**SPECIFICATIONS:**

**Performance**

* Display: 15-inch color touch-screen
* Trace: 8 waveforms
* Indicator:
  + Alarm indicator
  + Power indicator
  + QRS beep and alarm sound
* Trend time: 1 - 72 hour
* Recorder:
  + Built-in, thermal array, 3 channels
  + Record width: 48mm
  + Recorder paper: 50mm
  + Record speed: 25mm/s, 50mm/s

**ECG**

* Input: 5-lead ECG cable and standard AAMI line for connection
* Lead Choice: I, II, III, aVR, aVF, aVL, V, V1-V6, TEST
* Gain Choice : x0.5, x1, x2, x4
* Frequency Characteristic: 0.05 ~ 35 HZ (+3dB)
* ECG Waveforms: 7 channels
* Penetration Voltage: 4000VAC 50/60Hz
* Sweep Speed: 12.5, 25, 50 and 100 mm/sec (left to right or right to left)
* HR Display Range: 30 ~ 300bpm
* Accuracy: ±1bpm or ±1%, whichever is greater
* Alarm Limit Range Setting:
  + upper limit 100 ~ 200bpm,
  + lower limit 30 ~ 100bpm

**RESP**

* Measure Method: RA-LL impedance
* Range: 0 ~ 120 rpm
* Accuracy: ±3 rpm
* Alarm Limit Setting:
  + upper limit 6 ~ 120 rpm,
  + lower limit 3 ~ 120 rpm
* Sweep Speed: 12.5, 25, 50 and 100 mm/sec (left to right or right to left)

**NIBP**

* Measuring Technology: automatic oscillating measurement
* Cuff Inflating: <30s (0 ~ 300 mmHg, standard adult cuff)
* Measuring Period: AVE<40s
* Mode: Manual, Auto
* Measuring Interval in AUTO Mode: 2 min ~ 4 hrs.
* Pulse Rate Range: 30 ~ 250 (bpm)
* Measuring Range:
* Adult/Pediatric Mode: SYS: 40 ~ 250 (mmHg)
* DIA :15 ~ 200 (mmHg)
* Neonatal Mode: SYS: 40 ~ 135 (mmHg)
* DIA : 15 ~ 100 (mmHg)
* Accuracy:
  + Maximum Mean error: ±5mmHg
  + Maximum Standard deviation: 8mmHg

**TEMP**

* Range: 25 ~ 50 (°C)
* Accuracy:
  + ± 0.2°C (25.0 ~ 34.9°C)
  + ± 0.1°C (35.0 ~ 39.9°C)
  + ± 0.2°C (40.0 ~ 44.9°C)
  + ± 0.3°C (45.0 ~ 50.0°C)
* Display Resolution: 0.1°C
* Alarm Limit Setting:
  + upper limit 0 ~ 50°C,
  + lower limit 0 ~ 50°C
* Channel: 2 channels

**SpO2**

* ASpO2: Anti-motion SpO2
* SpO2% Range: 0-100%
* SpO2 Accuracy:
  + ±2% (70 ~ 100%, non-motion)
  + ±3% (70 ~ 100%, motion)
* Pulse Rate Range: 30-250 bpm
* Pulse Rate Accuracy:
  + ±2 bpm (non-motion
  + ±3 bpm (motion)
* Alarm Limit Setting:
  + upper limit 70 ~ 100%,
  + lower limit 70 ~ 100%
* SpO2 Probe:
  + Red light LED wavelength
  + 660nm±5nm
  + Infrared light LED wavelength
  + 940nm±10nm

**IBP**

* Measurement Range: -50 ~ 300mmHg
* Channel: 2 channels
* Pressure Transducer: sensitivity, 5µV/V/mmHg
* Impedance Range: 300 ~ 3000Ω
* Transducer Sites: ART, PA,CVP, RAP, LAP, ICP
* Unit: mmHg/kPa selectable
* Resolution: 1mmHg
* Accuracy: ±1mmHg or ±2%,whichever is greater
* Alarm Range: -10 ~ 300mmHg

**EtCO2 (Optional)**

* CO2 Measurement Range: 0 ~ 99mmHg
* Accuracy:
  + ±2mmHg (0 ~ 38mmHg)
  + 39-99mmHg ±5% of reading +0.08% for every 1mmHg (above 38mmHg)
* Sampling Rate: 50 ml/min
* Initialization Time: 30 seconds (typical), reaches ±5% steady-state accuracy within 3 minutes.
* Respiration Rate: 0 ~ 150 breaths/min
* Mode: adult, neonate

**Cardiac Output (Optional)**

* Measurement Method: Thermo dilution Method
* CO2 Measurement Range:
  + C.O.: 0.1 to 20 L/min
  + TB: 23 to 43
  + TI: 0 to 27
* Resolution:
  + C.O.: ±5% or ±0.1 L/min, whichever is greater, as measured using electronically generated flow curves.
  + TB, TI: 0.1
* Accuracy:
  + ±5 or ±0.1 L/min, whichever is greater, as measured using electronically generated flow curves.
  + TB, TI ±0.1 (without sensor)
* Alarm Range: TB 23 to 43
* Repeatability: C.O. ±2% or 0.1 L/min, whichever is greater, as measured using electronically generated flow curves.

**Anesthetic Agents (Optional)**

* Method: Infrared absorption
* Gas Sorts: Halothane, Isoflurane, Enflurane, Sevoflurane, Desflurane, CO2, N2O, O2 (optional Automatic Agent ID)
* Measurement Range:
  + Halothane, Isoflurane: 0 – 8.5%
  + Enflurane, Sevoflurane: 0 – 10%
  + Desflurane: 0 – 20%
  + CO2: 0 – 10%
  + N2O: 0 – 100%
  + O2: 0 – 100%
* Bias:
  + Halothane, Isoflurane, Enflurane, Sevoflurane, Desflurane: ±(0.15 Vol% + 15% rel.)
  + CO2: ± (0.5 Vol% + 12% rel.)
  + N2O: ± (2 Vol% + 8% rel.)
  + O2: ±3 Vol%

**Networking**

* Industry standard 802.11b/g wireless network

**Power**

* Source: External AC power or internal battery
* AC Power: 100 – 240VAC, 50/60Hz, 150VA
* Battery: Built-in and rechargeable lithium ion
* Operating Time: 3+ hours

**Environmental Specifications**

* Temperature:
  + Operating: 5° – 40° C
  + Storage: -20° – 65° C
* Humidity range:
  + Operating: ≤80 %
  + Storage: ≤80 %

**Other Standard Features**

* OxyCRG, drug dose calculation, cascading ECG, On screen NIPB trends (up to 250 readings), user set defaults, Arrhythmia detection, ST segment