

# Aquarius

## Vital Sign Monitor



Committed to Excellence

For Out-Patient Department, Spot-check, Transport, Ward and other basic monitoring

### Configuration

### Optional

SpO2 + NIBP, Li-ion battery	Masimo/Nellcor SpO2, Quick Temp, Bar code scanner, wired/wireless CMS
SpO2+NIBP+ECG+TEMP, Li-ion battery	Masimo/Nellcor SpO2, EtCO2, Quick Temp, Bar code scanner, Thermal Recorder, wired/wireless CMS



Portable Design



Touch Screen (Optional)

Masimo SET® SpO2



Ear Infrared Thermometer



Bar/QR Code Scanner

# Aquarius

## Vital Sign Monitor



- 8.4" color TFT LCD Screen (Touch screen optional)
- Portable, Lighter weight and sturdy design
- MEWS (Modified Early Warning Score)
- Calculations: Hemodynamics/Dose calculation
- Rechargeable Li-ion Battery (up to 15 hours uninterrupted work)
- Spot-check and continuous monitoring mode
- Suitable for Adult, Pediatric and Neonatal
- Wired/WIFI/3G/4G CMS, support HL7 protocol to HIS
- Barcode scanner, Infrared ear/Forehead thermometer
- Night mode selectable, reduce light stimulation and noise
- Graphical & tabular trend review (240 hours)
- 48H full disclosure wave review for each patient

### Specifications

#### Physical Specification

Display: 8.4" TFT LCD screen  
Resolution: 600 x 800  
Number of traces: 3, up to 7 ECG waveforms  
Dimension: 175x275x175mm(WxHxD)  
Weight: < 2.5 kg under standard configuration  
LAN: 1 standard RJ45 port  
WLAN: IEEE 802.11b/g/n  
USB: 2 USB interface

#### ECG

Lead type  
3-lead: I, II, III  
5-lead: I, II, III, aVR, aVL, aVF, V  
ECG waveform: 1 channel, 7 channels  
Display sensitivity:  
2.5mm/mV (x0.25), 5mm/mV (x0.5),  
10mm/mV (x1.0), 20mm/mV (x2.0)  
Wave sweep speed:  
3.125mm/s, 6.25mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s  
Bandwidth  
Diagnostic mode: 0.05Hz~100Hz  
Monitor mode: 0.5Hz~40Hz  
Surgery mode: 1Hz~20Hz  
Strong filter mode: 5Hz~20Hz

CMRR > 100dB  
Notch: 50/60Hz notch filter can be set to on or off  
Differential input impedance > 5MΩ  
Electrode polarization voltage range: ±400mV  
HR range: 15 - 350 bpm  
Baseline recovery time < 3s after defibrillation (in monitor and surgery mode)  
Calibration signal: 1mV (peak - peak), accuracy ±3%

#### RESP

Measurement method: Thoracic electrical bioimpedance  
Measuring lead: Lead I, II  
Wave gain: x0.25, x0.5, x1, x2  
Respiratory impedance range: 0.5-5Ω  
0 - 150bpm  
Baseline impedance: 500-4000Ω  
Gain: 10 grades  
Scan speed: 3.125mm/s, 6.25mm/s, 12.5 mm/s, 25mm/s

#### TEMP

Measurement method: Thermistor  
Measuring range: 5~50°C (41~122°F)  
Resolution: 0.1°C  
Measurement accuracy: ±0.1°C

#### NIBP

Measurement method: Automatic oscillometric method  
Operating mode: Manual, automatic, continuous  
Measurement unit: mmHg/kPa selectable  
Typical measurement time: 20~40s  
Measurement type: Systolic, Diastolic, Mean  
Measurement range (mmHg)  
Range of Systolic pressure:  
Adult 40-280  
Pediatric 40-200  
Neonatal 40-135  
Range of Diastolic pressure:  
Adult 10-210  
Pediatric 10-150  
Neonatal 10-95  
Range of Mean pressure:  
Adult 20-230  
Pediatric 20-165  
Neonatal 20-105

Measurement accuracy  
Maximum average error: ±5mmHg  
Maximum standard deviation: 8mmHg  
Resolution: 1mmHg  
Interval: 1, 2, 3, 4, 5, 10, 15, 30, 60, 90, 120, 180, 240, 480 minutes  
Overpressure protection: Software and hardware, double safety protection  
Cuff pressure range: 0-300mmHg

#### Northern SpO2

Measurement range: 0-100%  
Parameter monitoring: Perfusion Index (PI) : 1-10  
Optional Pleth Variability Index (PVI)  
Resolution: 1%  
Accuracy: ±2% or ±2bpm  
Refreshing Rate: 1s

#### Masimo SET SpO2 (optional)

Measurement range: 0-100%  
Resolution: 1%  
Accuracy: ±2% (70-100%, Adult/Pediatric, non-motion, low perfusion);  
±3% (70-100%, Neonate, non-motion);  
±3% (70-100%, motion);  
0-69%, unspecified  
Refreshing Rate: 1s

#### Pulse Rate

Range: 30~300 bpm  
Resolution: 1bpm  
Accuracy: ±2bpm (non-motion)  
±5bpm (motion)  
Refreshing rate: 1s

#### Infrared Ear Thermometer (optional)

Displayed range: 34~42.2°C (93.2~108°F)  
Operation ambient temperature range: 10~40°C (50~104°F)  
Accuracy for displayed temperature range:  
≥35°C (95.9°F) ~ ≤42.2°C (107.6°F) range ±0.2°C (0.4°F)  
<35°C (95.9°F) ~ ≥34°C (93.2°F) range ±0.3°C (0.5°F)

#### Masimo IRMA™ Sidestream CO2 (optional)

Warm-up time: Full accuracy within 10 seconds  
Sampling flow rate: 50ml/min (+/-10/min)  
Accuracy: 0~15% (±0.2% of the reading)  
15~25%, unspecified  
Measurement Range: 0-25%  
Rise time: 200ms, typical at 50ml/min flow rate  
Total response time:  
within 3 seconds (with 2m Moline sampling line)  
AWRR Range: 0~150bpm

#### Masimo IRMA™ Mainstream CO2 (optional)

Measurement Range: 0-25%  
Warm-up time: Full accuracy within 10 seconds  
Accuracy: 0~15% (±0.2% of the reading)  
15~25%, unspecified  
AWRR Range: 0-150bpm

#### Recorder (optional)

Built-in Thermal dot array  
Horizontal resolution: 16 dots/mm (25 mm/s paper speed)  
Vertical resolution: 8 dots/mm  
Paper speed: 12.5mm/s, 25 mm/s, 50 mm/s  
Number of waveform channels: 3

#### Operation Environment

Input Power: AC 100-250V, 50/60Hz  
Temperature: 5~40°C  
Humidity: < 85%  
Patient Range: Adult, Pediatric, Neonate



240	Hours long trend
120	Mins short trend
1000	NIBP measurements
200	Alarm events

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