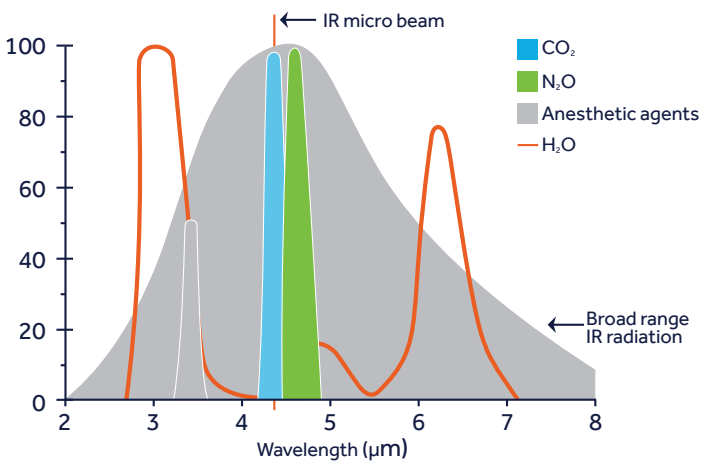


# SMART TECHNOLOGY. CLEAR RESULTS.

Discover the Microstream™ capnography technology advantage in capnography monitoring



Molecular Correlation Spectroscopy™ technology

## Engineered for accuracy

An inherent property of CO<sub>2</sub> is its absorption of infrared radiation (IR) at a distinct wavelength. Microstream™ technology offers a highly specific measurement technology using Molecular Correlation Spectroscopy™ (MCS) technology.

MCS™ technology uses a CO<sub>2</sub>-specific IR wavelength engineered to be highly accurate and unaffected by the presence of other gases (i.e., O<sub>2</sub>, N<sub>2</sub>O, He, or inhaled anesthetics). To help provide clear, crisp waveforms and parameter measurements.

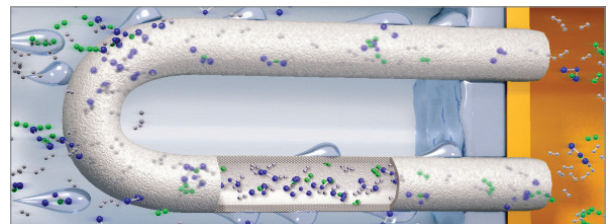
## Designed for efficiency

Microstream™ technology is engineered for:

- Intubated and nonintubated patients
- Virtually all patient populations, from neonate to adult
- Virtually all clinical environments, including the general care floor, in-hospital and prehospital emergency, and during procedural sedation

## Microstream™ capnography technology offers:

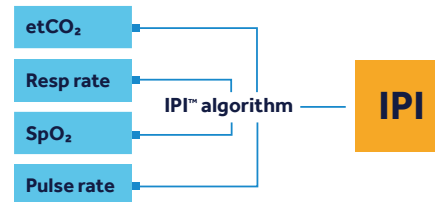
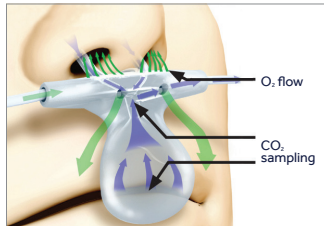
- Plug-and-play technology — turn on monitor, attach sample line, and begin monitoring
- No individual patient calibration or zero required
- Automatic adjustment for changes in ambient temperature; not impacted by temperature fluctuations
- Low flow 50-mL/minute sample rate, effective for virtually all patient types and necessary for neonatal sampling
- 0.2-micron sterilizing-grade filter designed to reduce risk of biohazard contamination of the monitor





## Sampling line technology

- Uni-junction™ technology is designed for effective sampling from both nares and the mouth, even at low tidal volumes.
- Delivers oxygen to both nares and orally by producing an “oxygen cloud” in front of the nose and mouth through small holes at the base of the nasal prongs and oral scoop.
- Wide array of options:
  - Neonate, pediatric, and adult sizes
  - Intubated and nonintubated
  - Short-term and long-term
  - High humidity environment
  - Nasal and oral/nasal
  - With or without oxygen delivery

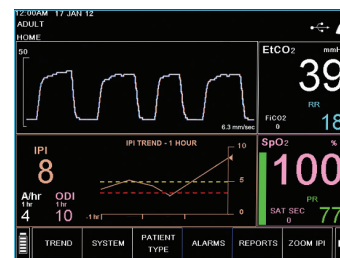


- Integrated Pulmonary Index™ (IPI) algorithm**  
Proprietary IPI™ technology combines four real-time measures — etCO<sub>2</sub>, SpO<sub>2</sub>, respiratory rate, and pulse rate — to provide an inclusive assessment of respiratory status in a single number.
- Apnea-Sat Alert™ algorithm**  
Provides key insights through summary reports of recurring apnea events per hour as well as oxygen desaturations.

## Smart Capnography™ family of algorithms

The Smart Capnography™ family of algorithms are engineered to reduce alarms and simplify the use of capnography monitoring. The suite of algorithms include:

- Smart Breath Detection™ (SBD) algorithm**  
Proprietary filter and pattern recognition algorithm screens out low-amplitude “non-breath” etCO<sub>2</sub> excursions like snoring, talking, or crying, to offer a more reliable respiratory rate.
- Smart Alarm for Respiratory Analysis™ (SARA) algorithm**  
Functioning in combination with the SBD™ algorithm, SARA™ manages breath-to-breath variability. It is engineered to reduce the number of nuisance respiratory alarms while providing a comprehensive picture of respiratory status.
- Nellcor™ SatSeconds alarm management**  
Calculates duration and severity of events, offering you insights to distinguish between minor or brief desaturations and serious hypoxemia.



Apnea-Sat Alert™ algorithm home screen

## Capnography clinical education

Capnography training is useful for all clinicians responsible for monitoring patients across the continuum of care, including:

- Prehospital EMS
- Emergency department
- PACU
- General care floor
- ICU, NICU, and PICU
- During procedural sedation and resuscitation

And for any patient receiving opioids for pain management.

Contact your Medtronic sales representative to schedule on-site training at your facility. Online training is available through the Professional and Clinical Education (PACE) website. Please visit [medtronic.com/covidien](http://medtronic.com/covidien) and select the education tab for more information.

Important: Please refer to the package insert for complete instructions, contraindications, warnings, and precautions.

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