

Features:

- 12.1" Color TFT LCD Screen, optional touch screen, Display Resolution: 800*600
- 2 hours wave storage, 720 hours Trend review, 200 alarm events, 1000 NIBP measurement data review
- ST and 13 kinds arrhythmia analysis, pacemaker analysis, drug dose calculation
- Respiration monitoring with apnea alarms, alarm review, arrhythmia review
- Anti - defibrillation design, NIBP over pressure protection
- Rechargeable high energy built-in Li battery, AC/DC available, silent fanless design
- Maximum 9-channel waveforms display, the waveform color can be defined by user (7 colors)
- Support multiple languages
- Easy connecting with central monitoring system
- PVI (Pleth Variability Index)
- Digital SpO2 with excellent performance
- Unique human voice alarm

Technical Specification

Quality Standards and Classification: ISO13485

MDD classification: Class II b

Anti-electroshock degree: Class I equipment

(internal power supply)

TEMP/SpO2 /NIBP: BF

ECG/Resp: CF

Application Range

Adult/Pediatric/Neonatal/Medicine/Surgery/

Operating Room/ICU/CCU/Clinic/Ambulance



Environment

Temperature

Working: 0 ~ 40℃

Storage: -20 ~ 50℃

Humidity

Working: 15% - 90%

Storage: 15% - 90% (no coagulation)

Atmospheric pressure

Working: 86.0kPa ~ 106.0kPa;

Storage: 86.0kPa ~ 106.0kPa

Power Requirement

External power required

AC: 100V ~ 240V, 50Hz/60Hz

DC: Built-in rechargeable battery

Battery: 14.8V, 2200mAh rechargeable Li-ion battery

3. 5h operating after full charge

5min operating after low battery alarm

Input power: $P_{max}=90VA$

FUSE: T1.5AL 250V

Dimension and Weight

Equipment: 320mm x 255mm x 125mm(about); 3.4kg(about)

Package: 390mm x 310mm x 355mm; 5.5kg(about)

Storage

Trend 720 hours

NIBP review 1000 NIBP events

Wave review 2 hours

Alarm review 200 alarm events

All storage data are non volatile



ECG

5 Leads: RA、LA、LL、RL、V

lead mode: I, II, III, AVR, AVL, AVF, V

3 Leads: R,L, F or RA,LA, LL

Lead mode: I, II, III

Gain: 2.5mm/MV, 5.0mm/MV, 10mm/MV,20mm/MV, auto

Sweep speed: 12 .5mm/s, 25mm/s, 50mm/s

Bandwidth

Surgery: 1 ~ 20Hz

Monitor: 0.5 ~ 40Hz

Diagnostic: 0.05 ~ 130Hz

Sensitivity: > 200(uVp-p)

CMRR

Diagnostic Mode: >90dB

Monitor Mode: > 110dB

Surgery Mode: > 110dB

Differential Input Impedance: >5M Ω

Electrode offset potential: $\pm 300\text{mV}$

Calibration Signal: 1(mVp-p), Accuracy: 5%

HR Measure Range

Adult: 15 ~ 300bpm

Neonatal/Pediatric: 15 ~ 350bpm

Accuracy: $\pm 1\%$

Resolution: 1bpm

Leakage Current: <10uA

Baseline Recovery: < 3S After Defi.

ECG Signal Range: $\pm 8\text{mV}(\text{Vp-p})$



ST Segment

ST Segment Monitoring Range

Measure and Alarm: -2.0 ~ +2.0 mV

ARR Detecting

Type: ASYSTOLE, VFIB/VTAC, COUPLET, BIGEMINY,
TRIGEMINY, R ON T, VT>2, BRADY, MISSED BEATS,
PNP, PNC, Alarm Available, Review Available

NIBP

Method: Oscillometry

Mode: Manual, Auto, STAT

Measuring Interval in AUTO Mode: 1,2,3, 4, 5, 10, 15,
30, 60, 90,120, 180,
240, 480 (Min)

Measuring Period in STAT Mode: Min

Pulse Rate Range: 40 ~ 240bpm

Alarm Type: SYS, DIA, MEAN

Measuring and alarm range:

Adult Mode: SYS 40 ~ 280mmHg

DIA 10 ~ 220mmHg

MEAN 20 ~ 240mmHg

Pediatric Mode: SYS 40 ~ 220mmHg

DIA 10 ~ 160mmHg

MEAN 20 ~ 170mmHg

Neonatal Mode: SYS 40 ~ 135mmHg

DIA 10 ~ 100mmHg

MEAN 20 ~ 110mmHg

Resolution: 1mmHg



Accuracy: Maximum Mean error $\pm 5\text{mmHg}$

Maximum Standard deviation 8mmHg

Overpressure Protection

Adult Mode: 300mmHg

Pediatric Mode: 240mmHg

Neonatal Mode: 150mmHg

Static pressure accuracy: 3mmHg

SpO₂

Measuring Range: $0 \sim 100\%$

Resolution: 1%

Alarm Range: $0 \sim 100\%$

Accuracy: $70\% \sim 100\% \pm 2\%$

$<69\%$ unspecified

Actualization interval about: 1 Sec.

Alarm Delay: 10 Sec.

Pulse Rate

Measuring and Alarm Range: $20 \sim 250\text{bpm}$

Resolution: 1bpm

Accuracy: $\pm 3\text{bpm}$

Perfusion Index

Measure and Alarm Range: $0.02 \sim 20\%$

Resolution: 0.01%

Respiration

Method: Impedance between R-F(RA-LL)

Measuring Impedance Range: $0.3\text{-}3\Omega$

Base line Impedance Range: $200\sim 4000\Omega$



Bandwidth: 0.3~2.5Hz

Resp rate: Measurement Range

Adult: 0 ~ 120 BrP

Neonatal / Pediatric: 0 ~ 150 BrPM

Resolution: 1 BrPM

Accuracy: 0 ~ 6 BrPM: unspecified

7~150BrPM:±2BrPM

Apnea Alarm: 10 ~ 40 S

Gain 0.25,0.500,1,2,4

Differential Input Impedance: >2.5MΩ

TEMP

Channel: 2

Measuring and Alarm Range: 0 ~ 50°C

Resolution: 0.1°C

Accuracy: ±0.1°C (0 ~ 50°C)

Actualization interval about: 1 Sec

Average Time Constant: <10 Sec

Sensor Type: 10K series, 2.25K series

Standard accessories Adult

NIBP cuff & Extension tube, ECG cable & electrodes,

SpO2 sensor, TEMP probe, Lithium-ion battery,

Power cable,User manual

Standard:3/5-Leads ECG、SpO2、NIBP、RESP、2-Temp、PR/HR

Optional:2-IBP、EtCO2、CMS、WIFI、AG、Nellcor Spo2、Rolling Stand、Touch Screen、Recorder、Suntech Blood Pressure、Disposable Spo2 Probe、Newborn Accessories、Wall Mount、Children Accessories、Depth of Anesthesia



Technical Specifications

IBP(optional)

Sensor

Reusable sensors: OHMEDA P23XL or BD, EDWARD compatible

Once usage: OHMEDA DT-4812 or BD, EDWARD compatible

Excitation voltage: + 5Vdc $\pm$ 2%

Sensitivity: 5uV/V/mmHg

Channels: 2 channels

Measure Range: -50 ~ 360 (mmHg)

Resolution: 1mmHg

Accuracy(no sensor): $\pm$ 2% or $\pm$ 1mmHg, use the greater

Band Width

Normal mode: DC ~ 40Hz

Smooth mode: DC12.5Hz

Measurable parameter: ART, PA, CVP, L AP, RAP, ICP

CO2(optional)

Measure Range: 0% ~ 13%

Resolution: 1mmHg

Accuracy: 2mmHg @ < 5.0% CO2(at ATPS)

Breath Rate: 3 ~ 150bpm

Recorder(optional)

Paper width: 48 mm

Speed: 25/50 mm/s

Wave channel: 3 channels



Gas (optional)

Range

FiCO₂, EtCO₂: 0 ~ 15%

RR: 0 ~ 0-1 50BPM

N₂O: 0~ 100

Sevoflurane: 0 ~ 10%

Isoflurane: 0 ~ 8%

Enflurane: 0 ~ 8%

Desflurane: 0 ~ 22%

Accuracy

FiCO₂, EtCO₂: $\pm(0.2\% + 5\% \text{ of reading}) @ (0 \sim 10\%)$

$\pm(0.2\% + 8\% \text{ of reading}) @ (0 \sim 10\%)$

RR: $\pm 1\text{BPM}$

N₂O: $\pm(2\% + 3\% \text{ of reading})$

Sevoflurane : $\pm(0.15\% + 5\% \text{ of reading}) @ (5 \sim 10\%)$

$\pm(0.3\% + 10\% \text{ of reading}) @ (5 \sim 10\%)$

Isoflurane: $\pm(0.15\% + 5\% \text{ of reading}) @ (0 \sim 5\%)$

$\pm(0.15\% + 10\% \text{ of reading}) @ (5 \sim 8\%)$

Enflurane : $\pm(0.15\% + 5\% \text{ of reading}) @ (0 \sim 5\%)$

$\pm(0.3\% + 5\% \text{ of reading}) @ (5 \sim 8\%)$

Enflurane : $\pm(0.15\% + 5\% \text{ of reading}) @ (0 \sim 10\%)$

$\pm(0.3\% + 10\% \text{ of reading}) @ (5 \sim 22\%)$

Size: 306*287*172mm

weight: 3.4kg

