

Multi-parameter Patient Monitor (HD12)



Features:

1. 13.3 inch color LCD, full view display, high resolution 1366×768dpi;
2. **13.3 inch capacitive touch screen, suitable for use in complex environment (optional);**
3. Support BIS module, easy and quick installation of card slot;
4. Standard parameters: ECG, SpO2, NIBP, RESP, Temperature, Heart rate;
5. **Fully discrete module: ECG, SpO2, NIBP, motherboard and power supply are each a separate PCB, easy to maintenance and upgrade;**
6. Optional for international mainstream module such as Masimo SpO2, SunTech NIBP etc.
7. 20 kinds of arrhythmia event alarm, support ST segment analysis function;
8. **The brightness of the screen can be adjusted to 10 levels;**
9. Double overpressure protection from NIBP software and hardware to ensure patient safety;
10. Multiple interface display, standard interface, large font, respiratory oxygenation diagram, trend coexistence, **seven ECG calculation leads displayed on the screen ;**
11. Four language operation interface, friendly operating system, convenient operation of patient information input, delete and save;

12. Parameter color adjustment function, medical staff can define the color of background, waveform and font;
13. International standard, sound and light double three-level alarm, more safe and more professional;
- 14. Extra long alarm light strip, multi-angle visible, easy to obtain alarm information;**
- 15. Independent alarm tone and pulse tone, when the alarm tone is silent, the pulse tone continues to correspond. When the pulse tone is silent, the alarm tone can be activated normally;**
16. Adjustable volume with 5 levels;
17. Anti-fibrillation, electric knife, power grid, electromyography interference
18. Large capacity built-in lithium battery, continuous working time not less than 300 minutes;
- 19. When the waveform screen is frozen, real-time parameters are continuously displayed in the parameter area. The frozen waveform can be flipped back and forth along the time axis.**
20. AC power indicator, working status indicator, real-time electricity detection;
21. Low battery power alarm, critical moment will not lose data;
- 22. Large storage capacity: at least 1200 hours of continuous patient monitoring data storage;**
- 23. Support USB configuration for fast import/export, to meet the needs of different departments**
- 24. Support USB firmware upgrade, good maintainability;**
25. Support central monitoring system screenshot HL7 protocol;
26. Support WIFI, Bluetooth and other transmission functions
27. HDMI HD video output;
- 28. Optional for built-in thermal matrix recorder, three trace waveform**
- 29. PMOS operating system, rapid response;**
- 30. Very short boot time, 10 seconds into the working state;**
- 31. Reserved ETCO2 interface to support plug-and-play CO2 module;**

Standard configuration: ECG, SpO2, NIBP, RESP, Temperature, Heart rate;

Optional configuration: Printer, touch screen, 3/5/12 leads ECG, masino SpO2, suntech NIBP, AG, C.O., BIS

Specifications:

ECG:

Leads: 3/5 leads; most 7 ECG calculation leads can be displayed on the screen

I、II、III、AVR、AVL、AVF、V leads

Measuring range: 20~300bpm

Resolution: 1bpm

Accuracy: the bigger one between $\pm 2\%$ or $\pm 2\text{bpm}$

Frequency response: 0.67Hz-40 Hz

S-T segment monitoring: -2.0mV~2.0mV

Electrode drop indication: sound and light indicator

Sweep rate: 6.25、12.5、25、50mm/sec

Gain : $\times 0.125$ 、 $\times 0.25$ 、 $\times 0.5$ 、 $\times 1$ 、 $\times 2$ 、 $\times 4$ 、Auto

Electrical calibration: 1mV $\pm 5\%$

Protection isolation withstands 4000V/AC/50Hz

Lead cable: 3/5 lead

Standard configuration: universal adult ECG cable

Optional configuration: special ECG cable for Neonate and Pediatric

Alarm: upper and lower limits of alarm value can be set, automatic memory; alarm review

SpO2:

Display: SpO2 value, pulse column figure, waveform, pulse value

Measuring range: 0%-100% adult/pediatric/neonatal

Resolution: 1%

Precision: $\pm 3\%$ (less than 70% is not defined)

Pulse Rate:

Measuring range: 30~280bpm

Pulse precision: ± 2 bpm

Alarm range: 20~300bpm, the lower limit can not be greater than the upper limit

Sensor:

Standard configuration: adult finger clip

Optional configuration: pediatric finger clip, neonatal finger clip

Alarm value: the upper and lower limit can be set, automatic memory

NIBP:

Method: Oscillometric

Measuring parameter: Systolic pressure, Diastolic pressure, Mean pressure

Mode: Manual, Auto, STAT

Unit: optional for mmHg/ KPa

Measurement interval time of automatic measurement mode: 2.5~120min ten-level adjustable

Overpressure protection: software and hardware overpressure protection

Measuring range:

	Adult	Pediatric	Neonatal
SYS (mmHg)	40~255	40~200	40~135
DIA (mmHg)	20~205	20~150	20~100
MEAN (mmHg)	27~220	27~165	27~110

Cuff pressure range: 0-300 mmHg

Cuff:

Standard configuration: adult cuff

Optional configuration: neonatal cuff, pediatric cuff

Alarm setting range:

SYS: 40~255mmHg, the lower limit can not be greater than the upper limit (adult),

40~200mmHg, the lower limit can not be greater than the upper limit (pediatric),

40~135mmHg, the lower limit can not be greater than the upper limit (neonatal);

DIA: 10~195mmHg, the lower limit can not be greater than the upper limit (adult),

10~150mmHg, the lower limit can not be greater than the upper limit (pediatric),

10~110mmHg, the lower limit can not be greater than the upper limit (neonatal);

MEAN: 20~215mmHg, the lower limit can not be greater than the upper limit (adult),

20~165mmHg, the lower limit can not be greater than the upper limit (pediatric),

20~125mmHg, the lower limit can not be greater than the upper limit (neonatal);

Alarm display error: Not greater than $\pm 5\%$ of the set value

Temperature:

Measuring Range: 15°C~50°C

Measuring error: not more than $\pm 0.1^{\circ}\text{C}$

Resolution: 0.1°C

Accuracy: $\pm 0.2^{\circ}\text{C}$ (including sensor)

Probe:

Standard configuration: permanent body temperature probe

Optional configuration: Esophageal temperature probe, rectal temperature probe

Alarm value: the upper and lower limit can be set, automatic memory

Alarm: all monitoring parameters can be set for alarm, and it has a sound and light alarm device, and can cancel the alarm

RESP:

Method: the thorax impedance method

PR Measurement Range and Accuracy

Measurement range: Adult: 0~120rpm

Pediatric/Neonatal: 0~150rpm

Measurement Accuracy: 10~150 rpm the bigger one between ± 2 rpm or $\pm 2\%$;

0~9 rpm not define.

PR measurement resolution

Resolution: 1 rpm

Suffocation alarm delay time

Set as: 20s、25s、30s、35s、40s、45s、50s、55s、60s

PR alarm limit range

Adult neonatal/pediatric alarm limit can be set to: 2~150rpm

