



# C30

## Emergency Transport Monitor

The C30 is a new generation of specialised ambulance & transport monitor. It is designed for transportation monitoring requirements for practicality, convenience and reliability. The C30 adopts PC/ABS high strength project plastics, high reliability Linux operation system, and high brightness anti-scratch LCD. The entire machine is portable, solid, reliable, stable, waterproof and fireproof and drop proof.

### Features

- Built-in 4400mAh lithium battery in specialized first aid monitoring package.
- With double lithium batteries: Built-in 2,600mAh lithium battery in C30 and built-in 4,400mAh lithium battery in first aid monitoring package, over 8 hours working time, support vehicle power.
- 4.3-inch, 16:9 colorful LCD display, touch screen operation.
- Three-level acoustic and optic intelligent alarm and intelligent alarm lamp switching for red, yellow and blue color; Alarm volume also can be adjusted.
- Trend storage & review for 48 hours.
- Weight: 1.2kg; light and portable.
- With Linux operation system.
- 1.2m drop test proof
- 2 hr battery life, with the additional option of external battery, prolonged to 8hrs

# Technical Specification C30

1/3



- Sweep Speed: 6.25 mm/s, 12.5mm/s, 25mm/s, 50mm/s
- Indicator: Dual alarm indicator lights
  - Power indicator light
  - Battery indicator light
- Interface: Parameter interface
  - AC power input socket
  - Network interface
  - MDR
- Alarm Event Recall: 100 groups
- ECG Wave Recall: 25 mins
- NIBP Recall: 2000 groups
- Trend Graph: 48 hours
- Trend Table: 48 hours
- Networking: Connected to Central Monitoring System by wire/wireless

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## Standard Configuration 1

ECG, RESP, Dual-Temp, Comen SpO<sub>2</sub>, NIBP, Reserved EtCO<sub>2</sub> Socket

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## Standard Configuration 2

ECG, RESP, Dual-Temp, Masimo SpO<sub>2</sub>, NIBP, Reserved EtCO<sub>2</sub> Socket

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## Optional Configuration:

Nellcor SpO<sub>2</sub>, EtCO<sub>2</sub>, packet, External battery

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## Safety Standards

ISO 13485: 2003 approved, CE marking according to MDD93/42/EEC

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## Physical Characteristics

- Product Size: 190mm x 82mm x 105mm
- Net Weight: 1.2kg

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## Operation Environment

- Working Temperature: 5-40C
- Humidity: ≤93%
- Power Supply: DC 15V
- External Power Supply: 100-240V~, 50/60Hz±1Hz
- Battery Type: Built-in Lithium-ion
- Battery Capacity: 2600mA
- Battery Recharging Time: Maximum 6 hours for charging;
- Battery running time : 2 hours

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## Performance Specifications

- Patient range: Adult, Pediatric, Neonatal
- Display: 4.3" color TFT touch screen
- Resolution: 480 x 272mm
- Trace: 2 waveforms

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## Respiration

- Method: Impedance method
- RR measurement range: Adult: 6-120bpm
  - Pediatric/Neonate:6-150bpm
- Resolution: ±1 rpm
- RESP Apnea Alarm: 10s-60s(Adult),10s-20s(Pediatric/Neonate),
- Alarm: Audible and visual alarm; alarm events recallable
- Sweep Speed: 6.25 mm/s, 12.5 mm/s,25mm/s
- Gain Selection: X0.25, X0.5, X1, X2

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## ECG

- Lead Type: 12 Lead, 5 Lead and 3 lead
- 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
- Gain Selection: X0.25, X0.5, X1, X2, auto
- Sweep Speed: 12.5 mm/s, 25 mm/s, 50mm/s



# Technical Specification C30

2/3

- Heart Rate Range: Adult: 15-300bpm
- Pediatric/Neonate: 15-350bpm
- Resolution: 1 bpm
- Accuracy:  $\pm 1\%$  or  $\pm 1\text{bpm}$  (whichever is greater)
- Bandwidth: MON: 0.5-40Hz  
DIA: 0.05-130Hz  
OPE: 1-20Hz  
ST: 0.2Hz-40Hz
- STSEGMENT detection:  $-2.0\text{mV} - +2.0\text{mV}$  (Automatic)
- Arrhythmia Analysis: Yes
- Pacemaker detection: Detectable

## NIBP

- Method: Automatic oscillometric
- Work mode: Manual / Automatic/Continuous
- Auto measurement: Adjustable (1-480min)
- Measurement Unit: mmHg / Kpa selectable
- Measurement types: Systolic, Diastolic, Mean
- Range of systolic pressure:  
Adult Mode: 40-270mmHg  
Pediatric Mode: 40-200mmHg  
Neonate Mode: 40-135mmHg
- Range of diastolic pressure:  
Adult Mode: 10-215mmHg  
Pediatric Mode: 10-150mmHg  
Neonate Mode: 10-100mmHg
- Range of mean pressure:  
Adult Mode: 20-235mmHg  
Pediatric Mode: 20-165mmHg  
Neonate Mode: 20-110mmHg
- Over-pressure protection: Both Hardware and software over pressure protection
- Accuracy:  $\pm 3\text{mmHg}$
- Resolution: 1mmHg



The portable, adaptable C30 can be used for ward monitoring once the patient is hospital based



Specifically designed for transport, the solid, stable design of the C30 makes it perfect for on-site first aid & ambulance response

## Temperature (Dual Channel)

- Measurement range: 0-50°C
- TEMP sensor: Standard configuration- skin TEMP sensor
- Resolution: 0.1°C
- Accuracy:  $\pm 0.1^\circ\text{C}$  (exclusive of error of sensor)
- Channel: T1, T2, TD (Temperature Difference)

## Nellcor SpO<sub>2</sub>

- Measurement range: 0-100%
- Resolution: 1%
- Accuracy:  $\pm 2\%$  (70-100%, Adu/Ped, non-motion);  $\pm 3\%$  (70-100%, Neo, non-motion); 0-69% unspecified
- Alarm range: Lower limit+1%-100%  
0%-upper limit-1%
- PR Measurement Range: 20-300bpm
- Resolution: 1bpm
- Accuracy:  $\pm 3\text{bpm}$
- Alarm range: 20-300bpm

## Masimo SpO<sub>2</sub>

- Measurement range: 1-100%
- Resolution: 1%
- Accuracy:  $\pm 2\%$  (70-100%, Adu/Ped, non-motion)  $\pm 3\%$  (70-100%, Adu/Ped, motion)  $\pm 3\%$  (70-100%, Neo, non-motion and motion); 0-69% unspecified
- Alarm range: 0-100%
- Pulse rate: Range: 25-240bpm  
Resolution: 1bpm  
Accuracy:  $\pm 3\text{bpm}$  (non-motion)  $\pm 5\text{bpm}$  (motion)  
Alarm range: 25-240bpm



Small, portable and lightweight, the C30 is ideal for patient transfer

## Comen SpO<sub>2</sub>

- Measurement & alarm range: 0-100%
- Resolution: 1%
- Accuracy:  $\pm 2\%$  (70-100%, Adu/Ped, non-motion)  
 $\pm 3\%$  (70-100%, Neo, non-motion);  
0-69% unspecified
- Alarm range: 0-100%
- Pulse rate: Range: 25-250bpm  
Resolution: 1bpm  
Accuracy:  $\pm 3$ bpm(non-motion)  
 $\pm 5$ bpm(motion)  
Alarm range: 25-250bpm

## Physical Characteristics

- Product Size: 190mm x 82mm x 105mm
- Net Weight: 1.2kg



The C30 is waterproof, fireproof & drop proof, being the ultimate monitor for emergency air transport

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

- CO<sub>2</sub> Measurement Range: 0 -150 mm Hg, 0 to 19.7%, 0 to 20kPa  
(at 760mmHg)
- Accuracy:  $\pm 2$  mm Hg (0 - 40 mm Hg)  
 $\pm 5\%$  of reading (41 - 70 mm Hg)  
 $\pm 8\%$  of reading (71 -100 mm Hg)  
 $\pm 10\%$  of reading (101 -150 mm Hg)
- Respiration rate: 0-120bpm
- RR accuracy:  $\pm 2$ rpm (0-70rpm)  
 $\pm 5$ rpm (>70rpm)
- Response time: <240 msec (10% to 90%)
- Delay time: <2s

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

- CO<sub>2</sub> Measurement Range: 0 -150 mm Hg, 0 to 19.7%, 0 to 20kPa  
(at 760mmHg)
- Accuracy:  $\pm 2$  mm Hg (0 - 40 mm Hg)  
 $\pm 5\%$  of reading (41 - 70 mm Hg)  
 $\pm 8\%$  of reading (71 -100 mm Hg)  
 $\pm 10\%$  of reading (101 -150 mm Hg)
- Respiration rate: 0-150rpm
- Respiration rate accuracy:  $\pm 2$ rpm (0-70rpm)  
 $\pm 5$ rpm (>70rpm)
- Delay time: <2s

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