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# Product Catalogue



Monitoring Products Initiated by "Specialized Products, Specific Usage"

Comprehensive NICU Solution

Comprehensive OR/ICU Solution



**Shenzhen Comen Medical Instruments Co., Ltd.** 

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Add: No.2 of FIYTA Timepiece Building, Nanhuan Avenue, Gongming Sub-district, Guangming New District, Shenzhen, 518106, P.R.China Tel:+86-755-2640 8879 400-700-9488 Fax:+86-755-2643 1232 Website: en.comen.com E-mail: info@szcomen.com



# Contents

### 01 Monitoring Products Initiated by "Specialized Products, Specific Usage"

- Specialized Patient Monitor
- Patient Monitoring
- Central Monitoring System
- Obstetric Monitoring
- Electrocardiograph
- CVAD Guiding system
- Sequential Compression System

### 24 Comprehensive NICU Solution

- Neonatal Incubator & Thermoregulation
- Jaundice Treatment
- Neonatal Respiratory Support

### 36 Comprehensive OR/ICU Solution

- Defibrillator Monitor
- 40 Ventilator
- High Flow Heated Respiratory Humidifier
- Anesthesia Machine
- Surgical Products
- Infusion System
- Smart OR

# Monitoring Products Initiated by "Specialized Products, Specific Usage"









C20 Specialized Fetal & Maternal Monitor

C60 Specialized Neonatal Monitor

U8 Catheter-positioning Guiding System C30 Multi-parameter Patient Monitor

COMen 01

# C100 Specialized Cardiovascular Monitor

≥ Modular Monitor + ECG



### Modular Monitor

Functional modular slot

Two extendable modular slots, CO<sub>2</sub> / IBP / C.O. / AG / ICG module optional; Flexible configuration based on department requirements.

Printing module slot X

Support 216mm thermal recorder, 12 waveforms simultaneously recorded.

# C30 Multi-parameter Patient Monitor

Transfer patients

Transfer patients in the hospital

Comen C30 is a new generation of specialized ambulance & transport monitor. It is designed according to rescuing scene and ambulance transportation monitoring requirements for practicability, convenience and reliability of emergency treatment, first aid and transportation. It adopts PC/ABS high-strength engineering plastics, high-reliability Linux operation system and high-brightness scratching-prevention LCD. It is equipped with specialized first -aid monitor bag with fitting management pack and first aid device collection pack able for multi-carry. The entire machine is portable, solid, reliable, stable, waterproof, fireproof and anti-falling. It also can be displayed clearly under strong sunshine in the open air. It also can be used under various kinds of severe environment to meet the demand of medical agents such as troops and hospital during emergency treatment, first aid and transportation in the field.



• Waterproof, vibration shock resistant

Monitoring in emergency

First-aid on the spot

- The specialized waterproof and anti-shock C30 first aid bag is portable and easy carrying with enough space
- Multi-carry options: shoulder strap, stretcher, mount on the ambulance
- Place first aid articles in left storage bag and all instrument accessories fitted in right one

### C100 can be used as a electrocardiograph

C100 has passed IEC 60601-2-25 ECG Machine Specialized Standards. Advanced performance: Input impedance≥50MΩ, Polarization resistance voltage: ≥±650mV, Common mode rejection ratio: ≥105dB, Time constant: ≥5S.

72 hours' full disclosure 12-lead ECG waveform review.

Shortcut key for ECG, one key switch between the monitoring mode and the ECG mode. 216mm modular printer; synchronous printing of 12-lead ECG.

COMEN 02 COMON 03



# C60 Specialized Neonatal Monitor



Apnea Self-saving monitoring

Unique neonatal Apnea Self-saving monitoring solves the suffocation symptom brought by Apnea neonatorum, gives superior care to the neonates.



### Oxygen concentration monitoring function

The oxygen concentration of the incubator will be displayed on the monitor through oxygen sensor, it's convenient for medical stuff to know the oxygen concentration status.



# C20

# Specialized Fetal & Maternal Monitor

In obstetrics, we take care of both fetus and pregnant women.

Different monitors will be used during the process of prenatal diagnosis, premature rescue, delivery, postpartum recovery. Traditional obstetric care equipment, including fetal monitor, emergency transport monitor, maternal / fetal monitor and multi parameter monitor, makes monitoring complicated. However, COMEN makes it simple and creates the C20 specialized obstetric monitor. C20 provides a variety of obstetric care equipment which can meet all the demands in obstetrics.

### **Functional Characteristics**

- 12.1" LCD touch screen
- Full keyboard design makes clinical editing more easily
- Screen can be adjusted for multi-angle observation
- Suitable for antepartum and postpartum applications
- Fetal interface, fetal and maternal interface, big font interface
- High sensitive waterproof FHR transducer
- Auto/Manual fetal movement marker
- Automatic fetal status scoring system
- Built-in 152mm Thermal Printer
- Compatible with COMEN central monitoring system

### Professional fetal automatic scoring system

NST

Fischer

Improved Fischer

Krebs

# C90 Multi-parameter Patient Monitor

C90 monitor is integrated with the world-leading vital signs parameter monitoring technology and IT application technology to make a high-end vital signs monitoring platform and provide a comprehensive monitoring solution.

- 17" high resolution LCD touch screen 1280 X 1024
- Rotary knob, buttons and touch screen operation.
- Built-in lithium battery: to ensure keeping continuity of patient's data during operation with its running time over 2 hours
- Bracket solutions: Trolley
- Supporting built-in thermal printer and external laser printer
- Module conductive contact: gold-plating technology, excellent conductivity
- Infrared transmission for module data transfer



# C70 Multi-parameter Patient Monitor

# Classic Continuation Continuous Innovation

C70 inherited the outstanding character of our Patient Monitor C90 and adopted with highly integrated modular mechanical structure, it efficiently combines the structure, function and maintainance management. C70's single-module and multi-module can combinate at meeting the upgrade which clinical needs. C70 create a new era in modular monitor field.



### Functional module slot

Plug and play, inchangeable Various kinds of module slots, multi parameter module C30 and multi parameter module C31 can be pluged in C90 and C70, which provided the vital signs parameter monitoring.





















C80

Multi-parameter Patient Monitor

12.1" LCD touch screen

C86

Multi-parameter Patient Monitor

15" LCD touch screen

C80/C86 is the new generation of patient monitor designed and developed by COMEN. C80/C86 is equipped with SD card port, USB port, convenient handle, multiple mounting solutions, IPX1 level waterproof cabinet design and sturdy housing to withstand rough handling. C80/C86 fulfills the hardware requirements for intensive care monitoring in multiple environments, efficiently caring for human life every second.



# C50

### Multi-parameter Patient Monitor

### Features:

- 10.4" LCD touch screen
- Support rotary knob, buttons and touch screen operation
- Perfect patient information management system
- 5° inclination screen makes bedside monitoring easier
- Fan-less design, avoid cross contamination on laminar, ultra quiet;
- IPX1 waterproof
- Intelligent alarm technique, automatic recognition alarm level











Multi-parameter Patient Monitor

### COMEN Telemetry Monitoring System

- RF telemetry technology.
- Support 3,5 lead ECG.
- Maximum 48 telemetrys can be connected to Central Monitoring System.





# NC3

### Vital Signs Monitor

Specially designed for inpatient monitoring and ward rounding, easy and quick to learn basic vital signs; Configured with easy-to-use NIBP, SpO<sub>2</sub> functions; Quick body temperature measurement technique in clinical application: use infrared ear thermometer to learn ear cavity temperature in 1-2s, which is instantly uploaded wirelessly to NC3; 12 hours battery life under standby mode, high resolution display; Simple and elegant, compact and lightweight; Aesthetics, technology, science and wisdom in one.

# NC5

# Vital Signs Monitor

### Ingenious and Minimalistic, Smart and Lightweight

Applied to outpatient, emergency and general wards.

As a spot check monitor and bed side monitor, it integrates NIBP, SpO2,
ECG, Ear Temp. It is simple, tasteful, compact and lightweight, a perfect
combination of technology and aesthetics.

# NC 12

Screen Size: 12.1 inch





NC 10

Screen Size: 10.4 inch



Screen Size: 8 inch



# Multi-parameter Patient Monitor

Simple, reliable, multi-functional.

Semi modular patient monitor, combined the advantages of normal patient monitor and modular patient monitor, which can meet different demand of different department in hospital.

Support rotary knob, buttons and touch screen operation.

Plug and play modular design offers the most commonly used parameters, including CO2, IBP, AG, C.O. ,BIS.

Screen brightness auto-adjustment with ambiant light sensor.

Button bar was located at right side on the front shell, more convenient for using.

Fan-less design, avoid cross contamination on laminar, ultra quiet.





# NC19 Multi-parameter Patient Monitor

Screen Size: 19 inch

NC19 is a standard display interface which integrated both hardware and software technology from its mature product C90 & C70. Not only with slim and wide LCD screen, but also capacity with powerful information processing. This product equips with various peripheral interface, which is suitable for working with different equipment. Relying on a variety of mounting solutions, developing with innovative technology, COMEN perfectly combines actual medical applications and modern aesthetics into one, which comes as Separated Modular Patient Monitor NC19.

This innovative monitoring applies with the comprehensive care units; Integrate with patient monitor C30 . It is very convenient for nurses to observe the data with 19 inch LCD screen, and also the modular patient monitor is a classic model for the ICU.



# STAR8000F

### Multi-parameter Patient Monitor

### eatures.

- 12.1" LED backlight touch screen with low power consumption
- Support rotary knob, buttons and touch screen operation
- Fan-less design, avoid cross contamination on laminar, ultra quiet
- Large data storage
- Large capacity battery, incredible long service life



# STAR8000E

### Multi-parameter Patient Monitor

### Features:

- 12.1" LED backlight screen with low power consumption
- Support rotary knob, buttons and touch screen operation
- Fan-less design, avoid cross contamination on laminar, ultra quiet
- Large data storage
- Large capacity battery, incredible long service life
- Independent striking NIBP shortcut key, easy to use



# STAR8000H

### Multi-parameter Patient Monitor

### Features:

- 8.4" LED backlight touch screen
- Support rotate, key and touch screen operation
- Fan-less design, avoid cross contamination on laminar, supreme quiet
- Pass CE certificate, modular design with magnesium alloy guarantee safety, reliability and stability
- Light weight with compact design, multiple mounting solutions, easy to transport and mount

# STAR8800

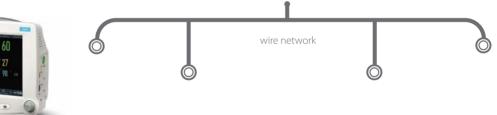
Central Monitoring System Software

Monitoring system consisted of varies of specialized monitors





C90





STAR8000E



C100A







# C21

### Specialized Fetal Monitor

### Features:

- 12.1" LCD touch screen
- Screen can be adjusted for multi-angle observation
- Standard, big font, parameter list interfaces
- High sensitive waterproof FHR transducer
- Built-in 152mm Thermal Printer
- 120 hours full data review
- Auto/manual fetal movement marker
- Automatic fetal status scoring system:
   NST, FISCHER, IMPROVED FISCHER, KREBS

# C22

### Specialized Fetal & Maternal Monitor

### Features:

- 12.1" LCD touch screen
- Screen can be adjusted for multi-angle observation
- Suitable for antepartum and postpartum applications
- Fetal interface, fetal and maternal interface, big font interface
- High sensitive waterproof FHR transducer
- Auto/Manual fetal movement marker
- Built-in 152mm Thermal Printer
- Compatible with COMEN central monitoring system
- Automatic fetal status scoring system: NST, FISCHER, IMPROVED FISCHER, KREBS



# STAR5000E

### Fetal Monitor

### Features:

- 5.7" screen
- Built-in 112mm thermal printer
- Quick release button for paper replacement
- Built-in Lithium-ion battery , up to 4 hours
- Auto/manual fetal movement marker
- Automatic fetal status scoring system
- FHR signal strength indicator, twins cross channel verification
- Power-off data protection for 300 cases.
- 60 hours real-time waveform replay & storage
- Timing monitoring function to avoid over time monitoring
- Support timing printing
- Compatible with COMEN central monitoring system



COMEN 16 COMEN 17



# H12 Electrocardiograph

- 10.4 LCD touch screen
- 12 × 1 、 6 × 2 format display, vertical screen display
- Support handwriting input
- 10000 patient case storage, support JPG format storage
- FTP / DICOM protocol allow connection with hospital HIS、EMR、PACS system without PC workstation.



# H3 Electrocardiograph

- 6.2" LCD touch screen
- Screen brightness auto- adjustment with ambiant light sensor
- 3 × 4 and 6 × 2 display format, 12 lead display simultaneously
- 10000 patient case storage, support JPG format storage
- FTP service allows patient case download in a remote network.

# CM1200

### Electrocardiograph

### Features:

- 12.1" folding-up touch screen
- Support multi-language, printing preview
- Sleep/wake up mode for saving energy and extending screen life
- Lead status display
- Alphanumeric keyboard, support hand-writing patient information input
- Anti-defibrillation
- 10,000 ECG internal memory
- Last 120 seconds 12-lead waveforms reviewable and recordable
- 216/210mm thermal printer, support rolling paper, and Z-fold paper
- External printer and data transmission support by USB port
- Optional ECG working station



# CM1200A

### Electrocardiograph

### Features:

- 8.4 inch LED touch screen
- Alphanumeric keyboard and hidden handle
- Lead status display
- Manual/ Auto/ Rhythm working modes selectable
- Support 4 hours working time
- 300 ECG internal memory
- 210mm, 216mm roll and Z-folded paper for options
- Net-grid on screen for easier observation



# CM1200B

### Electrocardiograph

### Features:

- 5.7" Screen
- Lead status display
- Numeric keyboard, backlight design for night use
- 300 ECG internal memory
- 120 seconds 12-lead waveforms reviewable and recordable
- Support 210mm rolling paper, Z-folded paper
- External printer and data transmission support by USB port
- Optional ECG working station
- Basic economic model



# U8

# Catheter-positioning Guiding System

the Most Comprehensive CVAD solution with Ultrasound and ECG positioning



# CVAD operating platform integrating ultrasound and ECG positioning

CVAD (central vascular access device) is a catheterization technique in which a catheter is inserted through a peripheral vein and the tip of the catheter is placed in the SVC (superior vena cava) or IVC (inferior vena cava). It includes PICC (peripherally inserted central catheter) and CVC (central venous catheterization) PORT. It is mainly used for measuring CVP (central venous pressure), chemotherapy, parenteral nutrition pathway, and administration of high-risk medication (hypertonic, high-acidic and high-alkaline).







Vessel localization and evaluation

Diagnosis of the ectopic catheter

In response to the above problems, Comen U8 proposes a CVAD puncture solution.

### **CVAD Solution**

Measure body surface ECG



ECG-guided positioning



Traditional CVAD puncture and catheterization requires requires to use various devices, which occupies large space and involves complicated operation. Meanwhile, interference between the equipment would effect the quality of ultrasound images and the stability of ECG waveforms. U8 has solved these problems and helped clinical staff to make decision confidently.

Distinct atrial P wave visible



Accurate ECG- guided positioning

Ultrasound-guided catheterization



Evaluate blood vessels using ultrasound, choose the vein for catheterization, and decide the catheter model

\* Clinical & technical workflow



# SCD600

# Sequential Compression System For preventing DVT and PE





# Light and Comfortable

Flexible and efficient workflow, SCD600 features a light body and unique clip design for handy and intuitive control experience. All of this allows for greater flexibility and comfort for both clinicians and patients.



# Powerful and intelligent

Focus on patients, providing personalized treatment. And with intelligent compression, dynamic and visualized treatment.

# Accurate and reliable

Medical- grade dual pressure sensor features real-time pressure collection and provides double overpressure protection to ensure patient safety.

The Dual CPU processor gives real-time monitoring of the entire treatment process to ensure safe and reliable treatment.



# Comprehensive NICU Solution



# BQ80 Infant Radiant Warmer

### New Neonatal Nursing and Rescue Platform

This is by far the most powerful 4 in1 neonatal nursing platform. The BQ80 integrates four key rescue and nursing systems to achieve one-stop operation and management. At the same time, it scientifically optimizes the workflow, helps medical staff to easily respond to urgent medical needs, effectively saves the valuable rescue time, and provides comprehensive and meticulous care for newborns.



### Heating:

BQ80 applies far infrared ceramic heating tube for improving the radition efficiency and extend the duration.

### Monitoring:

Built-in C31 specialized neonatal monitoring system is available for monitoring neonatal vital signs parameter, which can save the space and cost.

### Resuscitation:

Built-in T-piece resuscitation provides safe and effective integrated asphyxia resuscitation and ventilation management including negative pressure sputum suction, positive pressure resuscitation, and oxygen therapy

### Phototherapy:

Canopy integrated jaundice treatment LED light for phototherapy, providing a soft blue light for the neonatal with jaundice.



B8/B6 Neonatal Incubator

# Specialized Neonatal Monitoring System

Specialized Neonatal Monitoring System customized for NICU by COMEN, including ExNeo® ECG technology, Adap-DSP® self-adapt NIBP technology, Masimo SpO<sub>2</sub>, Apnea self-saving technology, and oxygen servo control function. And it is equipped with 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.







Adap-DSP®



Masimo SET



Apnea self-saving

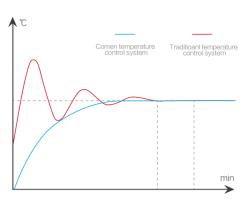
# Incubator System

Temperature control technology

### 7 channels temperature collection

Appropriate temperature inside the incubator can reduce neonates' loss of water and to reduce their risk of dehydration, B6/B8 double guarantee the control of temperature through 7 channels of detection.

3 independent over temperature protection



Constant temperature figure

# Humidity control technology

Thanks to PWM control technology and advanced humidity generator, COMEN infant incubator provides a fast humidified speed which could creat a womb-like environment in a short period of time









BC-107/108 Infant Bassinet



BL70 Infant Phototherapy Equipment



### High-intensity irradiance

- Equipped with high-intensity LED cold light source, with less heat production, BL70 supports long-time treatment.
- With five levels irradiance adjustment, BL70 allows treatment tailored to each patient's need.

# Precise Treatment for Neonatal Jaundice

Equipped with an irradiance probe to accurately measure the irradiance value and ensures that the baby receives enough irradiance, achieving precise treatment.



### Irradiance probe

After clarification using irradiance probe, phototherapy irradiance value of 5 levels can be displayed on the screen.

### Precise positioning

Using unique red light precise positioning, BL70 ensures correct position of the baby.



### Ward round assistance

When doctor doing ward checking, it is unnecessary to take off the cover, and check neonates condition through the screen in real time.

# Focus on Therapy, Applicable to Various Settings

- Ultra compact ---- Lightweight and portable, less space usage.
- Large screen ---- 4.3-inch color touch screen, easy to observe and operate.
- Ultra quiet ---- Fanless design, noise free, ensuring a quiet and comfort environment.
- Various mounting solutions ---- Convenient to move, seamless integration of different settings, including radiant warmer and baby cradle bed.
- Quick-release structure ---- The main unit can be quickly separated from the trolley
  and placed directly on the incubator hood.
- Flexible adjustment ---- Easy adjustment of height and angle.



# BQ70

# T-piece Infant Resuscitation System

The T-piece Infant Resuscitation System is designed to establish a clear airway, delivering oxygen or air/oxygen mixtures equired by resuscitation of infants.

### 3 functions into 1

Full integration of suction, resuscitation and  $O_2$  therapy, meeting the latest NRP guidelines (Neonatal Resuscitation Program). It simplifies the operation by making set-up easy and care area space-saving.

# Movability within reach Bringing life-saving capacity to anywhere

Bringing life-saving capacity to anywhere within hospital by virtue of its light weight and handle design. A trolley is supported to enhace the portability.



Pressure relief valve at the gas inlet

Membrane safety valve 1

# 4-channel pressure control

Reliable internal mechanical design, reducing the possibility of overpressure

Pressure reducer

Membrane safety valve 2

# **Easy Operation**



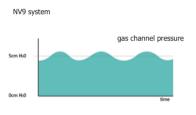
### Neonatal Ventilator

### The Epitome of Neonatal Non-invasive Ventilation

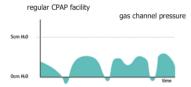
- NCPAP+apnea wakeup function
- SNIPPV+backup ventilation
- One button for fast oxygen ventilation
- HFNC+pressure monitoring function
- Manual ventilation

Exceptional apnea wakeup function: apnea monitoring and alarm function, providing positive airway pressure to lower the risk of neonatal apnea.

### iFlow Intelligent Closed-loop Control System



The most stable respiratory waveform



Fast and simple pressure setting: easy to setting the pressure through touch screen in one step.

Coanda-effect pressure generator: Provding stable pressure to settle neonate's weak resilience, and near the nose monitoring is more accurate and read.

**Real-time leakage compensation:** iFlow system can automatically compensate leakage to guarantee ventilation treatment efficiency.

### O<sub>2</sub> Concentration Control System

Fast and easy Fio₂ setting: adopt electronic control of air-oxygen blending to directly set FiO<sub>2</sub>, more precise and accurate.

Accurate O<sub>2</sub> concentration monitoring: CITY O<sub>2</sub> concentration sensor, short react time and instant monitoring.

One key calibration: one key to calibrate the O<sub>2</sub> concentration, automatically success after a moment.

SpO<sub>2</sub> Monitoring: NV9 is configured with Masimo/Nellcor SpO<sub>2</sub>. The effect of non-invasive ventilation is judged by the changes of SpO<sub>2</sub>.



# KL-20

### Medical Air / Oxygen Blender

An independent gas mixer receiving separate oxygen source and air source, and delivering mixed gas with adjustable oxygen concentration and volume; Incorporate humidifier and oxygen tube/pressure generator into oxygen apparatus/CPAP machine.



# NV6

### Neonatal Ventilator

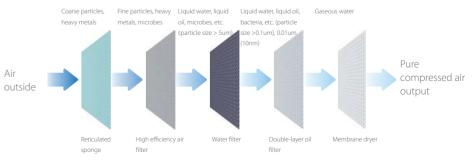
Bubble CPAP not only provides CPAP ventilation therapy, but also it is unique care for patients lies in that the high frequency vibration bubble makes the airflow of entering into patient's respiratory system produce high frequency oscillation, so that it gives a quick tap for the lung of patient, hence to improve the respiratory function, reduce the amount of dead space, advance expectoration and speed recovery. With HFNC high flow O<sub>2</sub> theraphy, NV6 is easier to use and able to aviod damage to the patients.

# VS-20

### Pure And Ultra-quiet

VS-20 applies high-effective filtering technology to provide pure compressed air.





COMON 34 COMeN 35



# Comprehensive OR/ICU Solution

S8



Solver Congress

Solver

**Defibrillator Monitor** 

# 1 pair

Defibrillating operation can be completed on a pair of electrode paddles. Pediatric paddles built in adult paddles.



S5

# 4 in 1 Design

Provide a full range of functions to meet various life support needs

With Defibrillation, Pacing, Monitoring and AED mode, S8 is not only suitable for pre-hospital first aid, but also applicable in in-hospital usage.

# 1 knob

Mode can be switched among manual defibrillation, pacing and AED. In manual defibrillation, the user can complete the energy selection within 1 second.



Defibrillator charge to 200J and shock in 3 seconds, rescue time is guaranteed fully.

# 3 steps

Fulfill defibrillating operation (Energy selection - Charging - Discharging).

25 types

Energy selections.



# V3 Ventilator









Patient type

Waveform measurement tool

Automatic alarm limit

Benefit from the intuitive UI design of V3, it only takes two steps to adjust ventilation parameters.

The functional layout is clinically applicable, and what you think is what you get.

# **Extensive Respiratory Management**

V3 has a comprehensive range of ventilation modes and special features that meet the requirements of intensive care respiratory therapy.

It fully supports the various treatment needs of ICU, PACU, RICU, EICU, PICU and other wards.

Ventilation modes:	Invasive ventilation mode	• V- A/C • V- SIMV • P- A/C • P- SIMV	• CPAP/PSV	Non- invasive ventilation mode	P- A/C     P- SIMV     CPAP/PSV     High flow oxygen therapy
Respiratory Respiration Assisting tools:	Assisted ventilation	Manual breathing		Smart ventilation	Compliance compensation     IntelliSynTec     Apnea ventilation mode
Monitoring function:	Waveform monitoring	P- T waveform P- V loop	• F- T waveform • F- V loop	V- T waveform  F- P loop	Wavefrom chart     Wavefrom chart

# Easy to Use

The V3 screen can be flipped freely to the best viewing angle For the most comfortable operating experience.



# NF5



# Simple and practical

- Ultra- Large touch screen: NF5 is equipped with a 4.3- inch touch screen, which allows easy and quick operation by touch and navigation knob.
- Electronic Air- O<sub>2</sub> mixer system: easy to set up flow rate and O<sub>2</sub> concentration.
- Intuitive UI design: large font, easy for caregiver to operate and observe.





# Intra- hospital transport

- High performance turbine, no need for compressed air supply
- Integrated battery for transportation
- Light and compact medical trolley ease intra- hospital transport



### Safe and comfortable

- Multi- position temp monitoring: NF5 is equipped with 3 temp sensors, which enable real-time temp monitoring, synchronized closed- loop feedback, joint high temp alarm, smart water level management and over- temp protection function to ensure safer heating.
- High- performance nasal cannula: ergonomic design, soft and comfortable, free of constriction.
- Ultra- quiet design: The ultra- quiet turbine significantly reduces noise, provides a quiet O₂ therapy environment, reduces irritability.

# SpO2 monitoring

 Optional Comen, Masimo or Nellcor SpO<sub>2</sub> monitoring function, real– time monitoring of the patient's O<sub>2</sub> concentration, ease evaluation of the effectiveness of highflow O<sub>2</sub> therapy, so that doctors can optimize the treatment plan in real time.





# AX-900 Anesthesia Machine

### Screen

- 15- inch four- way rotating touch screen for doctors of different heights carrying out observation and operation at different posture; improve doctor comfort and reduce work fatigue.
- Reasonable partitions of configuration parameters and monitoring
- parameters; all the observations and operations can be completed within 2– level menu.
- 8- inch independent control screen is adopted in the electronic flow control system, making it clear and handy to use.
- Bookmark menu, simple and clear- cut
- Self- explanatory and easy to use

# Full electronic flow control system

- Full electronic flow control system
- Fully electronically controlled fresh gas flow greatly improves accuracy of flow and oxygen concentration.
- Closed- loop oxygen concentration control technology: The user directly configures the oxygen concentration and total volume of flow. The system automatically matches the ratio and dynamically calibrated it in real time.
- Best flow indicator tool: scientifically guide the clinical implementation of low- flow anesthesia while saving costs.
- Fully electronic gas source control system: electronic monitoring of gas source pressure; once there is overpressure or underpressure, the electronic system would respond quickly.
- Negative pressure expectoration system: no need of negative pressure source; the equipment is converted to negative pressure through the Venturi effect and positive air pressure, and the flow can be adjusted independently.
- A brand new auxiliary oxygen supply system: support off-line operation;
   fast oxygen therapy; can produce gas of any volume of oxygen concentration.
- The high pressure oxygen source can support the rescue ventilator.





# Breathing circuit

- Compact and integrated design with circuit leakage volume of less than 65ml/min
- Improve the safety and convenience of system use
- Made of PPSU material; corrosion resistant; long service life; can withstand temperature as high as 134° C
- High temperature and high pressure steam sterilization
- Easy to disassemble and clean, and has less maintenance time
- Built- in heater eliminates internal condensation effectively Bypass function for easy replacement of soda lime absorption tanks during operation
- With semi- open, semi- closed double breathing circuit, can be equipped with bain, T and so on. Open ventilation.

The minimum tidal volume down to 5 ml under PCV mode

7% high accuracy ventilation

Breathing circuit leakage

as low as 65ml/min



AX-800

Anesthesia Machine

AX-500

Anesthesia Machine





AX-600

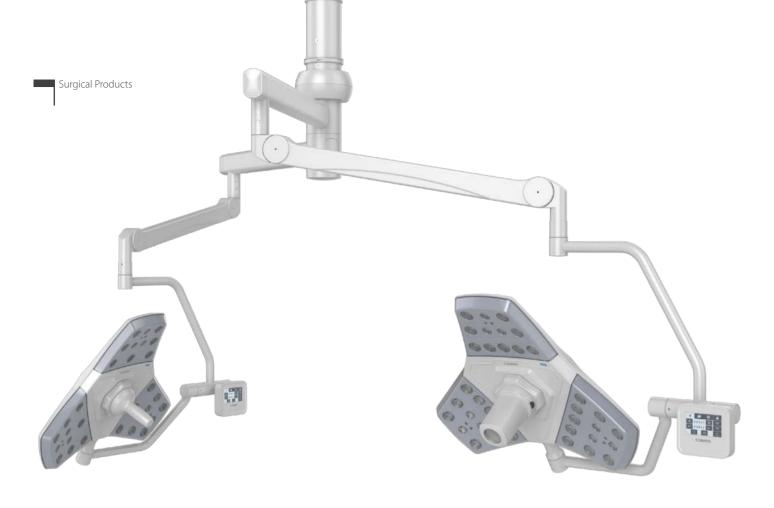
Anesthesia Machine

AGSS - L

Anaesthesia Gas Scavenging system

Doctors and nurses protect the health of patients, COMEN care for doctors and nurses





# L5 Surgical Light

The new generation outstanding surgical light

# Powerful independent working function

- Lamps' Lifespan up to 70,000 hours, , more durable than ever
- Central Illumination: 160,000 lux/120,000 lux, 3 modes meet various of surgery requirements
- Max. depth of Illumination: 1,300 mm
- Lower power consumption

# Unique Function

### • Illumination automatic adaptation technology

25cm up/down movement of the surgical lamp will no change the illumination under the specified illuminance

### • Illumination stabilization technology

L5 adopts DC dimming technology, that means it can protect the surgeon's eyes from the flickers of the traditional PWM dimming, what's more, it will no cause the waves during filming

### • Illumination capacity technology

Spot size will not change while the illuminance was changing, to make it more convenient for medical staff operation.

### Customized configuration

L5 has 3 custom configurations, surgeons can customize the parameter setup of illumination, spot size, etc. according to the needs and preferences themselves

### L3

# Surgical Light

Powerful and Economical surgical light

- The Ra of L3 is up to 98, which provides you a truest color of surgical wound
- Lamp lifespan is up to 70,000 hours, more durable than ever
- Double endoscopy modes, green and white light optional, more comfortable for doctors' eyes





# L6 LED Surgical Light

Mixed light function: Mixed with multicolor spectrum, L6 surgical light guarantees a perfect visualization on the surface as well as in deep cavities with very pure white light.

Thanks to optical engine technology, L6 surgical light provide consistent white light through mixing multiple color light and stable color temperature irrespective of blocking of the light.

An efficient illumination without spotlight

Endoscopy surgery lighting technology

Unparalleled shadow management

### Extraordinary 7 performances ranking high level in the world

Center Luminance(lx) Irradiance ( mW/m2.lx) Light depth Shadowless rate

Color temperature (K) Color rendering index (CRI) (Ra) R9





LED light source, 50000 long service life



M6 Ceiling Pendant

M8 Ceiling Beam

# Space utilization

Optimized space utilization: The frame-type box structure allows for significant space savings. As shown in the picture, space is still available at both sides of the operating table while ECMO, CRRT, ventilator, monitor and syringe pump are simultaneously loaded. The box does not occupy the prime nursing area (the two sides of the operating table where the patient's arms are placed), supporting critical care.

### Modular design

- Expand the possibilities
- Support subsequent upgrades
- More convenient maintenance
- Independent functioning of modules, more reliable quality, avoiding interference between multiple functions
- On-site adjustment of terminal order and terminal position according to user habits
- Power and air supply separation:
   Real power and air supply separation design, the power and air supply are distributed in two different boxes with independent wiring, eliminating fire hazards from the root
- Lightweight design, making the pendant lighter; smooth pushing and pulling, stable braking

# Load-bearing capacity

Scientific load-bearing capacity: a change from the tradition, the actual carrying capacity of the prototype is measured after the design is completed. Comen M series ceiling pendant uses an advanced FEM CAE system, to analyze the physical and mechanical properties of the product structure with the aid of discretization design, as well as to predict, evaluate and optimize the bearing capacity. At the same time, it is combined with the actual measurement of the prototype to verify each other.

This rigorous R&D system not only measures the basic performance of the new machine, but also simulates the load-bearing performance of the equipment after years of ageing. The quality and stability of the product throughout its life cycle is scientifically guaranteed.









D8 Ceiling Pendant

D5 Ceiling Pendant

D9 Ceiling Pendant



 Adopting complex porthole die technology on the arm;
 Profile section's thickness is up to 17.68mm;
 Tensile strength is 285N/mm2;
 Yield strength is 234N/mm2;
 Passed strict maximum loading test(2.72ton).



 Switzerland SKF high strength bearings, with quiet, smooth running and long-term reliability advantages.
 Service life of the bearing About 10000-250000 hours



 Combining with the SKF lifting technology from Switzerland; Its lifting mechanism can bear heavy load and support lifting distance working, enabling free and easy movement with direction orientation function in the driving system.



 Use AL6061 aluminum, better performance with the oxidation protection treatment on the surface.
 Air source terminal passed plug durability test(30000 times).

Passed strict pressure test



The engineer fully considerate the structure while designing the performance of the cabinet. Cable management and storage tank design make it more compact.

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The cabinets of the cabin

The interfaces of the gas sources and power supply is designed to maximize the space utilization.



 Drag chain design to prevent air leakage caused by gas circuit turning and short circuit caused by cable damage.

Double bearing and double track design enable more stable of translation.

The reading lamp was designed for enable patients to read in the evening, no influence to other patients.

Multi-color backlight design help meet with patients

of different backlight color preference.

COMON 54

# M300/500

# Syringe Pump



### M500 6.2 inch Touch Screen



### Professional & convenient



### Extensive drug library

M500 provides a library of 2100 drugs and is customizable for new entries, giving medical personnel essential drug options for infusion records to ensure medication safety.



### Continuous titration

The infusion parameters setting can be changed without stopping it.



### Dual-channel cascade

The dual-channel design provides a relay mode that not only allows for simultaneous injection of multiple drugs, but also cascade administration of the same drug to achieve continuous drug infusion. The maximum continuous single infusion is 120 ml of drug solution.



### Multiple working modes

Features rate mode, time mode, weight mode, interval mode, trapezia mode, sequence mode, micro mode, TIVA mode, loading dose mode and night mode, which meet a variety of clinical needs and matched well with other ICU equipment.

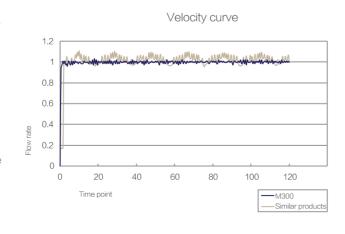
# Multi-CPU monitoring High precision injection

### **CPU** matrix

M300 adopts multiple CPUs to monitor each other and form a coordinated alarm system to ensure the safety of injection and prevent accidents.

### High-performance motor

The high-performance stepper motor and transmission system allow the M300 to inject without generating pulse waves even at low speeds.



# ME600 Infusion Pump

### Continuous innovation

- Sophisticated motor and dual detectors guarantee precision and stability
- Intelligent pulse compensation technology
- Intelligent heating technology
- Bubble detection technology
- Patented anti- bolus system

COMON 56 COMEN 57

