

# C80 Intensive Care Unit Monitor

## Technical Specification

<b>Safety</b> ISO 13485: 2003 approved, CE marking according to MDD93/42/EEC Degree of protection against harmful ingress of water : IP×1	<b>Time constant :</b> Monitoring mode ≥0.3s Diagnostics Mode≥3.2s <b>Anti-jamming :</b> line frequency, electrosurgical interference and defibrillation <b>Arrhythmia Analysis and pacemaker detection</b> <b>ECG cable:</b> standard configuration ECG cable for Adult Standard two ECG cables to support 12 leads ECG analysis <b>Alarm setting:</b> Adjustable from lower to upper and automatic memory <b>Waveform:</b> standard 12-ECG waveforms	<b>Dual TEMP</b> <b>Measurement range:</b> 0-50℃ <b>Channel:</b> T1, T2, TD (Temperature Difference) <b>Resolution:</b> 0.1℃ <b>Accuracy:</b> 0.1℃(exclusive of error of sensor) <b>Measurement unit:</b> C / F selectable <b>TEMP sensor:</b> standard configuration- skin TEMP sensor, <b>Alarm setting:</b> Adjustable from lower to upper and automatic memory
<b>Operation Environment</b> Power: AC100-250V, 50/60Hz. Temperature: 0-40℃ Humidity: 15-85% Patient Range: Adult, Pediatric, Neonate	<b>Nellcor SpO<sub>2</sub>-Standard</b> <b>Display:</b> SpO <sub>2</sub> digital, Pulse columnar graphics, volume waveform, Pulse rate Measurement range: 0~100% Resolution: 1% Accuracy: ±2% (90-100%, MAX-A, MAX-AL, MAX-N, MAX-P, MAX-I and MAX-FAST sensors); ±3% (70-100%, D-YS, DS-100A, OXI-A/N and OXI-P/I sensors); 0-69% unspecified Alarm range: 0~100% <b>Pulse rate:</b> Range: 20~300bpm Resolution: 1bpm Accuracy: ±3bpm Alarm range:20~300bpm Exclusive SatSeconds™ alarm management system, much lower false alarms, much less word for users	<b>RESP</b> Method:R-F(RA-LL) impedance method RR measurement range: Adult: 7-120bpm Neonate: 7-150bpm Resolution: 1 rpm Accuracy: 1rpm Alarm setting: Adjustable from lower to upper and automatic memory ARR analysis, RESP Apnea Alarm: 10s-40s
<b>Performance Specifications</b> <b>Display:</b> 12.1 inch color TFT touch screen (diagonal) Rolling and refreshing waveform display Resolution: 800×600 <b>Multi displays selectable, including:</b> Standard display Freeze display Large -font Display Trend coexist display Alarm limit display OxyCRG dynamic view display Bed-to-bed view display Multi-lead and ECG simultaneous display <b>Trace:</b> 12 waveforms Sweep Speed: 12.5mm/s, 25mm/s, 50mm/s <b>Indicator:</b> Power indicator light Battery indicator light <b>Inter face:</b> Parameter cable inter face AC Power input socket Network inter face External VGA interface Alternate Display <b>Battery:</b> Lithium-ion battery /Rechargeable Plug & play battery, capacity:4000mA Maximum 12 hours for charging; 4 hours for continuous working <b>Trend time:</b> 1~120 hours <b>Alarm:</b> User-adjustable High and Low limits audible and visual alarm <b>Networking:</b> Connected to central monitoring system <b>Recorder:</b> Built-in, thermal array Waveform: 2 channels Record mode: manual, on alarm, time -defined, etc Paper width: 50mm Print speed: 12.5 mm/s, 25mm/s, 50mm/s	<b>EtCO<sub>2</sub>:</b> Sidestream CO <sub>2</sub> CO <sub>2</sub> Measurement Range: 0 -150 mm Hg, 0 to 79%, 0 to 20kPa (at 760mmHg) Accuracy: ± 2 mm Hg (0 40 mm Hg) ± 5% of reading (41 70 mm Hg) ± 8% of reading (71 100 mm Hg) ± 10% of reading (101 150 mm Hg) Sampling Rate: 50ml/min. ±10ml/min Sampling rate accuracy: 15% Start-up time: <1 min, once the module starts up, it reaches ISO accuracy Mode: 10 minutes after start-up, the module reaches full accuracy mode Respiration rate: 0-120bpm Respiration rate accuracy: ±2rpm (0-70rpm) ±5rpm (>70rpm) Response time: <240msec (10% to 90%) Delay time: <2s (Sampling line length: 7 inches; internal diameter: 0.055 inches; sampling gas flow rate: 150ml/min)	<b>Mainstream CO<sub>2</sub></b> Method: Infrared Absorption Measuring mode: Mainstream Measurement range: 0 -150 mm Hg, 0 to 79%, 0 to 20kPa (at 760mmHg) Resolution: 0.1 mmHg 0 to 69 mmHg 0.25mmHg 70 to 150mmHg Accuracy: ± 2 mm Hg (0 40 mm Hg) ± 5% of reading (41 - 70 mm Hg) ± 8% of reading (71 - 100 mm Hg) ± 10% of reading (101 - 150 mm Hg)
<b>ECG</b> <b>-CardioTec™ 12-leads ECG Analysis</b> <b>Heart Rate Range</b> Adult: 15-300bpm Pediatric/Neonate:15-350bpm <b>Accuracy:</b> ±1% or ± 2 bpm (whichever is greater) <b>Resolution:</b> 1 bpm <b>ECG enlarge width:</b> MON: 0.5-40Hz DIA: 0.05-130Hz OPE: 1-20Hz ECG waveform: 2 channels <b>ST SEGMENT detection:</b> -2.0mV - +2.0Mv (Automatic) <b>Arrhythmia analysis:</b> yes <b>Electrode desquamated indicator:</b> Voice & light indication <b>Gain selection :</b> ×1/4、×1/2、×1、×2、Auto <b>sweep speed:</b> 12.5mm/s, 25mm/s, 50mm/s <b>HR alarming time:</b> ≤ 12s <b>PR from ECG:</b> Adult: 15-300bpm Pediatric/Neonate: 15-350bpm <b>ECG noise level:</b> = 30 uV (P-P value) <b>ECG input loop current:</b> 0.1 Ua <b>input impedance:</b> > 5 MΩ <b>CMRR:</b> ≥105 Db	<b>AcuTec™ NIBP</b> <b>Measurement method:</b> Automatic vibration <b>Measurement types:</b> Systolic, Diastolic, Mean <b>Work mode:</b> Manual / Automatic/Continuous <b>Auto measurement time:</b> Adjustable 1min-480min <b>Measurement unit:</b> mmHg / Kpa selectable <b>Measurement range:</b> 10-270mmHg Adult/Pediatric Mode:Systolic pressure60~240mmHg Diastolic pressure 30-190mmHg Mean pressure 40-210mmHg Neonatal Mode: Systolic pressure25-135mmHg Diastolic pressure 12-110mmHg Mean pressure 18-120mmHg <b>Alarm type</b> Systolic pressure, Diastolic pressure, Mean pressure <b>Accuracy:</b> 5mmHg <b>NIBP pressure range:</b> 0-300 mmHg <b>PR from NIBP:</b> Measurement 40-240bpm <b>Over-pressure protection:</b> Hardware and software both over pressure protection 300 mmHg is the max pressure. Higher than the above pressure, the safety valve deflate automatically. <b>NIBP cuff:</b> Standard - Adult NIBP cuff ; Optional - Pediatric NIBP cuff , Neonatal NIBP cuff <b>Alarm setting:</b> Adjustable from lower to upper and automatic memory	
	<b>IBP</b> Measurement Mode: Pressure Transducer Measurement Types: Systolic, Diastolic, Mean Channel: 2 channel Pressure names: AVP, CVP, PAR, LAP, RAP, ICP Measurement Range: -30mmHg~300mmHg IBP Accuracy: 0~100mmHg ±4mmHg 100mmHg~300mmHg ±2% Pulse Accuracy: ±1% or ±1bpm, whichever is greater Calibration Mode: Zero Calibration	

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# C80

## Intensive Care Unit Monitor



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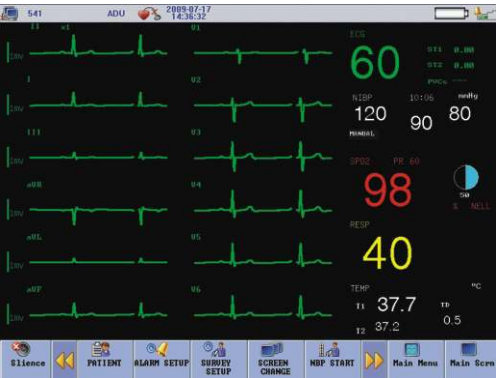
# C80 ICU Monitor

Critical time  
Seize every second for saving life

C80 uses CardioTec™ ECG technology, world leading OxiMax® technology, high precision AcuTec™ hypertension monitoring technology as standard configuration. C80 incorporates world's best medical technology for SpO<sub>2</sub> , ICG , EtCO<sub>2</sub> , Anesthesia Gas Monitoring from the world's best OEM technology providers like NELLCOR, RESPIRONICS, ARTEMA & BIOZ. Precisely, C80 provides medical professionals with powerful monitoring options and functionality to match the demands of a wide range of care , in any hospital environment.

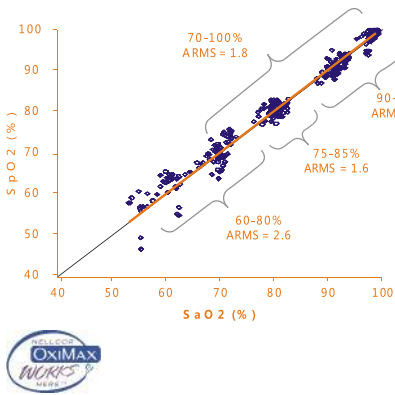
## ECG

- CardioTec™ technology 12-lead ECG waveform synchronously display High precision ECG measurement technology, provides professional diagnosis assistance.
- CMRR≥105dB, outstanding ECG anti-interference capability.
- Support arrhythmia analysis & alarm review.



## SpO<sub>2</sub>

- World advanced SpO<sub>2</sub> technology, OxiMax®.
- Unique Sensor in the Market with Digital Memory Chip: Every sensor is calibrated to its own specific needs; Desaturation Event Reports in the Sensor.
- Unique LoSat™ provides Highest Accuracy Range Expanded LoSat™ Accuracy from 60% to 100%.
- Exclusive SatSeconds™ Alarm Management System Much Lower False Alarms; Much Less Work for Users.



■ IPX1 Level Waterproof



■ Auto dust shield to prevent from foreign matter.



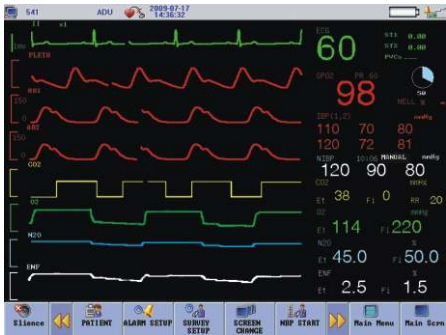
■ Handwriting pen,SD card and USB interface.



■ Wall mount, rolling stand/trolley.



■ 4000mAh Li-ion battery, above 4 hours working time.



## Anesthetic Gas

- Collaboration with Sweden Phase-in, adopt the advanced anesthetic gas module for monitoring 8 types of gas (O<sub>2</sub> , CO<sub>2</sub>, N<sub>2</sub>O,ENF, ISO, DES, SEV, HAL). Automatic recognition of the anesthetic gas, short time for warm-up,long service life and support the MAC value (minimum alveolar concentration).

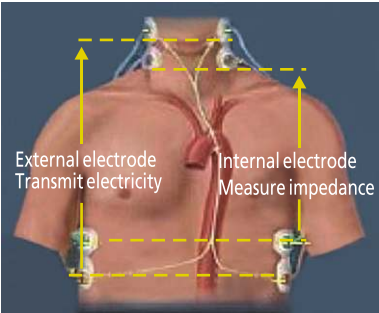
## EtCO<sub>2</sub>

- Collaborate with US RESPIRONICS, Plug and Play EtCO2 monitoring.
- Choose CAPNOSTAT 5 mainstream sensor for optimal performance in monitoring intubated patient.
- Small, durable and lightweight mainstream sensor provides accurate and reliable monitoring for all intubated patients from neonates to adults.
- No calibration required.
- Select LoFlo sidestream sensor for monitoring non-intubated patient
- Flexible, compact CO2 sensor provides consistent and reliable monitoring of adult, pediatric and neonatal patients
- Sample rate ≤ 50ml/min(micro-stream)



## Non-invasive Hemodynamic

- Collaboration with US BIOZ, impedance cardiography for non-invasive continuous hemodynamic monitoring.
- Micro-signal transmit through disposable electrode.
- Measurement and display of ICG.
- Blood volume and Blood Flow Velocity varies with heartbeat, DISQ® technology processes impedance signal variation.
- Variation of impedance applies to non-invasive Z MARC™ algorithm for acquiring SV, CO, SVR, Contractility and TFC etc.



## Intelligent Alarm

- I-Klok™ intelligent alarm management, auto-identification alarm level. Self-adjust proper alarm time to reduce false alarms.

