 126mm
- Weight: about 6.0 Kg

**Performance specifications**
- Display: 12-inch Color TFT-LCD
- Resolution: 800(H) × 600(V)
- Recorder: America Standard/ International Standard
- Fast print speed (stored traces) up to 25mm/sec
- Paper: Z-fold, thermosensitive

**Battery**
- 14.8V Rechargeable Lithium-ion Battery
- Continual Working time: 4 hours

**Ultrasound**
- Technique: Ultrasound Pulse Doppler with autocorrelation
- Pulse Repetition Rate: 2 KHz
- Ultrasound Frequency: 1.0MHz≥10%
- FHR Range: 50 bpm-240 bpm
- Resolution: 1 bpm
- Accuracy: ±1 bpm

**DECG Channel**
- Technique: Peak-peak detection technique
- FHR range: 30bpm-240bpm (American Standard)
- 50bpm-210bpm (International Standard)
- Resolution: 1bpm
- Accuracy: ±1bpm
- Input Impedance: >10M (Differential, DC50/60Hz)
- Input Impedance: >20M (Common Mode)

**TOCO**
- TOCO Range: 0%-100%
- Resolution: 1%
- Zero Mode: Automatic/ Manual
- Non-linear: ±1mmHg

**IUP channel**
- Pressure Range (IUP): 0-100mmHg
- Resolution: 1%
- Zero Mode: Automatic/ Manual
- Non-linear: ±1mmHg

**Auto Fetal Movement (AFM)**
- Technique: Pulsed Doppler ultrasound
- Range: 0-100 (%)
- Resolution: 1%

**SpO2**
- Measuring Range: 0%-100%
- Measuring Accuracy: 90%-100% ±2%
- PR: 70%-90% ±4%

**NIBP**
- Systolic pressure: 50mmHg-240mmHg
- Mean pressure: 25mmHg-200mmHg
- Diastolic pressure: 15mmHg-180mmHg
- Resolution: 1 mmHg

**Temperature (TEMP)**
- Measuring Range: 28.0°C ~44.0°C
- Accuracy: ±0.2°C

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Specification subject to change without prior notice