# COMON



B8/B6 Neonatal Incubator

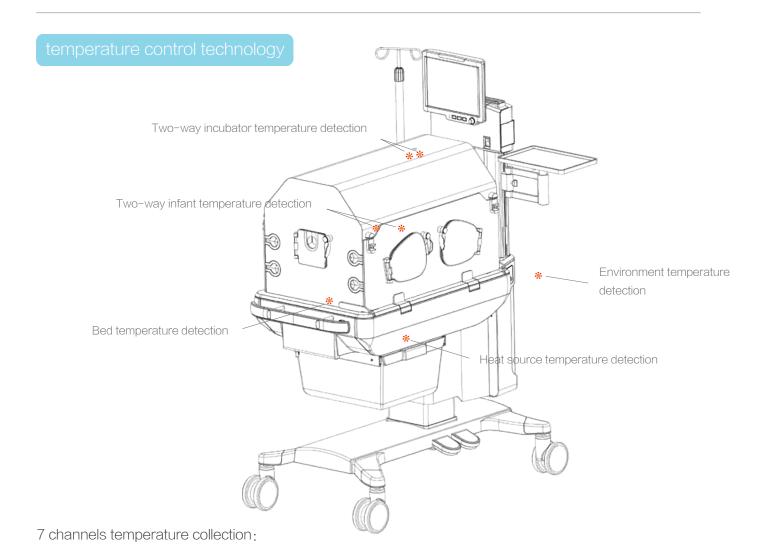
# A Deeper Love

Neonatal incubator is warming equipment used for providing constant temperature and humidity for treatment of premature infants and critical neonates on the basis of satisfying their physiological characteristics and needs.

COMEN B8 incubator was thoughtfully designed to provides stable temperature and suitable humidity ambient, in addition to configured vital signs monitoring function to promoting the growth and stability of even the most fragile of patients.

# Incubator System

To research and develop one of the world's leading incubator, COMEN has always target top level products as its competitor. "Whatever the mind can conceive and believe you have the ability to achieve." Overcoming lots of difficultiies and figthing for contineous 720days, COMEN B8 incubator provides stable temperature, suitable humidity and O2 consentration to newborn in the whole journey.



Appropriate temperature inside the incubator can reduce neonates' loss of water and to reduce their risk of dehydration, B8 double guarantee the control of temperature through 7 channels of detection.

# Comen temperature control system Traditioan I temperature control system min

Constant temperature figure

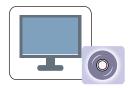
#### Intelligent Variable Resistance Heating Technology

Thanks to dual resistive heating tube and fin-style radiator, B8 shorten heating time of the incubator  $\leqslant$  35 mins with its control system, which saves time in emergency treatment of pretrms, in addtion, temperature fluctuation is significantly reduced to 0.3 ° .

Advanced air circulation: Dule inlet and out let Symmetrically

A more confortable environment with stable temprature and suitable humidity ambine is within reach.

#### 3 independent over temperature protection:



System protection

When temperature inside the shelf exceeds limits, heating instrument will stop heating automatically after detection by the control system



Hardware protection

A sensor is applied to control temperature through sending signals to heating instrument

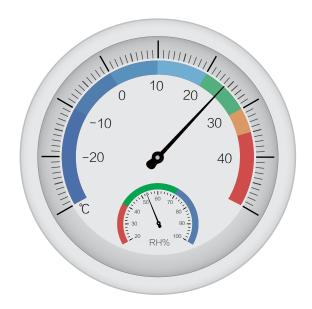


Mechanical protection

A mechanical over temperature switch is used to prevent over temperature based on its high-temperature deformation characteristics

#### Humidity control technology

Thanks to PWM control technology and advanced humidity generator, the B8 infant incubator provides fast wetting speed so that a environment similar to mother's womb is created in a short period of time.





- Effective humidity up to more than 95%: Suitable for premature infants with low weight
- Titanium alloy material for evaporation: corrosion resistance and scale deposits reduction
- PEEK material for thermal isolation: adiabated cover is made of PEEK material, it's corrosion resistant, high temperature resistant and high pressure resistant.

#### Oxygen concentration control technology

- Servo Oxygen Supply: According to air-O2 distribution standard and O2 consentration adjustment B8 infant incubator provids advanced close-loop feedback technology.
- One-press O<sub>2</sub> concentration calibration: Thanks to Comen patented technology—two-point calibration (21% and 100%), O2 concentration detection precision reaches to ±2%, higher than other brands.

#### Materia

• The transparent shelf is made of food-level Perspex materials with high transparency, safety, and environmental friendly characteristics.



# Specialized Neonatal Monitoring System

Specialized Neonatal Monitoring System is a tailored system that created for NICU by COMEN, including ExNeo\* ECG technology, Adap-DSP\* self-adapt NIBP technology, Masimo SPO<sub>2</sub>, Apnea self-rescue technology, and oxygen concentration detection function. And it is equipped with biocompatible specialized neonatal accessories. It not only ensures the correctness of ECG collection and NIBP measurement, but also solves the problem of neonatal respiratory distress syndrome, this system was used in the world first specialized neonatal monitor-COMEN C60.





Masimo SET Neonate SpO2 Technique

People has made lots of trails in improving the detection sensitivity of pulse and SpO<sub>2</sub> value of neonates on the condition that their blood perfusion and cardiac output are extremely I ower. The standard perfusion technology developed by Massimo is able to read at least 1/10 lower of blood perfusion than traditional pulse oximeter. Massimo SET performance on anti-interference is also outstanding. At present, the majority of NICU rooms have equipped with two or three high-end Massimo's SPO<sub>2</sub> monitor to meet their need of critically ill patients. Equipped with all kinds of clip and probes, it is suitable for babies of different size.



Apnea self-saving Monitoring

Apnea is the most common symptom of the newborns, and also a serious problem in NICU room. If not treated in time, it will cause the neonates oxygen-starved for long time, which may cause brain damage of the neonates and have great impact on their mental development. What's worse, it can cause neonates death under serious situation. Apnea self-saving monitoring can monitor newborns breathing in various ways and stimulate the nurse to flap their arch to arouse their breath.



# Adp-DSP\*

#### ExNeo® Neonate ECG Measurement Technique

Due to the big difference between ECG signal of neonates and adults, ECG measurement technology has long been a difficult problem faced with neonatal monitoring workers, in addition, newborns' crying and struggling during ECG testing make this issue even worse. So it is difficult for traditional monitor to provide accurate ECG measurement data for neonates. Based on the feature that neonates' fast heart rate change, ExNeo® ECG measurement technique focus on improving ECG signal acquisition sensitivity and signal resolution ratio to get rid of neonates moving interference at the utmost, so that to guarantee ECG measurement accuracy and breathing rate test accuracy.

#### Adap-DSP® Adaptive Signal Processing Technology

According to the low blood pressure and weak perfusion character of neonate, Comen use Adap-DSP® system to provide more accurate blood pressure measurement. We all know that newborns are the most vulnerable lives, a small mistake during measurement would cause serious harm to them. Designed With unique neonate specialized measurement mode, Comen's neonatal monitor is able to completely eliminate the potential risk of failure operation.

Both software and hardware accessories are designed with over–pressure protection and the maximum pressure of NIBP cuff shall be no more than 150mmHg to guarantee newborns' safety. Comen's neonatal monitor improves its anti–interference performance of BP measurement to reduce influence of newborns' frequently movement. so no matter the newborns are moving or not, the monitor is able to guarantee its test accuracy.



#### Masimo SpO<sub>2</sub>

Use Masimo SpO<sub>2</sub> technology, Specialized neonatal suffocation self-saving function equipped with oxygen density monitoring function.



#### Apnea Self-save Probe

B8 has a probe that wrapped under the infant's foot to stimulate neonates to resume breathing.

Abdomen attached respiration sensor:
Neonates conduct abdominal breathing.
Attach the sensor to the abdomen,
obvious abdomen up and down
movements squeeze the sensor and
transforms respiratory signals to electric
ones for the system to collect and identify.



## Neonatal ECG Cable and Electrodes

Neonatal ECG cable and electrodes have passed biological compatibility.



#### Neonatal Monitor Protection

Various specification of neonates NIBP cuffs to guarantee measurement accuracy of different size of newborns

#### Four independent CPU

Four independent CPU system, these are human-machine interaction, alarm system, temperature collection and thermoregulation, each system works independently without interference to each other, when one CPU fails, it won't affect other CPU systems.









Alarm system

Temperature collection

Thermoregulation

### COMON



#### Human-Machine interaction

12.1 inches LED touch-screen, key board with backlit and touch operation,
Screen angel adjustable, easy for observation.



Unarmed disassemble of beds and sink to realize through cleaning and disinfection. The air circulation system can be thoroughly cleaned without removing the temperature control system and the heating equipment.





#### Integrated design of monitor and incubator:

- easy to manage equipments. Integrated design is able to avoid risk of monitor falling off.
- Neonatal specialized monitoring to avoid mistake operation of the monitor.
- The true realization of the integrated transport monitor and incubator.

Adopting damping design on the left and right acsess panel, easy to open and close. Slowly falling of the panel is able to get rid of hitting the incubator, creating a calm zone around the neonates.

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