



NC3 Vital Signs Monitor

I. Monitor Type

1. Safety standard

Name	type
The degree of ingress protection (The host)	IPX1
The degree of ingress protection (infrared ear thermometer)	IPX0
The degree of safety in the condition of flammable anesthetic gas mixed with the mixture like air, the oxygen or nitrous oxide mixture (It's NA)	The device cannot be used in the case of flammable anesthetic gas mixed with air and the mixture of oxygen or nitrous oxide.
Operation Mode	Run the device continuously

2. Environmental Demands

Name	Specifications	
Work environment	Range of temperature	0°C ~ 40°C (without ear thermometer) 15°C ~ 36°C (with ear thermometer)
	Range of Rh	≤ 93% non-condensing (without ear thermometer) ≅ 85% non-condensing (with ear thermometer)
	Range of atmospheric pressure	70kPa ~ 106kPa
Demands on the power supply voltage	Power voltage	100-240V ~
	Power frequency	50/60Hz
	Rated input power	35VA
transportation	Prevent severe shock, vibration and splash from rain and snow in the process of transportation	
Storage environment	Ambient temperature	-20°C ~ +60°C (without ear thermometer) -20°C ~ +55°C (with ear thermometer)
	Relative humidity	≤ 93% (without ear thermometer) ≤ 85% (with ear thermometer)
	Atmospheric pressure	70kPa ~ 106kPa

3. Battery

Name	Specifications
Battery specifications(host)	2200mAh 11.1V lithium ion battery
Duration of charging	When monitor is not work, the fully charging time will no longer than 3 hours When monitor is work, the fully charging time will no longer than 5.5 hours.
Endurance time	It can last at least 12 hours in the fully charged condition when it is on standby. Moreover it can run five minutes after the first warning triggered due to low battery power.
Battery Specifications(ear thermometer))	d.c 3v(2 batteries)

II. Hardware Specification

1. Display

Name	Specifications
Broken code display	100mm*120mm

2. Host LED

Name	Specifications
Start/stop indicator	1(Yellow/Green)
AC power indicator	1(Green)
Battery indicator	1(Green)

3. Interface

Name	Number
Power	1
RS-232	1
Equipotential socket	1

4. Signal Output

Name	Number
Acoustic Output	
Louderspeaker	Supporting self-test sound and pulse sound

III. Monitor Specification

1. Size and Weight

Name	Specifications
Size and Weight	Size: 130mm(in length)*125mm(in width)*219mm(in height) Weight of the device: 1.25Kg, weight of battery: 0.25Kg

2. NIBP Specifications

Name	Specifications		
Way of measurement	Self-oscillation method		
Parameter display	Systolic pressure, diastolic blood, mean pressure and pulse		
Range and accuracy of measurement	Range of measurement for adult	Systolic pressure	5.3-36kPa (40-270mmHg)
		Diastolic pressure	1.3-28.7kPa (10-215mmHg)
		Mean pressure	2.7-31.3kPa (20-235mmHg)
	Range of measurement for child	Systolic pressure	5.3-26.7kPa (40-200mmHg)
		Diastolic pressure	1.3-20kPa (10-150mmHg)
		Mean pressure	2.7-22kPa (20-165mmHg)
	Range of measurement for neonate	Systolic pressure	5.3-18kPa (40-135mmHg)
		Diastolic pressure	1.3-13.3kPa (10-100mmHg)
		Mean pressure	2.7-14.7kPa (20-110mmHg)
	Accuracy of Measurement	±5mmHg, when the non-invasive blood pressure is beyond the range, the monitor still displays properly, but does not consider accuracy.	
	Resolution	1mmHg(0.1kPa)	
	The measurement rang and accuracy of static pressure	0 mmHg (0 kPa) ~ 300 mmHg (40.0 kPa) , ± 3 mmHg (± 0.4 kPa)	

3. SpO2 Specifications

Name	Specifications			
Data averaging and other signal processing time	2 seconds			
Data update period	8 seconds			
Resolution of display	1%			
Accuracy Detection		Measurement range	Accuracy(70%~100%)	Accuracy(0%~69%)
	Comen	0%~100%	± 2 % (measured without motion in adult/child mode) ± 3 % (measured without motion in neonate mode)	Not specified
	Masimo	1%~100%	± 2 % (measured without motion in adult/child mode) ± 3 % (measured with motion in adult/child mode or measured in neonate mode)	
	Nellcor	0%~100%	± 2 % (measured without motion in adult/child mode) ± 3 % (measured without motion in neonate mode)	
Perfusion Index(PI)	There is indicator function in Masimo mode, the measurement range is 0.01%~20%, accuracy is not specified. In the scope of 0.05%~9.99%, the resolution is 0.01%, 0.1% in the scope of 10%~20%.			
Low perfusion				
Conditions	Pulse amplitude: >0.2%			
	SpO ₂ accuracy: ± 3%			

4. Pulse Rate Specifications

Name	Specifications			
Range and accuracy		Measurement range	Resolution	Error
	Comen	20bpm~250bpm	1bpm	± 2bpm
	Masimo	25bpm~240bpm	1bpm	± 3bpm(no motion) ± 5bpm(motion)
	Nellcor	25bpm~250bpm	1bpm	± 3bpm

5. TEMP Specifications

Name	Specifications	
Range and accuracy	Range	34°C~42.2°C (93.2°F~107.6°F)
	Error	35°C~42°C: the error is ±0.2°C (±0.4°F) Other range: ±0.3°C (±0.5°F)
Resolution	0.1°C(0.1°F)	

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Specifications subject to change without notice

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