

# Specification: C30-V

The logo features the word "COMEN" in large, bold, white, 3D-style capital letters. Above the letters, a stylized globe is formed by a collection of smaller "COMEN" text elements in various sizes and orientations, creating a cloud-like or globe-like shape. The background is a solid blue color with a subtle gradient and a faint globe outline at the bottom.

**COMEN** Share with the world

**SHENZHEN COMEN MEDICAL INSTRUMENTS 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: [www.comen.com](http://www.comen.com)

## Patient Monitor

### C30-V



#### Standard Configuration:

ECG, HR, PR,RESP, Suntech NIBP, Nellcor SpO<sub>2</sub>, 2-TEMP Socket, EtCO<sub>2</sub> Socket

#### Optional:

Mainstream / Sidestream EtCO<sub>2</sub>, Extra battery, Packet

#### Safety Standards

MDD 2007/47/EC, Directive 2011/65/EU, IEC 60601-1, IEC 60601-1-2, IEC 60601-1-6, IEC 60601-1-8, IEC 60601-2-27, IEC 60601-2-30, IEC 60601-2-49, IEC 60601-2-56, IEC 60601-2-61

#### Physical Characteristics

Size: 190mm×82mm×105mm  
 Weight: 1.5 kg  
 Screen Size: 4.3" TFT touch screen  
 Resolution: 480 × 272  
 IP grade: IPX1  
 Waveforms: 2 waveforms

#### Operation Environment

Temperature: 5-40°C  
 Humidity: ≤93%  
 Power requirement: 100-240V~, 50/60Hz  
 Battery Type: Rechargeable Lithium-ion battery  
 Battery Capacity: 2600mAh  
 Battery Recharging Time: Maximum 6 hours for charging;  
 Battery backup: 2 hours for continuous working  
 Brightness: Manual from 10 to 100

#### Indicator:

Two alarm indicators  
 Power indicator  
 Battery indicator  
 QRS beep and alarm sound  
 Operating key sound, Key backlight

#### Interfacing

DC power input  
 RJ45 network interface  
 Parameter cable interface  
 Multi-functional connector

#### Date storage

Alarm Event Recall: 200 groups  
 Wave Recall: 48 hours (8 waves)  
 NIBP Recall: 2000 groups  
 Trend Graph: 160hours  
 Trend Table: 160hours  
 Power-off storage: Yes  
 Alarm: User-adjustable High and Low 3-level Limits;  
 Prioritized audible and visual alarm

#### Respiration

Method: RA-LL Impedance Method  
 RR measurement range: Horse: 0-120rpm  
 Dog/Cat: 0-150bpm  
 Accuracy: 7-150rpm: ±2rpm or ±2% (whichever is greater)  
 0-6rpm: unspecified  
 RESP Apnea: Horse: 10s-60s Dog/Cat: 10s~40s  
 Accuracy: 5s  
 Alarm: Audible and visual alarm; alarm events reviewable  
 Sweep Speed: 6.25,12.5, 25 mm/s  
 Gain Selection: X0.25, X0.5, X1, X2, x4

#### ECG

Lead Type: Cardio Tec™ 5-leads ECG Analysis, and 3 lead selectable  
 Lead selection: 5-lead: I; II; III; aVR; aVL; aVF; V

Waveform	5-lead: 2 -channel	Measurement	
Gain Selection:	X0.125, X0.25, X0.5, X1, X2, X4, auto error $< \pm 5\%$	types:	Systolic, Diastolic, Mean
Sweep Speed:	6.25, 12.5, 25, 50mm/s, error $\leq \pm 10\%$	Range of systolic pressure:	Horse Mode: 40-270mmHg Dog Mode: 40-200mmHg Cat Mode: 40-135mmHg
Resp, lead disconnection		Range of diastolic pressure:	Horse Mode: 10-215mmHg Dog Mode: 10-150mmHg Cat Mode: 10-100mmHg
detection and active noise control:	AC waveform: Current : $< 0.1\mu A$ ; Frequency 64kHz, $\pm 10\%$	Range of mean pressure:	Horse Mode: 20-235mmHg Dog Mode: 20-165mmHg Cat Mode 20-110mmHg
Heart Rate measurement		Static pressure range and accuracy:	0~300mmHg(0kPa~40.0kPa) $\pm 3\text{mmHg}(\pm 0.4\text{kPa})$
Range:	Horse: 15~300bpm Dog/Cat: 15~350bpm	Over-pressure protection:	
Accuracy:	$\pm 1\%$ or $\pm 1\text{bpm}$ (whichever is greater)	Initial pressure range(mmHg):	
Protection:	Withstand 4000VAC/50Hz voltage in isolation, Again electrosurgical interference and defibrillation	Alarm:	Systolic, Diastolic, Mean
Accuracy:	$\pm 1\%$ or $\pm 1\text{bpm}$ (whichever is greater)	PR from NIBP:	Measurement & alarm range: 40-240bpm Resolution: 1bpm Accuracy: $\pm 3\text{bpm}$ or $\pm 3\%$ , whichever is greater
Band width:	Monitoring Mode: 0.5-40Hz Diagnosis mode: 0.05-150Hz Surgery mode: 1-20Hz ST mode: 0.05-40Hz		
ST SEGMENT			
detection:	-2.0mV~+2.0mV (Automatic)		
Arrhythmia			
Analysis:	26 types		
Pacemaker			
detection:	Detectable		
Alarm:	Yes, audible and visual alarm, alarm events reviewable		
12 lead ECG			
Analysis:	Yes		
<b>NIBP</b>			
Method	Automatic oscillation		
Work mode:	Manual / Automatic/Continual (5min, not applicable to neonates)		
Measurement			
Time:	Adjustable (1-480min)		
Measurement Unit:	mmHg / kPa selectable		
		<b>Nellcor SpO<sub>2</sub></b>	
		Measurement	
		range:	0~100%
		Alarm range:	20~100%
		Resolution:	1%
		Accuracy:	$\pm 2\%$ (70~100%, Ped/Adu, non-motion) $\pm 3\%$ (70~100%, Neo, non-motion); 0-69% unspecified
		PR Measurement	
		Range:	20~300bpm
		Resolution:	1bpm
		Accuracy:	$\pm 3\text{bpm}$ (20~250bpm) 251~300bpm unspecified
		Alarm range:	20~300bpm
		<b>Masimo SpO<sub>2</sub></b>	

Measurement & alarm range	1~100%
Resolution:	1%
Accuracy:	±2% (70~100%, Ped/Adu, non-motion) ±3% (70~100%, Neo, non-motion); 1-69% unspecified
Alarm range	1~100%
PR Measurement	
Range	25~240bpm
Resolution:	1bpm
Accuracy:	±3bpm (non-motion) ±5bpm (motion);
Alarm range:	25~240bpm
Perfusion index:	0.02~20%
	Resolution: 0.01% (within 0.02%~9.99% range) or 0.1% (within 10.0%~20.0% range)

## Temperature (Dual Channel)

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

## EtCO<sub>2</sub>

Unit:	mmHg, kPa
Measurement range:	0mmHg~150mmHg
Resolution	1mmHg or 0.1kPa or 0.1%
Accuracy	0mmHg ~40mmHg should be±2mmHg; 41mmHg ~70mmHg should be±5%×reading; 71mmHg ~100mmHg should be±8%×reading; 101mmHg~150mmHg should be±10%×reading
Oxygen compensation	0~100 mmHg
Equilibrium gas	Helium, room air, nitrous oxide

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