



The **GE Corometrics 259** is a fully antepartum/intrapartum fetal monitoring system. The Corometrics 259 includes innovative features that can help deliver a high-quality birthing experience with advanced patient care. The Corometrics 250 series can monitor fetal heart rate and activity, along with monitoring parameters for the mother. These monitoring features include heart rate, temperature, oxygen saturation, ECG, and blood pressure. The Fetal Monitor can give you a comprehensive, detailed reading for labor and delivery.

The Monitor is equipped with an LCD screen that can simultaneously display fetal and maternal parameters plus the maternal waveforms. The Monitoring system additionally offers a recorder that prints continuous trends and

## Features

- Compact, Portable device
- 3, 8, or 12-lead Multi-Channel
- High-resolution color LCD display
- Stores up to 20 ECGs
- Choice of Wireless or Traditional ECG Acquisition
- High-fidelity acquisition sampling rate of 40,000 samples per second per channel
- Mortara Veritas algorithm for ECG interpretation



# Specifications

## Dimensions

Height: 6.7" (17 cm)  
Width: 16.7" (42.4 cm)  
Depth: 17.5" (44.4 cm)  
Weight: 22 lbs (10.9 kg)

## Power

Nominal Line Voltage: 100 VAC, 120 VAC, 220 VAC, 230 VAC, 240VAC  
Line Frequency: 50/60Hz  
Power Consumption: 100 W, 100 W, 0.4 A, 0.4 A  
Chassis Leakage: <300  $\mu$ A

## Operating Environment

Ambient Temperature: 50°F to 104°F (10°C to 40°C)  
Relative Humidity: 10% to 95%, non-condensing  
Atmospheric Pressure: 700–1060 mbar (525–795 mmHg)

## Storage Environment

Ambient Temperature: 14°F to 131°F (-10°C to 55°C)  
Relative Humidity: 0% to 95%, non-condensing  
Atmospheric Pressure: 700–1060 mbar (525–795 mmHg)

## Recorder

Speed: 1, 2, and 3 cm/min  
Speed Accuracy:  $\pm$  1%

## FECG

Technique: Peak detecting, beat-to-beat cardi tachometer  
Heart Rate Counting Range: 30-240 bpm  
Heart Rate Resolution:  $\pm$  1 bpm  
Artifact Elimination: Selectable,  $\pm$  25 bpm artifact rejection  
Countable Input Signal Range: 15  $\mu$ V to 2 mV peak-to-peak  
Offset Voltage Tolerance (Differential):  $\pm$  300 mVdc maximum  
Maximum Common Mode Voltage: 20 V peak-to-peak  
Preamplifier Bandwidth: 1–90 Hz  
Common Mode Rejection:  
Balanced: > 120 dB at mains frequency, with a patient cable  
Unbalanced 5k $\Omega$  RA or LA: > 110 dB at mains frequency Input Equivalent  
Noise: < 10  $\mu$ V peak-to-peak  
Input Impedance:  
Differential: > 10 M $\Omega$   
Common Mode: > 20 M $\Omega$   
Mains Frequency Rejection: > 40 dB  
Leakage Current: < 10  $\mu$ A at 100-240 VAC, electrically isolated  
Isolation, Mains-to-Patient: > 4 kVAC



## Specifications Continued

### Ultrasound Mode

Technique: Pulsed Doppler with autocorrelation processing  
Transducer Type: 9-crystal  
Pulse Repetition Frequency:  
Single Ultrasound Mode: 4 kHz  
Dual Ultrasound Mode: 2 kHz  
Pulse Duration: 92  $\mu$ s  
Transmitter Frequency: 1.151 MHz  
Spatial-Peak Temporal Average Intensity:  $I_{spta} < 10$  mW/cm<sup>2</sup>  
Spatial-Average Temporal Average Intensity:  $I_{sata} < 5$  mW/cm<sup>2</sup>  
Focal 20 dB Beam Area: 16.6 cm<sup>2</sup>, at a range = 7 cm  
Peak Instantaneous Intensity: 1.8 mW/cm<sup>2</sup>  
Peak-Negative Acoustic Pressure:  $p < 10.0$  kPa  
Heart Rate Counting Range: 50–210 bpm  
Leakage Current:  $< 100$   $\mu$ A at 100-240 VAC, isolated by the transducer

### Uterine Activity Mode Toco transducer

Range (typical): 0–100 mmHg (0–13.3 kPa)  
Resolution: 1 mmHg (0.13 kPa)  
Bandwidth: dc to 0.5 Hz  
Excitation Voltage:  
Zero Set Temperature Drift:  $< 0.1$  mmHg/ $^{\circ}$ C (0.013 kPa/ $^{\circ}$ C), excluding transducer  
Leakage Current:  $< 100$   $\mu$ A at 100-240 VAC, electrically isolated

### MECG

Technique: Peak detecting, beat-to-beat cardi tachometer  
Maternal ECG Electrode Type: Medtronic 1700-003 or equivalent  
Leads Available: I, II, and III  
Heart Rate Counting Range: 30–240 bpm  
Heart Rate Resolution:  $\pm 1$  bpm  
Heart Rate Update Rate:  $> 1$  update per second  
Countable Input Signal Range: 0.5 mV to 5 mV peak-to-peak  
Baseline Drift:  $< 0.5$  mV RTI  
Tall T-wave Rejection: 0.8 x QRS amplitude  
Heart Rate Meter Response Time:  
80–120 bpm Step Increase:  $< 2$  seconds  
80–40 bpm Step Decrease:  $< 3$  seconds  
Alarm Time for Tachycardia 80–200 bpm:  $< 10$  seconds (high alarm limit at 100 bpm)  
Offset Voltage Tolerance (Differential):  $\pm 300$  mVdc maximum  
Maximum Common Mode Voltage: 20 V peak-to-peak  
Preamplifier Bandwidth: 0.6 to 40 Hz

