Nothing is more personal than the labor and delivery experience. The monitor you choose must support you in delivering the individualized care your patients expect. For antepartum monitoring through labor, delivery and recovery, the compact and easy-to-use Corometrics® 250cx Series monitor is among the most comprehensive maternal/fetal monitors available today.

The Corometrics 250cx Series monitor allows you to address the monitoring needs for both the mother and the fetus. Begin by using the external monitoring modes and add non-invasive blood pressure, fetal ECG, IUP, maternal ECG, and maternal pulse oximetry as the patients' needs change, without switching to another monitor or external device. The optional 15” color VGA Extend-A-View™ Remote Display provides the clinician with access to the same maternal and fetal vital parameters as displayed on the bedside maternal/fetal monitor. This display may be conveniently located on the opposite side of the labor-room bed or on the anesthesia cart in the OR. Optional maternal temperature may be interfaced with an Exergen TemporalScanner™ TAT-5000.

Corometrics 250cx Series Maternal/Fetal Monitors

Features of the Corometrics 250cx include:

- Smart BP™ works with DINAMAP® SuperSTAT non-invasive blood pressure (NIBP) technology to automatically delay blood pressure measurement during contractions. These patented technologies keep the patient more comfortable and help ensure faster, more meaningful diagnostic data.

- Heart Beat Coincidence Recognition provides visual indications when it detects synchronous fetal and/or maternal heart rate signals, indicating that you may be monitoring a duplicate signal. The monitor compares up to three heart rates and provides an overlapping heart symbol for clear visual recognition and documentation.

- The ChartLight™ feature allows the clinician to easily read the fetal strip, while patients remain relaxed in their low-light setting. Backlit keys help caregivers work comfortably without additional illumination and optional remote display provides further convenience.

- Song Player allows you to celebrate the birth with a choice of three songs.

- Fetal heart rate high/low alarms provide both audible and visual alerts if the fetal heart rate (FHR) is outside of the user-defined high/low range. Optional unique Spectra Alerts™ transform the powerful Corometrics 250cx Series into a “smart” monitor complete with alert functions. You can simultaneously analyze FHR and uterine activity (UA), and notify clinicians of deviations from the norm.

- Selectable 3-lead maternal ECG with pacemaker detection and rejection generates maternal heart rate, QRS waveform display and a six-second snapshot printout when requested.

- Maternal Vital Signs History documents up to eight hours of maternal parameters, displaying the results in a flowchart summary format for easy charting and reference during recovery.
### Fetal alarms (for ultrasound or FECG modes)
- **Audio**: Alternating 1.5 second chimes (773 Hz and 523 Hz)
- **Visual**: Flashing heart rate numerics or message
- **Limits**: User-selectable high and low fetal heart rate
- **Technical**: Signal quality
- **Tachycardia response time**: 5 minutes at 100% limit violation response time
- **Bradycardia response time**: 30 seconds at 100% limit violation response time
- **Signal quality response time**: 100% Signal loss: 1.25 minutes; 70% Signal loss: 5 minutes; 65% Signal loss: 10 minutes

### Uterine activity mode
- **Strain gauge Tocotransducer**
- **Range**: 0-100 mmHg, 0-100 relative units
- **Bandwidth**: DC to 0.5 Hz
- **Resolution**: 1 mmHg, 1 relative unit
- **Excitation voltage**: +4.0 Vdc
- **Zero set temperature drift**: <0.1 mmHg°C (0.013 kPA°C), excluding transducer
- **Leakage current**: <60 µA at 254 VAC, electrically isolated

### Maternal blood pressure mode
- **Technique**: Oscillometric w/DINAMAP SuperSTAT algorithm
- **Blood pressure range**: Systolic 30-290 mmHg, Diastolic 10-220 mmHg, Mean arterial pressure 20-260 mmHg
- **Pulse rate range**: 30-200 BPM
- **Blood pressure accuracy**: ±5 mmHg with a standard deviation no greater than 8 mmHg
- **Pulse rate accuracy**: ±2 BPM or ±2% (whichever is greater)
- **Cuff inflation**: Initial inflation to 135 mmHg; user selectable from 100 to 250 mmHg. Subsequent inflation approximately 10 mmHg greater than previous systolic pressure.
- **Cuff deflation**: Automatic
- **Safety features**: Automatic cuff deflation if pressure exceeds 315 mmHg, or max. measurement time exceeded (AAMI SP10 limit of 180 sec; set to 120 sec). Safety timer detects microprocessor failure. Auto mode minimum 30-second delay from the end of one determination to the beginning of another to allow for venous return, indicated by WAIT on user interface in lieu of auto-mode timer.

### Display/record
- **Systolic, diastolic, mean pressure and pulse rate**
### Alarms (audible and visual)

<table>
<thead>
<tr>
<th>Audio</th>
<th>Alternating 1.5 second chimes (773 Hz and 523 Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>Flashing pressure numerics, or message</td>
</tr>
<tr>
<td>Limits</td>
<td>User-selectable high and low systolic, diastolic and mean pressures; user-selectable high and low pulse rate</td>
</tr>
<tr>
<td>Technical</td>
<td>Cuff/hose errors, connection errors, insufficient signal, excessive inflation/motion or determination times, overpressure, communication problem or self-test failure</td>
</tr>
</tbody>
</table>

### Technical

- Cuff/hose errors, connection errors, insufficient signal, excessive inflation/motion or determination times, overpressure, communication problem or self-test failure

### Alarms (audible and visual)

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</tbody>
</table>

### Maternal blood oxygen saturation

#### Nellcor Oximetry

- **Sensor brand**: Nellcor® Puritan Bennett
- **Sensor type**: Oximax® DS-100A, MAX-A
- **Saturation range**: 1-100%
- **Pulse rate range**: 30-250 BPM
- **Saturation accuracy**: ±2 digits from 70-100% (adults) ±2 digits from 70-100% (low perfusion) Unspecified 0-69%
- **Pulse rate accuracy**: ±3 digits from 20 to 250 BPM
- **Alarms**: Visual: Flashing percent SpO₂ numeric or message; Audible: Alternating 1.5 second chimes
- **Limits**: User-selectable high and low SpO₂; high and low pulse rate

#### Masimo SET Oximetry

- **Sensor brand**: Masimo SET®
- **Sensor type**: LNOP* DC-I, Adt
- **Saturation range**: 1-100%
- **Saturation accuracy**: ±2 digits from 70-100% (no motion) ±3 digits from 70-100% (motion) ±2 digits from 70-100% (low perfusion) Unspecified from 0% SpO₂ to 69% SpO₂
- **Pulse rate range**: 25-240 BPM
- **Pulse rate accuracy**: ±3 digits; ±5 digits in the presence of motion
- **Alarms**: Visual: Flashing percent SpO₂ numerics or message; Audible: Alternating 1.5 second chimes
- **Limits**: User-selectable high and low SpO₂; high and low pulse rate

### MECG mode

<table>
<thead>
<tr>
<th>Maternal ECG electrode type</th>
<th>Medtronic 1700-003 or equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leads available</td>
<td>I, II and III</td>
</tr>
<tr>
<td>Heart rate counting range</td>
<td>30-240 BPM</td>
</tr>
<tr>
<td>Heart rate resolution</td>
<td>±1 BPM</td>
</tr>
<tr>
<td>Heart rate averaging</td>
<td>1 second average</td>
</tr>
<tr>
<td>Countable input signal range</td>
<td>0.5 mV to 5 mV peak-to-peak</td>
</tr>
<tr>
<td>Common mode rejection</td>
<td>Balanced: &gt;80 dB at mains frequency, with patient cable Unbalanced 5K RA or LA: &gt;50 dB at mains frequency</td>
</tr>
<tr>
<td>Leakage current</td>
<td>60 µA at 254 VAC, with cable electrically isolated</td>
</tr>
</tbody>
</table>

### Alarms

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### Nellcor Oximetry

#### Sensor brand

- Nellcor® Puritan Bennett

#### Sensor type

- Oximax® DS-100A, MAX-A

#### Saturation range

- 1-100%

#### Pulse rate range

- 30-250 BPM

#### Saturation accuracy

- ±2 digits from 70-100% (adults)
- ±2 digits from 70-100% (low perfusion)
- Unspecified 0-69%

#### Pulse rate accuracy

- ±3 digits from 20 to 250 BPM

#### Alarms

- Visual: Flashing percent SpO₂ numeric or message
- Audible: Alternating 1.5 second chimes

#### Limits

- User-selectable high and low SpO₂; high and low pulse rate

### Masimo SET Oximetry

#### Sensor brand

- Masimo SET®

#### Sensor type

- LNOP* DC-I, Adt

#### Saturation range

- 1-100%

#### Saturation accuracy

- ±2 digits from 70-100% (no motion)
- ±3 digits from 70-100% (motion)
- ±2 digits from 70-100% (low perfusion)
- Unspecified from 0% SpO₂ to 69% SpO₂

#### Pulse rate range

- 25-240 BPM

#### Pulse rate accuracy

- ±3 digits; ±5 digits in the presence of motion

#### Alarms

- Visual: Flashing percent SpO₂ numerics or message
- Audible: Alternating 1.5 second chimes

#### Limits

- User-selectable high and low SpO₂; high and low pulse rate

### Caution

- Excessive overshoot time of pacemaker pulse may cause false QRS detection
Certifications

ANSI/AAMI EC 13-1992 – Complies with all areas except those listed below:
- 3.1.2.1e: Heart rate meter accuracy and response to irregular rhythm (not tested)
- 3.2.6.1: Range of QRS wave amplitude and duration
- 3.2.7: Range and Accuracy of Heart Rate Meter, (4.2.7f – Input of 300 BPM)
- 3.2.8.1: Lower alarm limit (the lowest alarm limit on the 250 Series is 35 BPM)
- 3.2.9.8c: Impulse response
- 4.2.9.7: Output Display, a) Channel Width

ANSI/AAMI SP10-1992
- The blood pressure module complies with the American National Standard for Electronic or Automated Sphygmomanometers (AAMI/ANSI SP10-1992)

UL-2601-1
- Designed to meet UL-2601-1 Medical electrical equipment classified by Underwriter’s Laboratories, Inc. with respect to fire, shock and mechanical hazards in accordance with UL-2601-1

EN1060-1

Limited Warranty
Standard limited warranty is one year.

1 Operating environmental specifications for paper are for a period of less than one month. Storage environmental specifications are for extended periods of time.