

# CONTEC™



## CMS8000 Patient Monitor

The monitor has abundant functions that can be used for clinical monitoring with adult, pediatric and neonate. Users may select different parameter configuration according to different requirements. The monitor, power supplied by 100–240V ~, 50/60Hz, adopts 12.1" color TFT LCD displaying real-time date and waveform. It can synchronously display eight-channel waveform and full monitoring parameters equipped with an optional 48mm thermal recorder. The monitor can be connected to the central monitoring system via wire or wireless network to form a network monitoring system.

This device can monitor such parameters as ECG, RESP, NIBP, SpO<sub>2</sub>, and dual-channel TEMP, etc. It integrates parameter measurement module, display and recorder in one device to form a compact and portable equipment. Its replaceable internal battery brings lot of convenient for patient moving.

# CMS8000

## Functions

Standard parameters: ECG, RESP, SpO<sub>2</sub>, PR, NIBP, dual-channel TEMP

- ◆ ECG
  - Heart rate(HR)
  - ECG waveform
  - Arrhythmia and ST-segment analysis
- ◆ RESP
  - Respiration rate(RR)
  - Respiration waveform
- ◆ SpO<sub>2</sub>
  - Oxygen saturation(SpO<sub>2</sub>)
  - Plethysmogram(PLETH) waveform
  - Pulse rate(PR)
  - Bar graph
- ◆ NIBP
  - Systolic pressure(SYS), Diastolic pressure(DIA), Mean pressure(MEAN)
  - T1, T2, TD
- ◆ TEMP
- ◆ IBP(optional)
  - CH1: SYS, DIA, MAP
  - CH2: SYS, DIA, MAP
  - IBP waveform
- ◆ CO<sub>2</sub>(optional)
  - EtCO<sub>2</sub>
  - InsCO<sub>2</sub>: Inspired Minimum CO<sub>2</sub>
  - AwRR: Air Way Respiration

It has abundant functions, such as audible and visual alarm, trend data storage and output, NIBP measurement, alarm event marking and drug concentration calculation, etc.

## Accessories

- ◆ Adult fingertip SpO<sub>2</sub> probe (5-pin)
- ◆ Adult NIBP cuff
- ◆ NIBP extension tube
- ◆ ECG lead cable
- ◆ ECG electrode
- ◆ Temperature probe
- ◆ Power cord
- ◆ User Manual

## Physical characteristic

- ◆ Dimension: 314 mm(L) × 145 mm(W) × 264 mm(H)
- ◆ Weight: <3.9 kg(excluding battery and accessories)

## Performance

- ◆ ECG
  - Lead mode:
    - 3-lead: I, II, III
    - 5-lead: I, II, III, aVR, aVL, aVF, V
  - Waveform:
    - 3-lead, 1-channel
    - 5-lead, 2-channel
  - Gain:
    - 2.5 mm/mV, 5.0 mm/mV, 10 mm/mV,
    - 20 mm/mV, 40 mm/mV
  - Scan speed:
    - 12.5 mm/s, 25 mm/s, 50 mm/s
  - HR:
    - Measurement and alarm range: 15 ~ 350 bpm
    - Resolution: 1 bpm
    - Accuracy: ±1 % or ±1 bpm, whichever is greater
    - Alarm accuracy: ±2 bpm
  - ST-segment monitoring:
    - Measurement and alarm range: -2.0 mV ~ +2.0 mV
    - Accuracy: -0.8 mV ~ +0.8 mV: ±0.04 mV or ±10%, whichever is greater
    - Other range: unspecified
  - Arrhythmia analysis:
    - ASYSTOLE, VFIB/VTAC, COUPLET, BIGEMINY, TRIGEMINY, R ON T, VT>2, PVC, TACHY, BRADY, MISSED BEATS, PNP, PNC
  - Pacemaker:
    - yes
- ◆ RESP
  - Method:
    - R-F(RA-LL) Impedance
  - Respiration rate:
    - Measurement and alarm range: 0 ~ 150 rpm
    - Resolution: 1 rpm
    - Measurement accuracy: ±2 rpm
  - Apnea alarm:
    - 10 ~ 40 s
  - Scan speed:
    - 6.25 mm/s, 12.5 mm/s, 25 mm/s
- ◆ NIBP
  - Method:
    - Oscillometry
  - Mode:
    - Manual/AUTO/STAT
  - Measurement interval in AUTO mode:
    - 1/2/3/4/5/10/15/30/60/90/120/240/480/960 minutes
  - Measurement period in STAT mode: 5 minutes
  - Measurement and alarm range: 10 ~ 270 mmHg
  - Resolution:
    - 1 mmHg
  - Cuff pressure accuracy:
    - ±3 mmHg
  - Measurement accuracy:
    - Maximal mean deviation: ±5 mmHg
    - Maximal standard deviation: 8 mmHg

## Features

- ◆ 12.1" TFT color LCD, multi-language interface(English, French, German, Italian, Dutch, Russian, Portuguese, Turkish, Spanish(EU), Polish, Roumania, Kazakh, Czech, Trad Chinese, Spanish(MX), Bulgarian, Chinese, Ukraine).
- ◆ Fanless design, quiet, energy-saving and clean, which reduces the possibility of cross-infection.
- ◆ All-round monitor for adult, pediatric and neonate.
- ◆ With standard interface, oxygen graph, trend graph, big character interface and view bed, convenient to observe.
- ◆ Finish all operations by keys and knobs.
- ◆ Maximum 8-channel waveform synchronous display.
- ◆ Display 7-lead ECG waveform on one screen, cascade ECG waveform display.
- ◆ Adopt digital SpO<sub>2</sub> technology, anti-motion and anti-ambient light interference, and measurement can be performed under the circumstance of weak filling.
- ◆ Heart rate variability (HRV) analysis function.
- ◆ NIBP measurement mode: Manual/AUTO/STAT, storage for 4800-group NIBP data.
- ◆ Review for 71 alarm events of all parameters and 60 arrhythmia alarm events.
- ◆ Drug concentration calculation and titration table functions.
- ◆ One-touch printing of trend graph.
- ◆ Connect to Central Monitoring System by 3G, Wi-Fi or wired mode.
- ◆ AC/DC, built-in rechargeable lithium battery achieve uninterrupted monitoring.
- ◆ Anti-high frequency surgical unit, defibrillation-proof (special leads are necessary).

- ◆ NIBP
  - Over-pressure protection:
    - Adult mode: 297 mmHg ± 3 mmHg
    - Pediatric mode: 240 mmHg ± 3 mmHg
    - Neonatal mode: 147 mmHg ± 3 mmHg
  - ◆ SpO<sub>2</sub>
    - Measurement and alarm range: 0 ~ 100 %
    - Resolution: 1 %
    - Accuracy: 70 ~ 100 %: ±2 %;
    - 0 ~ 69 %: unspecified
  - ◆ PR
    - Measurement and alarm range: 25 ~ 250 bpm
    - Measurement accuracy: ±2 bpm or ±2 %, whichever is greater
  - ◆ TEMP
    - Channel:
      - dual-channel
    - Measurement and alarm range: 0 ~ 50°C
    - Resolution:
      - 0.1 °C
    - Accuracy:
      - ±0.1 °C
    - ◆ EtCO<sub>2</sub>
      - Method:
        - Sidestream or Mainstream
      - Measuring Range:
        - 0 ~ 150 mmHg
      - Resolution:
        - 0 ~ 69 mmHg: 0.1 mmHg
        - 70 ~ 150 mmHg: 0.25 mmHg
      - Accuracy:
        - 0 ~ 40 mmHg: ±2 mmHg
        - 41 ~ 70 mmHg: ±5 %
        - 71 ~ 100 mmHg: ±8 %
        - 101 ~ 150 mmHg: ±10 %
    - AwRR Range:
      - 2 ~ 150 rpm
    - AwRR Accuracy:
      - ±1 rpm
    - Apnea Alarm:
      - Yes
  - ◆ IBP
    - Channel:
      - dual-channel
    - Label:
      - ART, PA, CVP, RAP, LAP, ICP, P1, P2
    - Measuring and Alarm Range:
      - 10 ~ 300 mmHg
    - Resolution:
      - 1 mmHg
    - Accuracy:
      - ±2% or 1mmHg, whichever is greater
    - ◆ Power supply:
      - 100-240V ~, 50/60 Hz
    - ◆ Safety classification: Class I, type CF defibrillation-proof applied part