

Endless love  
To Guard The New Life Safe



# HKN-93CS

Infant Radiant Warmer



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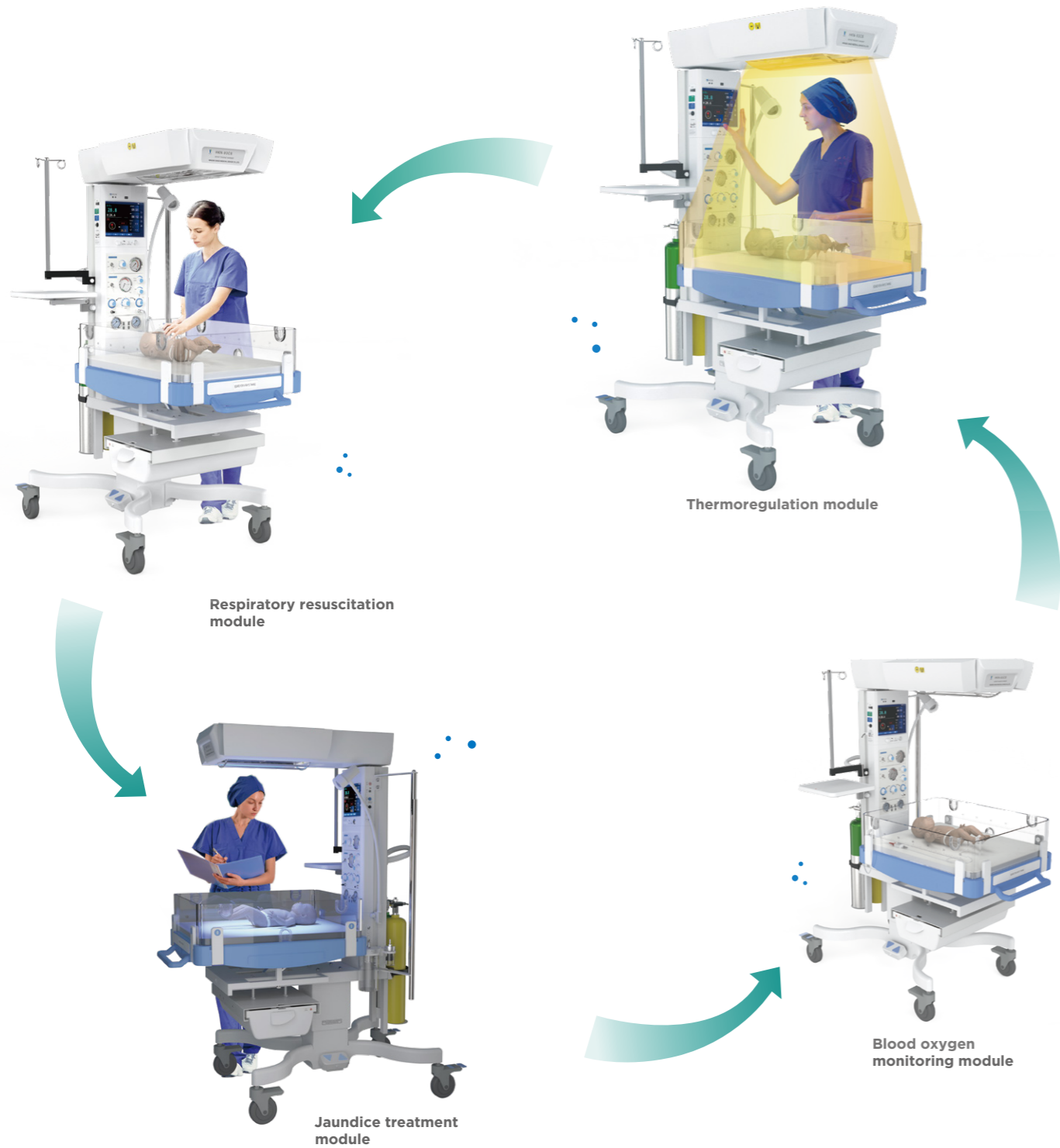


# The "Four in One" equipment

Intelligent integration of thermoregulation

+ respiratory resuscitation + jaundice treatment + blood oxygen monitoring

Build a safe neonatal surgical emergency place to effectively save the rescue time of emergency diseases.



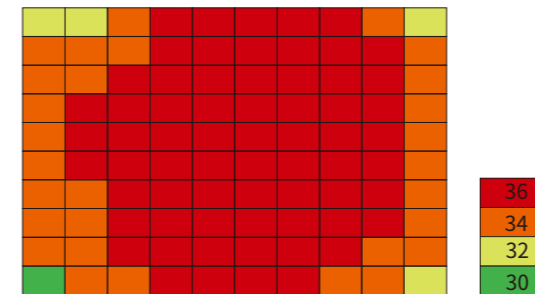
## CONTINUOUS AND STABLE THERMOREGULATION

### Building a warm and reliable growth cradle

The parabolic reflector with high reflectivity is adopted to make the radiation area more concentrated, ensuring the uniform heating of the mattress and avoiding the surrounding nursing staff from feeling overheated.

The independent high-precision double thermistor skin temperature sensor can realize mutual supervision and provide heating feedback in time to make the temperature monitoring more accurate.

The radiating head supports horizontal rotation, adjustable in 5 gears, convenient for clinical X-ray shooting.



Quartz high-power heating tube is adopted, which can efficiently convert into far-infrared radiation. Easy to be absorbed by the skin, with fast heating speed and short rewarming time.

High temperature resistance, corrosion resistance, good thermochemical stability and long service life.



## RESPIRATORY RESUSCITATION IN A RACE AGAINST TIME



Due to the immature development of the neonatal respiratory center, premature infants and low birth weight infants often suffer from critical situations of apnea. Therefore, it is necessary to establish respiratory support and oxygen therapy systems in the NICU, provide safe and effective respiratory resuscitation ventilation management, help newborns to breathe stably and reduce the occurrence of hypoxemia and lung damage.

- T-piece resuscitation device
 

Provide controlled and stable peak inspiratory pressure (PIP) and positive end-expiratory pressure (PEEP), ensure functional residual capacity (FRC), provide optimal oxygenation, and effectively prevent neonatal respiratory complications.
- Air/oxygen blender device
 

Provide accurately controlled air-oxygen mixed gas to children who need oxygen; as a gas supply device, it can be used with other clinical respiratory treatment systems (e.g. CPAP and HFNC).  
Can be used in conjunction with other clinical respiratory therapy systems (such as CPAP, HHFNC) to provide oxygen therapy for neonates.
- Low pressure aspirator device (Venturi)
 

Professionally used for cleaning the respiratory tract of newborns.
- Designed according to the requirements of the latest NRP guidelines jointly published by the three professional organizations: APP, AHA and ILCOR.



## EFFICIENT AND PORTABLE FOR JAUNDICE TREATMENT



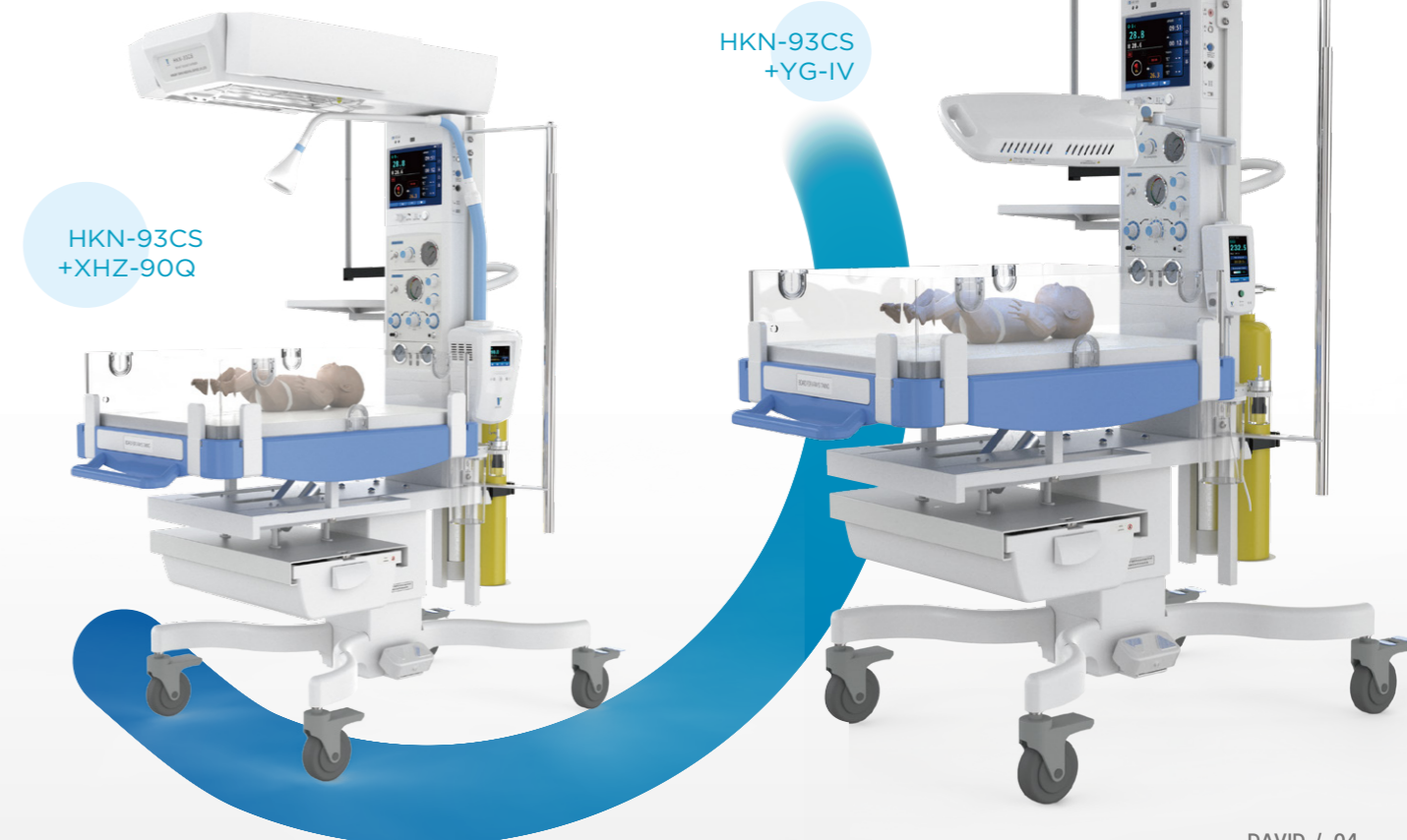
Jaundice treatment module

- Strong light therapy, using SMD LED light source, with high total bilirubin irradiance, in line with the American Academy of Pediatrics (AAP) guidelines for strong light therapy equipment.

Effectively treat jaundice, quickly reduce the level of bilirubin in newborns, shorten the treatment time, and reduce the probability of blood exchange to a certain extent.

Light treatment time accumulation and single treatment time display enable medical staff to replace the irradiation light source in time, so as to ensure the effect of phototherapy.

The effective life of LED light source is 50,000 hours, which can effectively reduce energy consumption.



HKN-93CS + XHZ-90Q

HKN-93CS + YG-IV



## REAL-TIME AND ACCURATE BLOOD OXYGEN MONITORING

24-hour non-invasive continuous monitoring, tracking and recording the changes of neonatal PI (blood perfusion index), PR (pulse), SpO<sub>2</sub> (blood oxygen saturation), which is convenient for timely observation of clinical condition changes.

### Masimo® Rainbow SpO<sub>2</sub> pulse oximetry monitoring system

Effectively eliminate movement interference and improve the measurement performance under low perfusion and body movement states<sup>1</sup>.

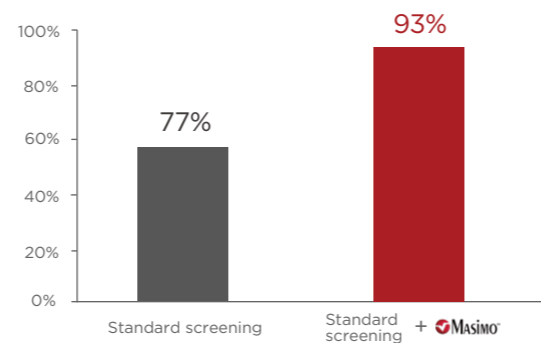
When combined with clinical assessment, the sensitivity of screening for critical congenital heart disease (CCHD) can be improved to 93% (optional).

Significantly reduce the incidence of severe retinopathy of prematurity (ROP)<sup>2</sup>.



SpO<sub>2</sub> Pulse oximetry module accessories

Independent Clinical Evaluation Versus Improved Screening Sensitivity of Critical Congenital Heart Disease (CCHD)



\*Zhao et al. Lancet.2014 Aug 30;384(9945):747-54.



<sup>1</sup><Performance of Three New-Generation Pulse Oximeters during Motion and Low Perfusion in Volunteers.> Shah N., Ragaswamy H.B., Govindugari K., Estanol L. J Clin Anesth. 2012 Aug;24(5):385-91.

<sup>2</sup><Castillo et al. Prevention of retinopathy of prematurity in preterm infants through changes in clinical practice and SpO<sub>2</sub> Technology.> Acta Paediatr.2011 Feb;100(2):188-92.

## EFFICIENT AND SIMPLIFIED HUMAN-COMPUTER INTERACTION

The 32-bit Android system has strong adaptability which can optimize human-computer interaction function, simplify clinical nursing steps, build a safe and comfortable treatment environment for newborns and save precious treatment time for medical staff.



### LCD display

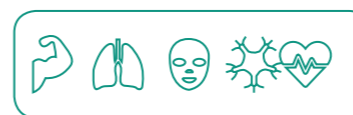
10.4-inch TFT color LCD touch screen, large characters, clearly visible from a long distance, convenient for observation and operation of medical staff.

Automatically identify the external environment, adjust the screen brightness and reduce the impact of bright stimulation on newborns.



■ Hands free alarm silence, and non-contact alarm mute function maintains a clean and quiet treatment environment.

■ Independent over-temperature protection system has a variety of fault sound and light alarm prompts, providing multiple safety protection.



APGAR score timing



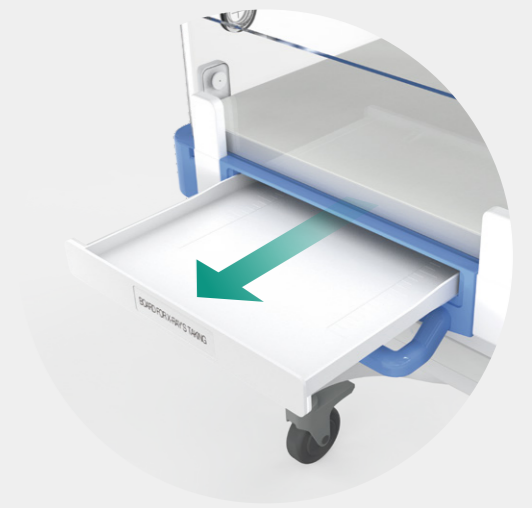
CPR timing functions

■ The APGAR timing and CPR timing function help medical staff to assess the vital signs of newborns timely.

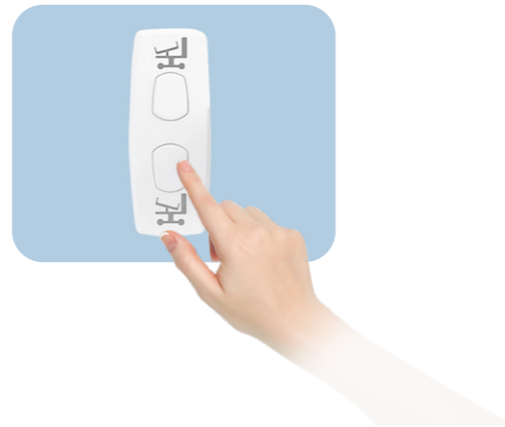
- Pressure-relief antidecubitus waterproof mattress is made of TPU material, which is waterproof, soft and breathable, thereby protects the tender skin of newborns and improving the comfort of newborns.



- An X-ray film box can be placed under the bassinet without moving the newborns.

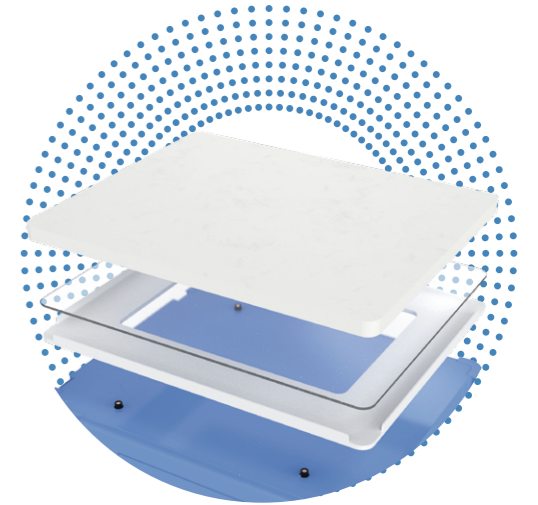


- The electric control bassinet can be adjusted at multiple tilting angles, which can effectively reduce the spitting up of newborns.

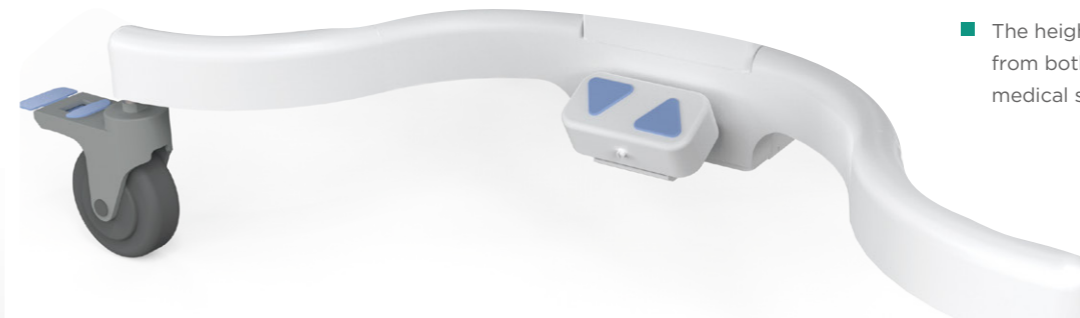


- Built-in weighing system is convenient to measure the weight of children and monitor the weight trend changes.

Optional



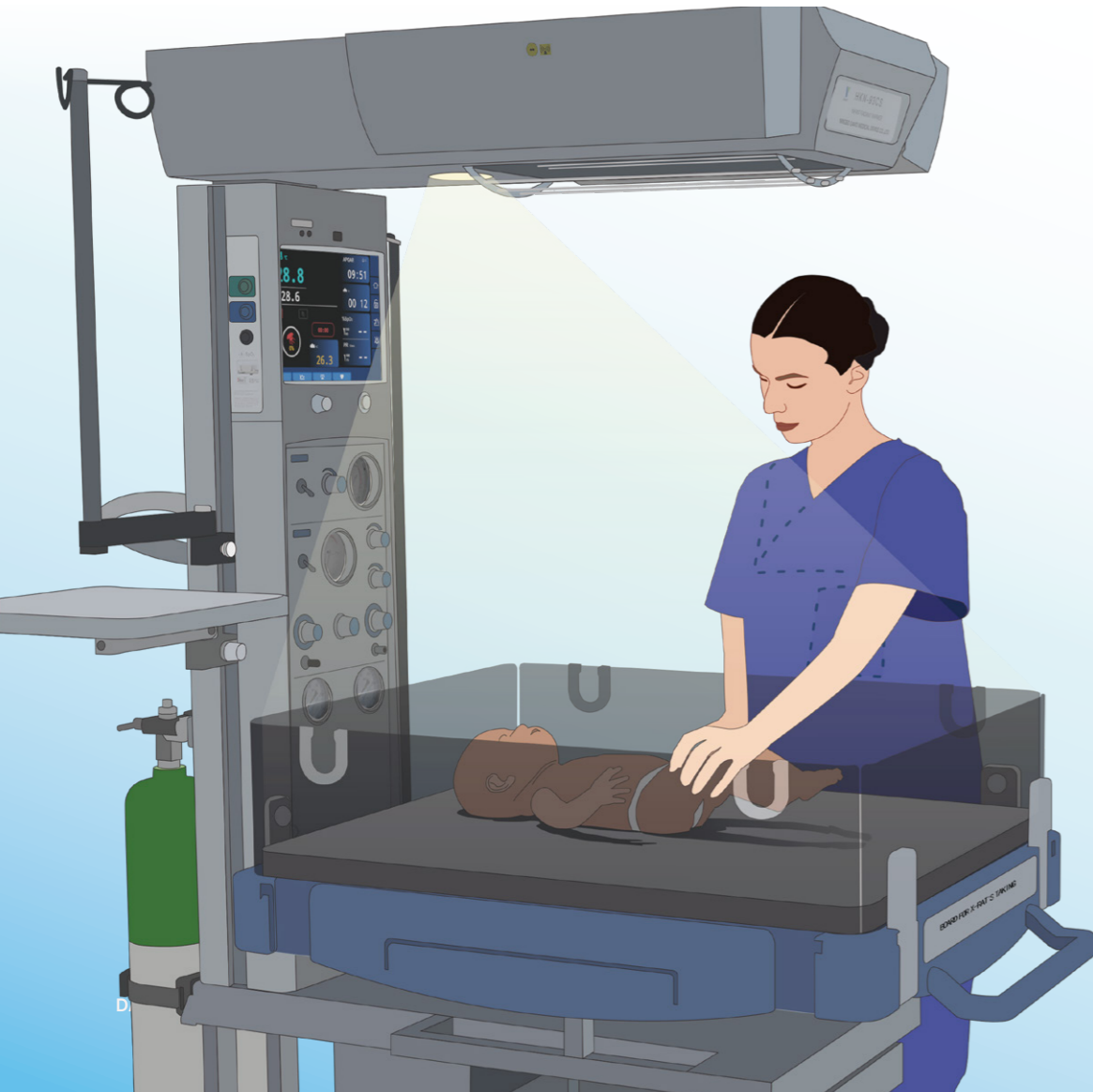
- The height of whole machine can be adjusted from both sides to meet the operations of medical staff with different heights.



- Can be connected to the central air supply of the wall or directly install the air/oxygen cylinders.



- The brightness of the built-in lamp is infinitely adjustable to provide even light covering the mattress, helping medical staff to observe and care even in a dark environment.



## CONFIGURATION TABLE

( ✓ Represents for standard function, ▲ Represents optional function. )

Infant radiant warmer module			
Controller	10.4-inch TFT color LCD touch screen	Air-oxygen blender	✓
Temperature servo control	Pre-warm mode, manual mode, Baby mode	Low pressure suction (Venturi)	✓
Warmer module	✓	Neonate bilirubin phototherapy unit	✓
Skin temperature sensor	✓	APGAR,CPR	✓
Hands-free alarm silence	✓	SpO <sub>2</sub> monitoring	✓
Vertical height adjustment stand	✓	Air cylinder, oxygen cylinder	✓
Electric tilting system	✓	External observation lamp	▲
T-piece resuscitator	✓	Weighing system	▲
Power voltage	AC110-120V, 50/60Hz or AC220-230V, 50/60Hz, 750VA		
Failure alarm	Power off, sensor, deviation, over temperature, setting, check, system, blood oxygen, upper and lower limit of SpO <sub>2</sub> , upper and lower limit of pulse, etc.		
Product dimension	L1075mm × W760mm × H1840		
Product weight	About 120kg (VHA stand)		