



## Advanced, integrated fetal monitor available maternal monitoring

Integrates twin's fetal heart rate, uterine activity, fetal movement, intrauterine pressure, fetal direct ECG, maternal NIBP, SpO<sub>2</sub>, ECG and temp. monitoring

Available with an intuitive touchscreen

### Simple operation

- Folding screen
- Probe rack and wall mounting rack
- Handle for easy portability
- User-friendly GUI with two display modes and four color schemes

### Powerful functions

- 24 hours CTG storage
- Fast print for stored traces

### Outstanding performance

- 12" color screen
- Excellent algorithm
- 12-crystal and 1 MHz water-proof transducer for accurate detection

### Storage

- 24 hours of waveform storage and playback

### Signal overlap verification

- A smart design to reduce risk of miscollecting fetal heart signal
- Alerts when two FHR probes process the heart rate signal from the same source

### 12-crystal waterproof ultrasound transducer

- For FHR detection
- Provides broad beam pulsed wave and improves signals

### Display Controls

The DRE Kindred Plus features four options for color. Details such as baseline, acceleration, deceleration, long-term variability, short-term variability of FHR can be shown vividly on any background.

The DRE Kindred Plus offers the most advanced integrated monitoring for the mother and fetus. It is tailored to the needs of moving situation which covers the entire continuum of antepartum, intrapartum and postpartum applications.

### Monitoring

Fetal external parameters (twins monitoring, external uterine contraction), fetal internal parameters (DECG, IUP), and optional maternal parameters (NIBP, ECG, temp, SpO<sub>2</sub>).

Also provides external monitoring, DECG and IUP, and a vibrating stimulator.



### Printer

Built-in long life thermal array printer.

Also features **Insight software** for transferring data to a standard PC and a rechargeable Lithium-ion battery (sustains four hours of continuous operation).

# DRE Kindred Plus

Fetal Monitor

Equipment for the way *you* operate

## Technical Specifications

### Physical characteristics

Dimensions ..... 347 mm x 330 mm x 126 mm  
Weight ..... Approx. 6 Kg

### Performance specifications

Display ..... 12" color TFT-LCD  
Resolution ..... 800 (h) x 600 (v)  
Recorder ..... America standard;  
International standard;  
1/2/3 cm/min real-time printing speed;  
Fast print speed (stored traces)  
up to 25 mm/sec  
Paper ..... Z-fold, thermosensitive

### Battery

14.8V rechargeable Lithium-ion battery  
Continual working time ..... 4 hours

### Ultrasound

Technique ..... Ultrasound pulse Doppler  
with auto-correlation  
Pulse repetition rate ..... 2 KHz  
Ultrasound frequency ..... 1.0 MHz±10%  
FHR range ..... 50 bpm - 240 bpm  
Resolution ..... 1 bpm  
Accuracy ..... ±1 bpm

### DECG channel

Technique ..... Peak-peak detection technique  
FHR range ..... 30 bpm - 240 bpm  
(American Standard);  
50 bpm - 210 bpm  
(International Standard)  
Resolution ..... 1 bpm  
Accuracy ..... ±1 bpm  
Input impedance ..... >10M (Differential, DC 50/60 Hz)  
Input impedance ..... >20M (Common Mode)

### TOCO

TOCO range ..... 0% - 100%  
Resolution ..... 1%  
Zero mode ..... Automatic/manual  
Non-linear ..... ±10%

### IUP channel

Pressure range (IUP) ..... 0-100mmHG  
Resolution ..... 1%  
Zero mode ..... Automatic/manual  
Non-linear ..... ±1 mmHG

### Auto Fetal Movement (AFM)

Technique ..... Pulsed Doppler ultrasound  
Range ..... 0 - 100 (%)  
Resolution ..... 1%  
Fetal movement marking; manual movement marking

### SpO<sub>2</sub>

Measuring range ..... 0% - 100%  
Resolution ..... 1%  
Measuring accuracy ..... 90% - 100% ±2  
70% - 90% ±4

### PR

Measuring range ..... 30 bpm - 240 bpm  
Measuring accuracy ..... ±2 bpm

### NIBP

Systolic pressure ..... 50 mmHg - 240 mmHg  
Mean pressure ..... 25 mmHg - 200 mmHg  
Diastolic pressure ..... 15 mmHg - 180 mmHg  
Resolution ..... 1 mmHg

### Temperature

Measuring range ..... 28.0° C - 44.0° C  
Accuracy ..... ±0.2° C

Configuration	DRE Kindred Plus	DRE Kindred Plus Express
Dual-FHR	Yes	Yes
TOCO	Yes	Yes
FM	Yes	Yes
AFM	Yes	Yes
DECG/IUP	Optional	Optional
MECG	No	Yes
NIBP	No	Yes
MSPO <sub>2</sub>	No	Yes
Temp	No	Optional
Fetal Stimulator	Optional	Optional
Lithium-ion Battery	Optional	Optional