



YP-2200B

Infant Incubator



Endless Love  To Guard The New Life Safe



Brief Introduction

- Dual LCD screen, with 12.1-inch LCD color touch screen (Resolution: 1024 x 768) and 5.6-inch LCD color screen can be achieved by simple click;
- First domestic parent-child mode: kangaroo mode;
- Equipped with an embedded smart system and an Android display system. The updated PID core algorithm makes the temperature fluctuation in the incubator more uniform;
- 7-channel temperature sensor monitoring: by monitoring the ambient temperature, heater temperature, two-channel air temperature and three-channel skin temperature;
- In the scientific air circulation system with front-rear air outlet and left-right air return, the incubator will automatically form a vertical air curtain when the cabin door is open, thereby minimizing the heat loss;
- The high-temperature steam humidification method is used to kill most of the common pathogenic bacteria in the water tank, greatly reducing the risk of infection;
- Once the knobs on both sides are turned in place, the electric control bassinet can be smoothly tilted and adjusted at multiple angles, effectively reducing the spitting up of newborns;
- Independent over-temperature protection system, multiple failure alarm indications to provide multiple safety protection;
- The angle of the bassinet can be adjusted through the touch screen and support one-key leveling, which is more convenient for operation;
- Panel damping system, panels fall silently without holding (Optional);
- The height of whole unit can be adjusted;
- The large-capacity swivel storage drawer is ergonomic;
- Built-in weighing system, convenient to measure the weight of children and monitor the weight trend changes (optional);
- Camera can perform local image shooting and video recording, which is convenient for clinical review (optional);
- RS-232 connector to support data transmission;
- Low noise DC motor.

Newborn special monitoring module (optional)

- **Masimo** Rainbow SpO₂ pulse oximetry monitoring system: effectively eliminates exercise interference and improves the measurement performance under weak perfusion and body movement
- Hemoglobin monitoring: the perfusion variation index (PVI) enables clinicians to assess the patient's infusion status, and non-invasively and continuously measures the hemoglobin SpMet in the blood to assess the total blood oxygen content SPOC.
- ECG monitoring: 3-lead or 5-lead monitoring of neonatal ECG waveform and heart rate.
- **SunTech** NIBP non-invasive blood pressure monitoring: it has double protection function of software and hardware.
- **Masimo** CO₂ monitoring: provides two measurement methods: mainstream and external side flow to monitor CO₂ accurately in a real-time manner.
- Apnea wake-up monitoring: it has the functions of close monitoring, real-time prompt and adopt early intervention for neonates at risk of apnea.

Standard Configuration

Main body (including infant compartment, machine case, controller, I.V. pole and tray), external display screen, sensor box, humidity control function, oxygen concentration control function, >37°C temperature set function, VHA stand, skin temperature sensor, electric tilting system.

Environmental Requirement

Operating range: 20°C~30°C
Relative Humidity: 30%RH~75%RH
Ambient air velocity: <0.3m/s

Product Dimensions

Dimension: L 1500mm × W 675mm × H 1650mm~1800mm
Weight : 117kg

Optional Configuration

Weighing system, observation lamp, camera, ambient temperature and humidity monitoring function, panel damping system, UPS, oxygen cylinder supply system, AVR monitoring system (SpO₂, CO₂, ECG, NIBP, apnea wake-up, hemoglobin monitoring device).

Specification

Power requirement: AC220-240V, 50/60Hz, 1300VA
Auxiliary power output: AC220-230V, 50/60Hz, maximum current allowed: 3A
Mode of control: Air mode and baby mode controlled by micro-computer
Air temperature control range: 20°C~37°C (override mode 37.1°C~39°C)
Baby temperature control range: 34°C~37°C (override mode 37.1°C~38°C)
Temperature sensor display range: 5°C~65°C
Warm-up time (with the ambient temperature at +22°C): No longer than 40 minutes
Difference between the air temperature at one point and the average air temperature: No greater than 0.5°C
Difference between the average air temperature and the control temperature: No greater than 1.0°C
Temperature overshoot in Air Control mode: No greater than 1.0°C
Temperature uniformity: No greater than 0.8°C (mattress horizontally placed)
Temperature uniformity: No greater than 1.0°C (mattress tilted)
Accuracy of skin temperature sensor: ±0.2°C
Humidity display range: 0%RH~100%RH
Humidity control range: 30%RH~95%RH
Water tank capacity : 1200ml
Accuracy of humidity display and control: ±5%RH
Noise inside hood: ≤45dB(A)
Mattress size: 755 x 375 mm
Oxygen concentration display range: 0%O₂~100%O₂
Control range of oxygen concentration: 20%~65%O₂
Accuracy of oxygen display concentration:
±2%O₂ (oxygen concentration sets ≤25%)
±3%O₂ (oxygen concentration sets >25%)
Accuracy of oxygen control concentration: ±4%O₂ volume concentration
Weighing Range: 200~8000g (optional)
Weight display accuracy: ±10g (optional)
Rechargeable UPS use Lithium Battery , capacity is 20000mAh, 5-6 hours charging (optional)
Maximum tilt Angle for crib with electric adjustment function: no less than ±12°
Precision of tilt Angle display for crib equipped with electric adjustment function: within ±1°
Failure alarm: power failure alarm, fan motor alarm, sensor alarm, deviation alarm, over-temperature alarm, water shortage alarm, system alarm, SpO₂ Falarm, ECG alarm, RESP alarm, NIBP alarm, CO₂ alarm and so on.
Video storage duration: no less than 24 hours (optional)

Pulse oximetry indicators (optional)

SpO₂ display range: 0~100%, SpO₂ display resolution: 1%
SpO₂ measurement accuracy: within the range 70%~100% and without body movement: ±3%
SpO₂ waveform scan speed: 6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s
SpO₂ alarm upper limit: 51%~100%, SpO₂ alarm lower limit: 50%~99%
SpO₂ average time: 2s~4s, 4s~6s, 8s, 10s, 12s, 14s, 16s, Factory default 8s
PR display range: 25bpm~240 bpm, PR display resolution: 1 bpm
PR measurement accuracy: within the range 30bpm~240bpm and without body movement: ±3bpm
PR alarm upper limit: 26bpm~240 bpm, PR alarm lower limit: 25bpm~239 bpm
PI display range: 0.02%~20.0%, PI display resolution: 0.01%
Hemoglobin parameters (applicable only to incubators with the Masimo Rainbow sensor), Parameters that can be measured and displayed: SpOC, PVI, SpMet.

CO₂ PERFORMANCE INDICATORS (optional)

Total system response time: Mainstream system < 3s, Sidestream system < 5s
Measurement parameters: CO₂, AwRR
Measuring range: 0.0~25.0Vol% (CO₂), 0~150rpm (AwRR)
Resolution: 0.1Vol% (CO₂), 1rpm (AwRR)
Measurement accuracy: under standard conditions (22±5°C and 1013±40hPa, single gas): when CO₂ within the range of 0~15Vol% , measurement accuracy ± (0.2Vol% + 2% of reading),
AwRR measurement accuracy: ±1rpm.
Under all conditions: when CO₂ within the range of 0 Vol%~15Vol%, measurement accuracy ± (0.3kpa + 4% of reading),
AwRR respiratory rate: ±1rpm.

ECG PERFORMANCE INDICATORS (optional)

Lead type: 3leads: I, II, III; 5leads: I, II, III, aVR, aVL, aVF, V
Gain and error: at least supports 1.25mm/mV (×0.125), 2.5mm/mV (×0.25), 5mm/mV (×0.5), 10mm/mV (×1), 20mm/mV (×2), 40mm/mV (×4), accuracy error is less than ± 5%.
Waveform scanning speed: four scanning speeds: at least 6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s, with an error within ±10%.
Common mode rejection ratio (CMRR): Diagnostic mode: > 90dB,
Monitor mode: > 100dB,
Surgery mode: > 105dB
Power frequency notch: Monitor and Surgery modes: 50Hz and 60Hz
Diagnostic mode: 50Hz, 60Hz, and Off
Power frequency interference suppression capacity: ≥20dB
Input impedance: when the input signal frequency is 10Hz,
input impedance >5MΩ
Input signal range: ±10mV (peak-to-peak value)
Input dynamic range: DC offset voltage up to ±300mV
Lead-off detection current: measuring electrode: < 0.1μA,
drive electrode: < 1μA
Baseline recovery time: recovery time after defibrillation < 5s
Calibration signal: 1mV±0.01 mV (peak-to-peak), accuracy ±10%
Measuring range: 15bpm~350bpm, Resolution: 1bpm
Accuracy: ±1% or ±1bpm (whichever the larger)
HR alarm upper limit: (low limit+1bpm) ~ 350bpm,
HR alarm lower limit: 15bpm~(high limit - 1bpm)

RESP PERFORMANCE INDICATORS (optional)

Respiration lead: lead I, II, or automatic
Waveform speed: supporting at least 6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s
Waveform amplitude: supporting at least ×0.125, ×0.25, ×0.5, ×1, ×2, ×3, ×4,
×5 RR measurement range: 0~ 150rpm, Resolution: 1rpm
RR measurement accuracy: 10~150 rpm, ± 2 rpm or ±2%, whichever is greater
0 rpm~9 rpm, not defined.
RR alarm high limit: (low limit+1rpm)~150rpm
low limit: 0rpm~(high limit-1rpm)

NIBP PERFORMANCE INDICATORS (optional)

Measuring mode: manual, automatic, Short-term automatic mode (STAT)
Automatic measurement mode: 2.5min, 5min, 10min, 15min, 20min, 30min, 45min, 60min, 90min, 120min.
Time of Short-term Auto Mode: 5min±10%
Maximum single measurement time: <90s
Noninvasive blood pressure measuring range:
40mmHg~130 mmHg (Systolic pressure)
20mmHg~100 mmHg (Diastolic pressure)
27mmHg~110 mmHg (Mean blood pressure)
Static pressure measurement range: 0mmHg~140mmHg
Static pressure measurement accuracy: ±3mmHg
Pressure resolution: 1mmHg (0.1kPa)
Initial cuff pressure range: 60mmHg, 70mmHg, 80mmHg, 90mmHg, 100mmHg, 110mmHg, 120mmHg, 130mmHg, 140mmHg, Factory default 90mmHg.
Overpressure protection: 150mmHg±5mmHg
SYS alarm high limit: (low limit+1mmHg)~130mmHg, or (low limit+0.1kPa)~17.3kPa;
low limit: 40mmHg~(high limit-1mmHg), or 5.3kPa~(high limit-0.1kPa)
Resolution: 1mmHg or 0.1kPa
DIA alarm high limit: (low limit+1mmHg)~100mmHg, or (low limit+0.1kPa)~13.3kPa;
low limit: 20mmHg~(high limit-1mmHg), or 2.7kPa~(high limit-0.1kPa)
Resolution: 1mmHg or 0.1kPa
MAP alarm high limit: (low limit+1mmHg)~110mmHg, or (low limit+0.1kPa)~14.7kPa;
low limit: 27 mmHg~(high limit-1mmHg), or 3.6kPa~(high limit-0.1kPa)
Resolution: 1mmHg or 0.1kPa

APNEA AWAKENING PERFORMANCE INDICATORS (optional)

Trigger condition: when the heart rate (HR), blood oxygen (SpO₂) and any parameter of the newborn are less than the set value, the wake-up device will start to vibrate intermittently, When it is greater than the preset value, the wake-up device will automatically stop intermittent vibration.
When the breathing rate of CO₂ ≤ 6 rpm, the wake-up device will start to vibrate intermittently;
When the breathing rate of CO₂ > 6 rpm, the wake-up device will stop intermittent vibration automatically.
Vibration strength: 50, 60, 70, 80, 90, 100, Factory default 50.



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