



medical **ECONET**
GERMANY

ECOtwin LED ECOtwin LCD

Modernized user-friendly antepartum fetal monitor



Compact and portable twin fetal monitor

The ECOTwin fetal monitors of medical ECONET securely accompany women through all stages of their pregnancy.

The ECOTwin is a microprocessor-based Fetal Monitor, providing continuous monitoring, display, and recording of fetal heart rate (FHR) and uterine contraction (UC) for antepartum testing and monitoring. Both combinations indicate the well-being of the fetus.

The monitored data can be recorded continuously or intermittently on a strip chart recorder at the operator's discretion. The recorded information includes graphic trend data and text information of monitor hardware and software configuration, date and time, patient identification, changes to operational settings, clinician, and patient event marks.

This devices are for use only by trained medical personnel located in hospitals, clinics, doctor's offices, and in the patient's home.

Features and Benefits

- High resolution 7" Color LCD Display (800 x 480) rotatable by 270° (ECOtwin LCD)
- 7 segment LED display (ECOtwin LED)
- 9 - crystal US-probes with 0,985 MHz frequency
- Waterproof IPX8 (US & UC)
- Integrated Li-Ion battery
- Monitoring of fetal movement
- Two USB ports for data storage
- LAN port for data transmission
- Thermal array recorder
- Support dual doppler for twins
- Cardiotocography (CTG) Analysis
- Short Term Variability (STV) Analysis
- CCV (Cross-Channel Verification) Function
- Available with mobile cart (option)
- 450 hours patient data saving (ECOtwin LCD)
- Compact-sized and lightweight
- Including probes, event marker, CTG-belts, ultrasound gel and paper
- Multiple language support
- Central monitoring software
Up to 8 fetal monitors connections available
- Networkable with PC (RS-232C or optional Bluetooth)

ECOtwin LCD

ECOtwin LED

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The Main Function of ECOtwin Fetal Monitor

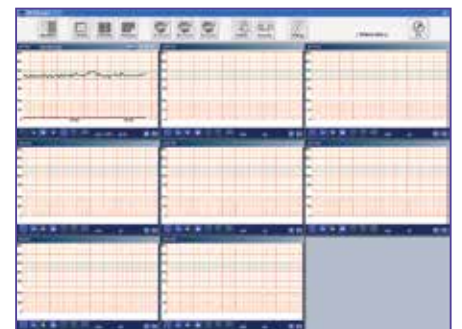
Usually, during pregnancy women regularly counts their baby's movements to make sure it's alright and spend a lot of time and energy worrying about its well-being. The ECOtwin is a Prenatal Monitoring System for non-invasively measuring and showing graphically maternal abdominal contractions and the fetal heart rate through a display on a non-permanent graphical display and a strip chart recorder. This data is intended to aid in assessing the well being of the fetus during the final trimester of pregnancy (Non-Stress Test).



CTG Analysis



Printed paper



Central monitoring

Precise and reliable Analysis

- CTG Analysis calculates important data such as baseline, acceleration, deceleration, fetal movement.
- Cross-channel verification (CCV) prevents signal ambiguity from maternal heart rate.
- Short term variability (STV) is used to measure the cardiac autonomic control.
- Doppler probe has 9-crystal with 0,985 MHz frequency

High performance and Multi function

- ECOtwin LCD can save trend data for 450 hours.
- Recorded paper reports CTG analysis, FHR signal trend, UC trend, and Fetal movement.
- Central monitoring software allows a real-time remote viewing of CTGs with automatic archiving of up to 8 patients at the same time.
- It has IPX8 waterproof probes. It withstands 1 meter of water for over 40 minutes.

ECOtwin LCD

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Specifications

Dimension

Size: 326 (W) x 276 (D) x 96 (H) mm
Weight: Approx. 5.5 kg

Display

ECOtwin LCD: 7" wide TFT color LCD
ECOtwin LED: 7 segment LED
Indicator: Heart rhythm, Printing state, Alarm on / off state LED

Ultrasound

Type: Multicrystal transducer with 9 elements
Mode: Pulsed doppler
Frequency: 0.985 MHz
Intensity: < 10 mW/cm²
FHR range: 30 bpm to 240 bpm
FHR accuracy: ± 2% of range
Waterproof: IPX 8

UC (Uterine Contraction)

Input source: External type
Control: Reference (Zero) control
Measurement range: 0 ~ 99
Waterproof: IPX 8

FM (Fetal Movement)

Detection method: Ultrasound
Type: Dual FM

CTG Analysis

Result: Baseline, OSC. Amp., OSC Num.
Acceleration, Deceleration (early, late, variable)
Movement
Short-Term VAR (min, max, mean)

Printer

Type: Thermal array Z-fold type
Paper width: 150 mm
Record speed: 10, 20, 30 mm / min
Auto record period: Off, 10, 20, 30, 40, 50, 60 min

Set-up

list: Alarms upper / lower value
Time & Date
Print contrast 1, 2, 3
Print speed
FHR volume level
CCV (Cross-Channel Verification)

Function

list: Mark function
UC reference
Zoom in particular response

Signal Interface

Connectors: 2 USB connector
LAN
RS-232

Power

Requirements: 100 - 240 VAC, 50 / 60 Hz
Output: DC +18 V 2.8A
Battery: Rechargeable, 14.8 V Li-Ion

Environment Specifications

Temperature range: Operating: 10 °C to 45 °C
Storage: -20 °C to 60 °C
Relative humidity range: Operating: 5% to 85%
Storage: -20% to 95%

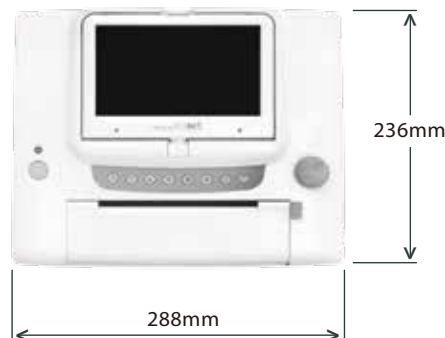
Accessory

- **Standard**
 - Ultrasound probe
 - Toco probe
 - CTG straps
 - Event marker
 - Z-fold paper / HP paper
 - Ultrasound gel
 - Rechargeable battery
- **Optional**
 - Nylon carrying bag
 - Mobile cart

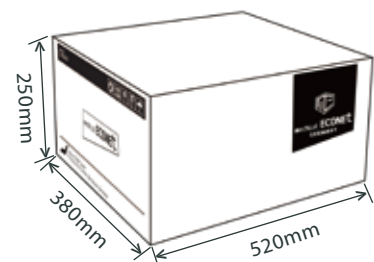
Right side



Top



Packaging



Approx. 7kg

Accessory Information



Ultrasound Probe

Standard accessory



Toco Probe

Standard accessory



CTG straps

3pcs / pack
Standard accessory



Event Marker

Standard accessory



Z-fold Paper

15 cm x 9 cm (scale: 30 - 240 bpm)
Standard accessory



HP Paper

15 cm x 9 cm (scale: 30 - 210 bpm)
Standard accessory



Ultrasound Gel

250 ml
Standard accessory



Nylon Carrying Bag

Optional accessory



Rechargeable Battery

Standard accessory



Mobile Cart

Optional accessory

