



C80 Multi-Parameters Patient Monitor

General Specification

Configuration

Standard: 3/5/12-lead ECG,RESP,Temp,SPO2,NIBP,PR,
Optional: Dual-IBP, EtCO₂, AG, C.O., M.SPO₂, N.SPO₂, ICG
BIS

Power Supply

AC input voltage: 100-240V~, 50/60Hz
Built-in battery (Standard) : 2200mAh, at least 2 consecutive hours.
Built-in battery (Optional) : 4400mAh, at least 4 consecutive hours

Display

Dimension: About 344mm×291 mm×165mm
Weight: About 3.9kg(with battery)
Display: 12.1 Inch touch screen
Waveforms: maximum 8 waveforms display
Resolution: 800×600

Environmental Specifications

Environment temperature: 5 C ~ 40 C
Relative humidity: ≤ 93%
Atmospheric pressure: 700hPa ~ 1060hPa

Indicator

Alarm indicator lights, Power indicator light, Battery indicator light,
QRS beep and alarm sound, Operating key sound

External interface

Parameter cable interface, AC power input socket, USB port
RJ45 port, Multifunction port, VGA port, Equipotential

Technique Specification

Data Review and Storage

NIBP storage: 2000 groups

NIBP storage: 2000 groups
Alarm storage: 200
Trend table/graph: 160hrs
Full disclosure waveform: 48h
Power-off Protection

ECG Specifications

Lead type: 3-lead, 5-lead or 12-lead selectable
Lead selection:
3-lead (I, II, III), 1- channel
5-lead (I, II, III, avR, avL, avF, V), 2 -channel
12-lead (R, L, F, N, C1, C2, C3, C4, C5, C6 or RA, LA, LL, RL, V1, V2,
V3, V4, V5, V6); 2-channel

HR measurement range:

Adult: 15~300bpm
Neonate/child: 15~350bpm
Accuracy: ±1% or ±1bpm, whichever is greater.
ST measurement range: 2.0mV~+2.0mV (-20.0 mm~+20.0 mm)
Arrhythmia: 26 calls
Waveform speed: 6.25mm/s, 12.5mm/s, 25 mm/s, 50 mm/s
Gain selection: 1.25, 2.5, 5.0, 10, 20, 40mm/mV, Auto.
Pacemaker detection: Yes
Protection: Against electrosurgical interference and defibrillation.
Bandwidth:

Surgery mode: 1 Hz ~ 20 Hz (-3.0dB ~ +0.4dB);
Monitoring Mode: 0.5 Hz ~ 40 Hz (-3.0dB ~ +0.4dB);
Diagnosis mode: 0.05Hz ~ 150 Hz (-3.0dB ~ +0.4dB);
ST mode: 0.05Hz ~ 40Hz(-3.0dB ~ +0.4dB)
ECG analog output

Common mode rejection: <1mV (p-v RTI)

Non-invasive Blood Pressure(NIBP)

Method: Auto oscillation method
Parameters: SYS/DIA/MAP/Pulse Rate

Operating mode: Manual/Auto/STAT

Auto measure intervals: 1/2/2.5/3/4/5/10/15/30/60/
90/120/180/240/480/720min

Units: mmHg/kPa

Cuff pressure range: Adult: 80~280;
Child: 80~210;
Neonate: 60~140

Measurement and alarm range:

SYS: (adult) 5.3-36kPa (40-270mmHg)
(Child) 5.3-26.7kPa (40-200mmHg)
(Neonate) 5.3-18kPa (40-135mmHg)

DIA: (adult) 1.3-28.7kPa (10-215mmHg)
(Child) 1.3-20kPa (10-150mmHg)
(Neonate) 1.3-13.3kPa (10-100mmHg)

MEAN: (adult) 2.7-31.3kPa (20-235mmHg)
(Child) 2.7-22kPa (20-165mmHg)

Accuracy: ± 0.1 kPa or ± 1 mmHg, whichever is greater.

PR measurement range: 40 bpm - 240 bmp

Accuracy: ± 2 bpm or $\pm 2\%$, whichever is greater

Over-pressure protection: Yes

Resp Specifications:

Measurement method: Thoracic impedance

Measurement range: Adult: 0 - 120 rpm
Child/neonate: 0rpm-150rpm

Accuracy: 7rpm~150rpm: ± 2 rpm or $\pm 2\%$, whichever is greater.
0rpm~6rpm: not defined.

No breath alarm delay: 10s、15s、20s、25s、30s、35s、40s、
45s、50s、55s、1min、Off

SpO2 Specifications

Measurement range & Accuracy:

Comen SpO2: 0%~100%;

accuracy: $\pm 2\%$ (adult/child, in non-motion state) or
 $\pm 3\%$ (neonate, in non-motion state) within
the measurement range of 70%~100%.

Masimo SpO2: 1%~100%;

accuracy: $\pm 2\%$ (adult/child, in non-motion state),
 $\pm 3\%$ (adult/child, in motion state) or
 $\pm 3\%$ (neonate, in motion or non-motion state)
within the measurement range of 70%~100%.

Nellcor SpO2: 0%~100%;

accuracy: $\pm 2\%$ (adult/child, in non-motion state) or
 $\pm 3\%$ (neonate, in non-motion state) within
the measurement range of 70%~100%.

The measurement accuracy within the measurement range
of 1%~69% is not defined.

Perfusion index (PI):

Range for Masimo SpO2 and Comen SpO2: 0.02%~20%;

accuracy: not defined.

Resolution: 0.01% (within 0.02%~9.99% range)
or 0.1% (within 10.0%~20.0% range).

PR Specifications

Measurement range and accuracy:

Comen SpO2: 20bpm~254bpm; resolution: 1bpm;

Masimo SpO2: 25bpm~240bpm; resolution: 1bpm;

Nellcor SpO2: 20bpm~300bpm; resolution: 1bpm;

Temp Specifications

CO2 specification

Measurement range: 0°C~50°C

Accuracy: ± 0.1 °C

Number of channels: 2

CO2 Specifications

Masimo EtCO2 sensor (mainstream):

CO2 measurement range:
0mmHg~190mmHg, 0~25% (at 760mmHg)

CO2 resolution: 1mmHg, 0.1kPa or 0.1%

CO2 accuracy: 0~15%: $\pm(0.2\% + \text{reading} \times 2\%)$

15~25%: not defined

Masimo EtCO2 sensor (sidestream):

CO2 measurement range:
0mmHg~190mmHg, 0~25% (at 760mmHg)

CO2 resolution: 1mmHg, 0.1kPa or 0.1%

CO2 accuracy: 0~15%: $\pm(0.2\% + \text{reading} \times 2\%)$

15~25%: not defined

Respironics/Nmed/Palconn EtCO2 sensor (mainstream)

CO2 measurement range:
0~150mmHg 0%~19.7% (0~20.0kPa)

CO2 resolution: 0~69mmHg: 0.1mmHg
70~150mmHg: 0.25mmHg

CO2 accuracy: 0~40mmHg: ± 2 mmHg
41~70mmHg: $\pm 5\% \times \text{reading}$
71~100mmHg: $\pm 8\% \times \text{reading}$
101~150mmHg: $\pm 10\% \times \text{reading}$

Respironics/Nmed/Palconn EtCO2 sensor (side stream)

CO2 measurement range:
0~150mmHg 0%~19.7% (0~20.0kPa)

CO2 resolution: 0~69mmHg: 0.1mmHg
70~150mmHg: 0.25mmHg

CO2 accuracy: 0~40mmHg: ± 2 mmHg
41~70mmHg: $\pm 5\% \times \text{reading}$
71~100mmHg: $\pm 8\% \times \text{reading}$
101~150mmHg: $\pm 10\% \times \text{reading}$

IBP Specifications

Channels: 2

Measurement range: -1.3kPa~+40kPa(-50mmHg~+300mmHg)

Resolution: 0.1kPa or 1mmHg

Accuracy: ± 1 mmHg or $\pm 2\%$, whichever is greater.

Recording Specifications

Recording paper width: 50mm

Paper speed: 25/50 mm/s

Number of waveforms: 3

C.O. Specifications

C.O. measurement range: C.O.: 0~20L/min
BT: 25~43°C
IT: 0~25°C

Resolution: C.O.: 0.1L/min
BT, IT: 0.1°C

Accuracy: C.O.: $\pm 5\%$ or ± 0.1 L/min, whichever is greater.
BT, IT: ± 0.1 °C (excluding the sensor)

AG Specifications

AG measurement method:	Infrared radiation absorption 8) characteristics
AG preheating time:	<20s
AG measurement range and accuracy:	
CO2:	0%~15%, $\pm(0.2\text{kPa}+\text{reading}\times 2\%)$; 15%~25% Not defined.
N2O:	0~100 %, $\pm(2\text{kPa}+\text{reading}\times 2\%)$
Hal, Enf, Iso:	0~8 %, $\pm(0.15\%+\text{reading}\times 5\%)$; 8~25 %, Not defined.
Sev:	0~10 %, $\pm(0.15\%+\text{reading}\times 5\%)$; 10~25 %, Not defined.
Des:	0~22%, $\pm(0.15\%+\text{reading}\times 5\%)$; 22~25 %, Not defined.
O2:	0~100 %, $\pm(1\%+\text{reading}\times 2\%)$
RR:	0~254rpm, $\pm 1\text{rpm}$
AG resolution:	CO2: 1mmHg awRR: 1rpm
AG gas name:	CO2, O2, N2O, one of the five anesthetic gases (Enf, Iso, Sev, Hal or Des)

BIS Specifications

BIS measurement range and accuracy:	
BIS:	0-100; accuracy: 1%.
SQL:	0-100%; accuracy: 1%.
EMG:	0~100dB; accuracy: 1%.
ESR:	0~100%; accuracy: 1%

ICG Specifications

ICG measurement method:	Indirect impedance cardiography measurement
Measurement range:	HR: 40~250bpm SV: 5~250mL C.O.: 1.4~15L/min
Measurement accuracy:	SV: not defined. HR: $\pm 2\text{bpm}$. C.O.: no defined. Resolution: SV: 0.1ml HR: 1bpm C.O.: 0.1L/min

COMEN, one of the leading medical device manufacturers in China, and admitted to be the quickest developing company in medical industry.

COMEN design and produce medical devices for OR, NICU, and ICU. The product range covers Anesthesia devices, Monitoring & diagnostic products, Infant incubators, ventilators, medical pendants, operation light, all designed with specific patient data managing system to link-in to multiple medical database. Based in Shenzhen - the hi-tech "headquarter" of China, COMEN has 30 branch offices operating business in China and 8 international branch offices in: USA, Russia, Turkey, Mexico, Thailand, India, Malaysia and Indonesia.

With all over 50,000 install bases in hospitals and medical centers globally, COMEN products are accepted and favored with its friendly design and excellent performance.

Specifications subject to change without notice

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