

# Specification: 8000E



## **SHENZHEN COMEN MEDICAL INSTRUMENT CO.,LTD**

No.2 of FIYATA Timepiece Building, Nanhuan Avenue, Gongming  
sub-district, Guangming New District, Shenzhen, P.R. China

Tel: +86-755-26408879

Fax: +86-755-26431232

Email: [info@szcomen.com](mailto:info@szcomen.com)

Web: [en.comen.com](http://en.comen.com)

# Patient Monitor

## 8000E



### Standard Configuration:

3-lead ECG, RESP, Comen SpO2, NIBP, HR,  
Temp(Single Channel)

### Optional Configuration:

Dual-IBP, EtCO2, Dual-Temp, Nellcor/Masimo SpO2,  
5/12-lead ECG, Thermal Recorder, Suntech NIBP,  
Trolley, Wall mount, Ground wire

### Safety Standards:

IEC 60601-1 IEC 60601-1-8 IEC 60601-2-27 EN 1060-3 IEC  
80601-2-30 IEC60601-2-34 IEC60601-2-49 ISO 80601-2-56 ISO  
80601-2-61

### Physical Characteristics:

Size: 300mm×278 mm×150mm  
Weight: 2.72kg  
Screen Size: 12.1" color TFT screen  
Resolution: 800 × 600  
Waveforms: Up to 9 waveforms

### Operation Environment:

Working  
Temperature 0~40°C  
Humidity: ≤93%  
Power Supply 100-240V~, 50/60Hz±1Hz  
Battery Type: Rechargeable Lithium-ion battery  
Battery Capacity: 2200mAh (Option: 4400mAh)  
Battery Recharging  
Time: Maximum 3 hours for charging;  
Battery backup: 3 hours for continuous working  
Brightness: Manual from 10 to 100

### Indicator:

Alarm indicator  
Power indicator  
Battery indicator  
QRS beep and alarm sound  
Key backlight

### Interface:

Parameter cable interface  
AC power input  
USB port  
RJ45 port  
Multi-functional interface

### Optional:

#### Data storage

Alarm Review: 200 groups  
Wave Review: 6 hours (8 waves)  
NIBP Review: 2000 groups  
Trend Graph: 160 hours  
Trend Table: 160hours  
Power-off storage: Yes  
Alarm: User-adjustable High and Low 3~level Limits;  
Prioritized audible and visual alarm  
Network: Connected to Central Monitoring System by hardwire/wireless

#### Recorder:

Type: Built-in; thermal array  
Channel: 3 channel waveforms  
Speed: 25mm/s,50mm/s  
Record width 50mm  
External printer: Yes

#### Respiration:

Method: RA-LL Impedance Method  
RR measurement range: Adult: 0~120rpm  
Pediatric/Neonate:0~150rpm  
Accuracy: 7~150rpm: ±2rpm or 2%, whichever is greater; 0~6rpm: unspecified  
Resolution: 1 rpm  
RESP Apnea 10s~60s(Adu); 10s~40s (Ped/Neo)  
Alarm: Audible and visual alarm; alarm events reviewable

Sweep Speed:	6.25, 12.5, 25mm/s	Neonate Mode	40~135mmHg
Gain Selection:	X0.25, X0.5, X1, X2, X4	Range of diastolic pressure:	Adult Mode:10~215mmHg
<b>ECG:</b>			Pediatric Mode:10~150mmHg
Lead Type:	CardioTec™5-leads ECG Analysis, 12-Lead and 3-leads selectable		Neonate Mode 10~100mmHg
Lead selection	12-Lead I; II; III; aVR; aVL; aVF; V1~V6. 5-lead: I; II; III; aVR; aVL;aVF; V 3-lead: I; II; III	Range of mean pressure:	Adult Mode:20~235mmHg
Gain Selection	1.25mm/mV, 2.5mm/mV, 5.0mm/mV, 10mm/mV, 20mm/mV, 40mm/mV, Auto. Manual replacement. Plus $\pm 750$ mV DC polarization voltage; sensitivity change range: $\pm 5\%$ .		Pediatric Mode:20~165mmHg
Sweep Speed:	6.25, 12.5, 25, 50mm/s	Over-pressure protection:	Neonate Mode 20~110mmHg
Heart Rate Range:	Adult: 15~300bpm Pediatric/Neonate:15~350bpm	Accuracy:	Both hardware and software over pressure protection
Resolution:	1 bpm	Resolution:	$\pm 3$ mmHg
Accuracy:	$\pm 1\%$ or $\pm 1$ bpm (Whichever is greater)	Alarm:	1mmHg
Protection:	Withstand 4000VAC/50Hz voltage in isolation; Against electrosurgical interference and defibrillation;	PR from NIBP:	Systolic, Diastolic, Mean 40~240bpm
Bandwidth:	MON Mode:0.5 Hz~40 Hz DIA Mode: 0.05Hz~150 Hz OPE Mode:1 Hz~20 Hz ST Mode:0.05Hz~40Hz	Resolution:	1bpm
ST detection:	-2.0mV~ +2.0 mV (Automatic)	Accuracy:	$\pm 3\%$ or $\pm 3$ bpm, whichever is greater
Resolution:	0.01mV	<b>Nellcor SpO<sub>2</sub>:</b>	
Accuracy:	-0.8mV ~ +0.8mV: $\pm 0.02$ mV or $\pm 10\%$ ; Others: Unspecified	Measurement range	0~100%
Arrhythmia analysis:	26 Types	Resolution:	1%
pacemaker detection:	Detectable	Accuracy:	$\pm 2\%$ (70~100%, Adu/Ped, non~motion) $\pm 3\%$ (70~100%, Neo, non~motion) 1~69% unspecified
<b>NIBP:</b>		Alarm range:	0~100%
Method	Automatic Oscillometric	PR Measurement	
Work mode:	Manual / Automatic/Continuous	Range:	20~300bpm
Measurement time:	Adjustable(1~480min)	Resolution:	1bpm
Maximum measurement time:	Adu/Ped: 120s; Neo: 85s	Accuracy:	$\pm 3$ bpm (20~250bpm); Unspecified (251~300bpm)
Measurement types:	Systolic, Diastolic, Mean	Alarm Range:	0~300bpm
Range of systolic pressure:	Adult Mode:40~300mmHg Pediatric Mode:40~200mmHg	<b>Masimo SpO<sub>2</sub>:</b>	
		Measurement & alarm range	1~100%
		Resolution:	1%
		Accuracy:	$\pm 2\%$ (70~100%, Adu/Ped, non-motion) $\pm 3\%$ (70~100%, Neo, non-motion) 1~69% unspecified
		PR Measurement	
		Range:	25~240bpm
		Resolution	1bpm
		Accuracy:	$\pm 3$ bpm(non-motion) $\pm 5$ bpm(motion)
		Alarm Range:	0~300bpm
		PI value:	0.02~20%
		Resolution:	0.01% (0.02%~9.99%)

Accuracy:	0.1% (10.0%~20.0%) unspecified
<b>Comen SpO<sub>2</sub>:</b>	
Measurement & alarm range	0~100%
Resolution:	1%
Accuracy:	±2% (70~100%, Adu/Ped, non-motion) ±3% (70~100%, Neo, non-motion) Unspecified (0~69%)

PR measure	
Range:	20~300bpm
Resolution:	1bpm
Accuracy:	±1bpm
Alarm Range:	0~300bpm
PI value:	0.05~20%
Resolution:	0.01% (0.05%~9.99%) 0.1% (10.0%~20.0%)
Accuracy:	unspecified

### Temperature (Dual Channel)

Measurement & alarm range:	0~50°C
Sensor:	Skin/rectal TEMP sensor
Resolution:	0.1°C
Accuracy:	±0.1°C (exclusive of error of sensor)
Channel:	T1, T2, TD (Temperature Difference)

### Respiroics EtCO<sub>2</sub> (Sidestream)

Measurement & alarm range:	0 ~150 mmHg, 0~20kPa (at 760mmHg)
Accuracy:	±2 mmHg (0~40 mmHg) ±5% of reading (41~70 mmHg) ±8% of reading (71~100 mmHg) ±10% of reading (101~150 mmHg)
awRR range:	2~150rpm
awRR accuracy:	±1rpm
Response time:	< 240msec (10%~90%)
Delay time:	< 2s

### Respiroics EtCO<sub>2</sub>(mainstream)

Measurement & alarm range:	0~150 mm Hg, 0~20kPa (at 760mmHg)
Accuracy:	±2mmHg (0~40 mmHg) ±5% of reading (41~70 mmHg) ±8% of reading (71~100 mmHg) ±10% of reading (101~150 mmHg)
awRR range:	0~150rpm
awRR accuracy:	±1rpm
Response time:	< 240msec (10% to 90%)
Delay time:	< 2s

### Masimo EtCO<sub>2</sub> (Sidestream)

Measurement & alarm range:	0 ~190 mm Hg, 0 – 25% (at 760mmHg)
Accuracy:	Standard environment 22 ± 5 °C ,1013 ± 40hpa): 0~15%: ±(0.2%+reading×2%) 15~25%: not defined All environment:

awRR range	0~150rpm
awRR accuracy	±1rpm
Response time:	< 240msec (10% to 90%)
Delay time:	< 2s

### Masimo EtCO<sub>2</sub> (mainstream)

Measurement & alarm range:	0 ~190 mm Hg, 0~25% (at 760mmHg)
Accuracy:	Standard environment 22 ± 5°C,1013 ± 40hpa): 0~15%: ±(0.2%+reading×2%) 15~25%: not defined All environment: ± (0.3kPa+reading×4%)

awRR range	0~150rpm
awRR accuracy	±1rpm
Response time:	< 240msec (10% to 90%)
Delay time:	< 2s

### IBP

Channel:	2 Channels
Measured Pressure:	ART, PA, CVP, RAP, LAP, ICP, LV, AO, UAP, BAP, FAP, UVP, IAP, P1, P2,
Measurement Unit:	mmHg/ kPa selectable
Measurement Range:	ART: 0~300mmHg PA: -6~120 mmHg CVP: -10~40mmHg RAP: -10~40mmHg LAP: -10~40mmHg ICP: -10~40mmHg LV: 0~300mmHg AO: 0~300mmHg UAP: 0~300mmHg BAP: 0~300mmHg FAP: 0~300mmHg

	UVP: -10~ 40mmHg	PR from IBP:	20bpm~350bpm
	IAP: -10~40mmHg	Resolution:	1bpm
	P1, P2: -50~300mmHg	Accuracy:	±1% or ±1bpm, whichever is greater
Accuracy:	±2% or ±1mmHg, whichever is greater	Alarm Range:	20bpm~350bpm
Resolution:	0.1kPa or 1mmHg		
	(-50mmHg~300mmHg)		
Alarm Range:	-50mmHg~300mmHg		

**\*Notice: Specifications subject to changes without prior notice. All rights reserved by Comen**