



INTEGRATED MEDICAL GAS SUPPLYING AND ENGINEERING SOLUTION



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Hunan Eter Medical Co., Ltd

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COMPANY PROFILE

Founded in 2003, Hunan Eter Medical Co., Ltd. has developed into a state-level high-tech enterprise and software enterprise integrating the business of research, development, production and sales, and has successfully been listed on the NEEQ with the stock code of 839074 in 2016. ETR has become the National high-tech enterprise and software enterprise and UN qualified products supplier.



Main Products

ETR's top R&D team has developed three series of products over the past decade, including the integrated solutions for IOT smart ward, the integrated solutions for medical gas system, the integrated solutions for medical cleaning engineering system.

Honorary Qualification

ETR has passed ISO 9001:2015 certification, ISO 13485:2016 certification, ISO 45001:2018 certification and ISO 14001:2015 certification and also has obtained CE certificates and patent certificates for related products, as well as the national-level China Quality Credit Enterprise Certificate and AAA credit grade certificate.

Market

In China market, ETR has served for more than 9000 hospitals of 20 provinces with full coverage. And the after-sales service network covers more than 20 provinces and cities throughout the country. In the international market, the ETR products have been exported to Southeast Asia, Africa, South America, the Middle East and more than 60 countries and regions.

Company Culture

Vision

ETR World ETR Forever

Mission

Creating Products With Love
Caring Patients With Sincerity

Core Values

Building Brand With Integrity
Fulfilling Dreams With Passion



MEDICAL GAS STATION



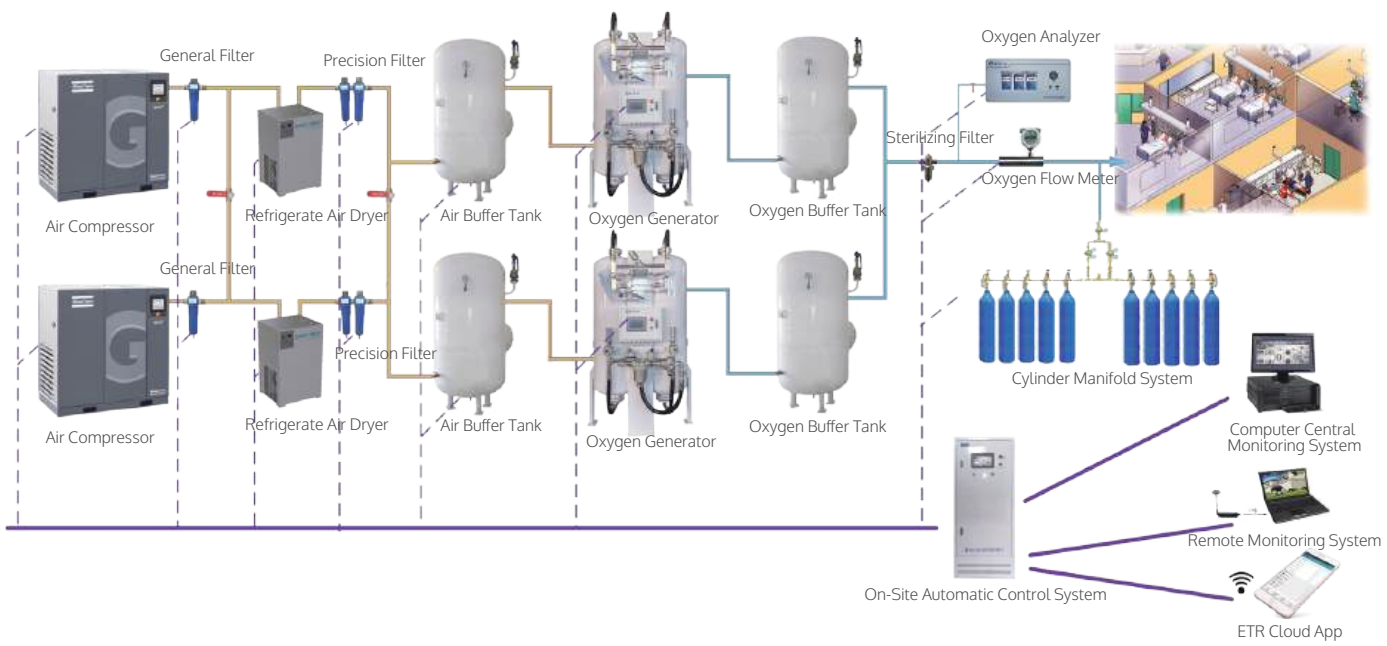
Stationary Oxygen Generator System

ETR oxygen generator system can produce medical level oxygen from the air directly with time proved PSA technology, 93%±3% oxygen purity is full meet the Europe and USA and China medical standard.

Intelligent PLC control ensure for the easily operation, APP monitoring platform support for the remote monitor, Many practical references fully proved, ETR oxygen generator keep good working at least 10 years.

Comparing with the liquid oxygen and cylinder oxygen, ETR PSA oxygen generator system can save bout 50% cost for long term. As a more economical solution, onsite PSA oxygen generator system is more and more popular for hospitals.

ETR medical oxygen generator system comply to ISO10083 and HTM02-01 standards.



◆ Features

- ISO10083 and HTM02-01 standards;
- Stable oxygen purity;
- Online oxygen monitor, Remote monitoring system;
- LCD touch screen interface;
- More than 100,000 hours service life;
- Up to 18 patents, quality assurance.

Technical Parameters

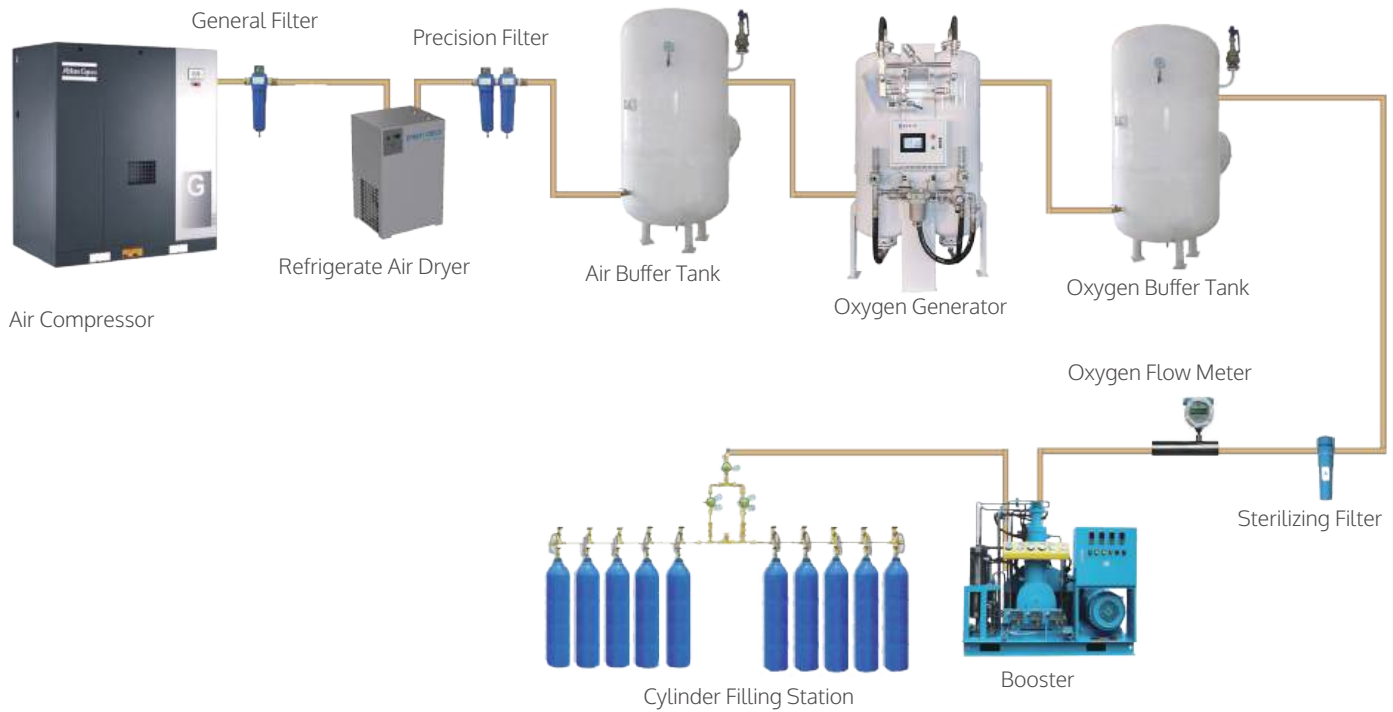
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|------------------------|------------------------------|
| Inlet pressure: 0.6mpa | Output pressure: 0.3-0.45mpa |
| Oxygen purity: 93±3% | Oxygen flow: 3-160m3/hr |
| Power: 60w | Frequency: 50hz/60hz |
| Supply voltage: AC220v | Low noise: ≤85dB |

| Model | Capacity (Nm3/h) | Size (mm) L*W*H | Weight (KG) | Air Inlet | Oxygen Outlet | Buffer Tank |
|--------|------------------|-----------------|-------------|---------------|---------------|-------------|
| ETO-03 | 3 | 760×750×1850 | 380 | DN15(G1/2") | DN15(G1/2") | 300L |
| ETO-05 | 5 | 760×750×2200 | 450 | DN15(G1/2") | DN15(G1/2") | 600L |
| ETO-10 | 10 | 880×780×2400 | 780 | DN20(G3/4") | DN15(G1/2") | 600L |
| ETO-15 | 15 | 1070×940×2500 | 1080 | DN25(G1") | DN20(G3/4") | 1000L |
| ETO-20 | 20 | 1450×950×2500 | 1260 | DN32(G1 1/4") | DN20(G3/4") | 1000L |
| ETO-30 | 30 | 1500×1000×3000 | 1680 | DN40(G1 1/2") | DN25(G1") | 2000L |
| ETO-40 | 40 | 1750×1200×3150 | 2150 | DN40(G1 1/2") | DN25(G1") | 2500L |
| ETO-50 | 50 | 2000×1350×3300 | 2500 | DN40(G1 1/2") | DN25(G1") | 3000L |
| ETO-60 | 60 | 2288×1599×3500 | 2900 | DN40(G1 1/2") | DN25(G1") | 3000L |
| ETO-80 | 80 | 2600×1750×3700 | 3400 | DN40(G1 1/2") | DN25(G1") | 3000L |

Oxygen Cylinder Filling System

ETR oxygen cylinder filling system is consisted of screw air compressor, refrigerant dryer and filters, air buffer tank, Eter PSA oxygen generator, oxygen buffer tank, oxygen booster ,electricity control system and cylinder filling station.it can produce oxygen 93±3% purity and fill in cylinders.as a complete system, oxygen cylinder filling system can be widely used for oxygen gas station and hospitals.

ETR oxygen cylinder filling system comply to ISO10083 and HTM02-01 standards.



◆ Features

- ▶ ISO10083 and HTM02-01 standards;
- ▶ More than 10 years operation;
- ▶ Automatically control and monitor;
- ▶ Energy saving and environmentally friendly;
- ▶ Easy installation and operation and maintenance;
- ▶ Can produce oxygen based on the actual demand;
- ▶ No need for transportation and supply oxygen onsite;
- ▶ Stable oxygen purity, 24 hour safe oxygen usage.

Technical Parameters

| Model | Oxygen Capacity | Oxygen Purity | Filling Pressure | Filling Capacity |
|--|-----------------|---------------|---------------------------|------------------|
| | (Nm3/h) | % | (Mpa) | (Cylinders/Day) |
| ETS-B3 | 3 | 93±3% | 15 (Can be customized) | 12 |
| ETS-B5 | 5 | | | 20 |
| ETS-B10 | 10 | | | 40 |
| ETS-B15 | 15 | | | 60 |
| ETS-B20 | 20 | | | 80 |
| ETS-B30 | 30 | | | 120 |
| ETS-B40 | 40 | | | 160 |
| ETS-B50 | 50 | | | 200 |
| ETS-B60 | 60 | | | 240 |
| ETS-B80 | 80 | | | 320 |
| Note:Filling capacity based on 15Mpa pressures &40L cylinder volume &24 operation hours per day. | | | | |

Containerized Oxygen Generator System

ETR containerized oxygen generator is consisted of the screw air compressor, air dryer, filters, buffer tanks, oxygen generator, electricity control system and the optional oxygen cylinder filling station. The complete system is installed and tested at factory, delivery to customer s turn-key project.

ETR containerized oxygen generator is removable, and make the onsite installation and operation very easy. It can also save the cost for the decoration cost of the machine room.



◆ Features

- ▶ Designed for outdoors;
- ▶ Small and easy machine room;
- ▶ Turn-key project and removable;
- ▶ Easy for installation and operation;
- ▶ Smart monitor and control system;
- ▶ Conveniently open and shut down;
- ▶ Heat and sound insulation treatment;
- ▶ Compact in structure, small in floor area.

Skid Mounted Oxygen Generator System

ETR skid-mounted oxygen generator system is a complete onsite system which can produce oxygen from the air directly and fill cylinders, all the components are installed together.

For this system, the installation and commissioning shall be finished in factory in advance, delivery to customer as a turn-key project. Plug in and operation, no need for additional jobs, easy for the customers.



◆ Features

- ▶ Convenient maintenance;
- ▶ More Convenient, quickly start;
- ▶ Stable operation and highly reliable;
- ▶ Intelligent onsite or remote monitoring;
- ▶ Compact in structure, small in floor area;
- ▶ Skid mounted for easy installation and move;
- ▶ Proven PSA technology, reliable and economy;
- ▶ Stable oxygen purity, 24 hour safe oxygen usage.

Compacted Oxygen Generator System

The village clinics and small hospitals are troubled by the oxygen sources, because of lower oxygen consumption and long distance, the traditional oxygen cylinders or liquid oxygen can not ensure for the oxygen supply constantly and safely.



Uncontrollable

The oxygen purity cannot be detected, and the oxygen quality cannot be guaranteed.

Inconvenience

Transportation is easily affected by road and climatic conditions, and medical oxygen cannot guarantee emergency needs.

Unsafe

Bottle oxygen explosion accidents have occurred in succession, there are potential safety hazards in handling, storage, and use, and it is easy to leak and cause accidents.

Expensive

The purchase price is high, the demand for oxygen is small, the one-time purchase quantity is small, and the transportation cost in remote areas is high.

Features

- Integrated oxygen system, oil-free design, stable concentration, safe and reliable;
- Small footprint and less consumables, low concentration alarm to ensure oxygen quality;
- The main components are imported to ensure product quality;
- Using three-phase 380V low-voltage power supply, low noise and low energy consumption;
- Digital energy-saving design, energy saving and environmental protection;
- It can be directly connected to the oxygen supply pipeline system of small medical institutions;
- The oxygen production process is controlled by microcomputer, fully automatic operation.

Technical Parameters

| Model | Oxygen Production | Motor Power (KW) | Power Supply | Size (mm) | Weight (KG) | Noise Level (dB(A)) | Additional Tank | Machine Room (m2) |
|---|-------------------|------------------|---------------|---------------|-------------|---------------------|-----------------|-------------------|
| ETO-A20 | 1Nm3/h (20LPM) | 2.50 | 380V/50Hz/3ph | 1600*750*1300 | 420 | 60±3 | 300L/0.6Mpa | 10~12 |
| ETO-A30 | 2Nm3/h (30LPM) | 4.00 | 380V/50Hz/3ph | 1600*750*1300 | 480 | 62±3 | 600L/0.6Mpa | 10~12 |
| ETO-A50 | 3Nm3/h (50LPM) | 6.00 | 380V/50Hz/3ph | 1600*800*1500 | 550 | 63±3 | 600L/0.6Mpa | 12~15 |
| ETO-A80 | 5Nm3/h (80LPM) | 10.00 | 380V/50Hz/3ph | 1600*800*1920 | 750 | 65±3 | 800L/0.6Mpa | 12~15 |
| Oxygen Purity: 93%±3% Oxygen Pressure : 0.35-0.45(Mpa) | | | | | | | | |

◆ Intelligent Electric Control Cabinet

- Power distribution function;
- Internet communication: computer/mobile app;
- Support for data record and remote data transmission;
- Alarms prompt and system dynamic display and operation;
- Devices running status monitoring, types of sensors monitoring;
- Monitoring and alarming the system, such as power off, low flow rate, low purity;
- Control the oxygen generation system automatically, collect the data of the system.



◆ Air Dew Point Monitor

- Patented air dew point monitor researched and designed by ETR;
- Alarming for the high dew point;
- Digital display the dew point of the air, easy to read;
- Support for data record and remote data transmission;
- Ensure the oxygen generator not be damaged by the water;
- Monitoring the water content in the compressed air and alarming;

◆ ETR-Cloud APP

- Remote monitoring;
- Remote message alarming;
- Remote data record.



◆ Oxygen Online Monitor

- Patented oxygen online monitor researched and designed by ETR;
- Monitoring the oxygen purity and alarming;
- Support for data record and remote data transmission;
- Multi-functional integrated design and easy for installation;
- Monitoring the water & CO content in the oxygen and alarming;
- Omnibearing monitoring the oxygen supply and ensure for good oxygen quality.



◆ Oxygen Flow Meter

- Intrinsic safe enclosure;
- Hygienic stainless steel body ready for oxygen metering;
- Extended range ability for accurate flow monitoring and control;
- Standard 4 ~ 20 mA or RS485 for remote data communication;
- Detachable display that can be placed away from the flow channel via a specially designed cable



◆ Oxygen Analyzer

- The latest touch button technology is adopted to prolong the service life of keys;
- Data storage function: recording test data regularly and querying and storing data quickly;
- Menu lock switch: prevent misoperation and change of analyzer parameters from affecting its normal operation;
- Adopt ion current sensor, which has high precision, good stability and longer service life;
- The surface of the window is covered with a piece of toughened glass so as to protect the LCD display and buttons;

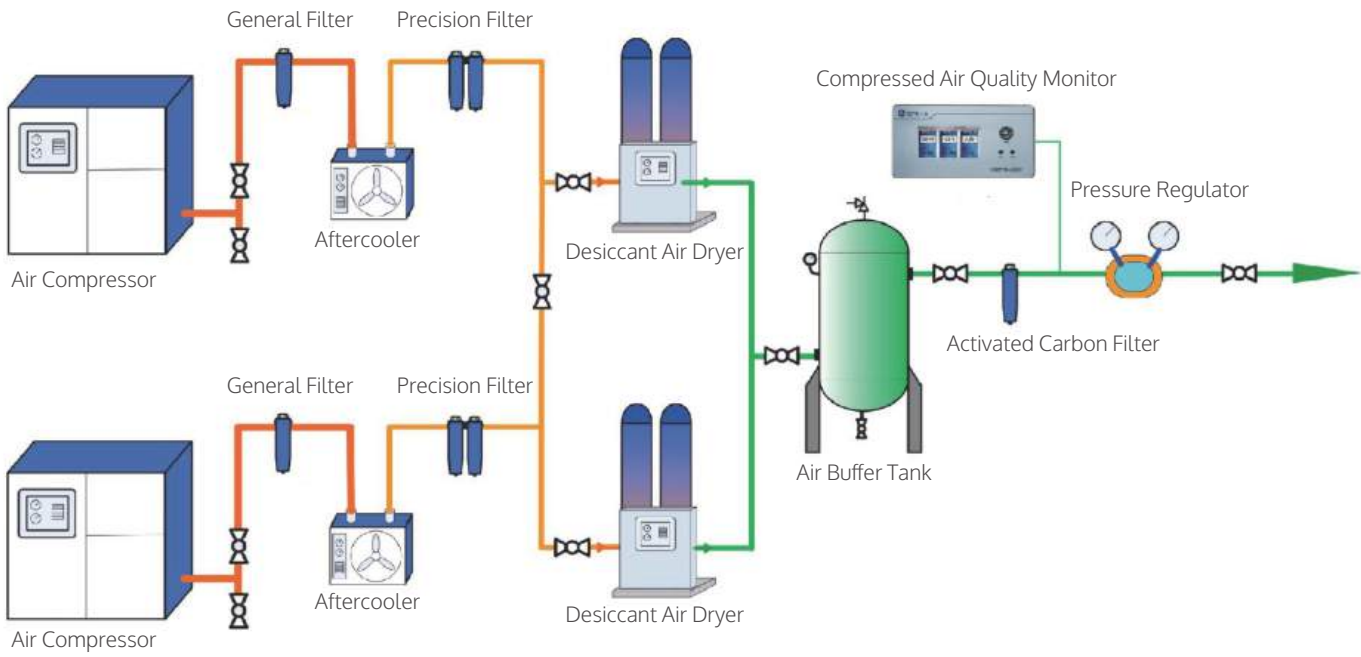


Medical/Surgical Compressed Air System

The compressed air system is composed of air compressor, desiccant air dryer, air buffer tank, sterilizing filter, pressure regulator, valve, dew point monitoring, electrical control system, pipeline and terminal.

The compressed air is generated by the air compressor, removes impurities and moisture in the compressed air through the desiccant air dryer, delivers the air to the air buffer tank , through sterilizing filter and supplies it through a pipeline to the terminal equipment in the operating room, ICU and other inpatient wards after pressure regulator. The compressed air system can micro-oil and oil free design.

ETR medical compressed air system is registered medical device and comply to ISO7396 and HTM02-01 standards.



◆ Features

- 01

Registered medical device ISO7396 and HTM02-01 standard;
- 02

Oil-free design ensure for qualified medical level air;
- 03

Modular and compacted design, easy for installation and operation;
- 04

Automatic control, touch screen operation, high degree of intelligence;
- 05

Reduce the probability of system failure and save cost;
- 06

Prevent oxidation of pipeline, inhibit bacteria breeding;
- 07

Dry clean compressed air can prevent the damage of medical device;
- 08

24 hours intelligent monitoring and recording by Mobile phone APP, with messages alarm in case of failure.

Technical Parameters

| Model | Output Capacity (m3/min) | Control Pressure (MPa) | Inlet/Outlet | Power (KW) | Size (mm) L*W*H | Weight (KG) | Noise dB(A) |
|--------|--------------------------|------------------------|---------------|------------|-----------------|-------------|-------------|
| ETA-04 | 0.32 | 0.5-0.8 | G1/2"(DN15) | 4.0 | 1030X590X994 | 380 | ≤52 |
| ETA-07 | 0.64 | 0.5-0.8 | G3/4"(DN20) | 8.0 | 1235X740X1630 | 580 | ≤57 |
| ETA-11 | 0.96 | 0.5-0.8 | G1 1/4"(DN32) | 12.0 | 1580X1235X1630 | 800 | ≤60 |
| ETA-15 | 1.28 | 0.5-0.8 | G1 1/4"(DN32) | 16.0 | 1580X1235X1630 | 800 | ≤60 |
| ETA-22 | 1.92 | 0.5-0.8 | G1 1/4"(DN32) | 24.0 | 1580X1235X1630 | 800 | ≤60 |
| ETA-30 | 2.56 | 0.5-0.8 | G1 1/4"(DN32) | 32.0 | 1580X1235X1630 | 1060 | ≤61 |

Water-Ring Vacuum Suction System

Water-ring vacuum suction system is consist of water-ring vacuum pump, vacuum tank, gas-water separator, water replenishment solenoid valve, pipe fittings and electrical control system, and the output negative pressure can be directly connected to the existing negative pressure suction system of medical center in medical institutions to meet the requirements of clinical negative pressure in medical institutions.

ETR medical vacuum system comply to ISO7396 and HTM02-01 standards.



◆ Features

01

Registered medical device ISO7396 and HTM02-01 standards;

02

Compacted medical vacuum suction machine with good quality;

03

Open data communication interface, facilitating remote management of equipment, Automatic electrical control system with high degree of intelligence;

04

Dynamic display of technological process, enabling operating data storage, fault protection and abnormal warning;

05

Dynamic control of water cooling temperature and water level, ensuring the operation of vacuum pump in the optimal condition;

06

Automatic switching between units, and automatic supplement with the subsequent unit in accordance with the decline in gas consumption.

Technical Parameters

| Model | Capacity (Nm3/h) | Pressure mbar(Mpa) | Weight (KG) | Voltage (V) | Power (KW) | Noise dB(A) | Size (mm) |
|--------|------------------|--------------------|-------------|-------------|------------|-------------|----------------|
| ETV-02 | 80 | 33mbar (-0.098Mpa) | 220kg | 380V | 2.35 | 62 | 1300X800X1700 |
| ETV-03 | 110 | | 280kg | 380V | 3.85 | 63 | 1300X800X1700 |
| ETV-04 | 165 | | 350kg | 380V | 4 | 65 | 1300X800X1700 |
| ETV-05 | 230 | | 450kg | 380V | 5.5 | 66 | 1300X800X1700 |
| ETV-07 | 280 | | 580kg | 380V | 7.5 | 69 | 1650X1280X1900 |
| ETV-11 | 400 | | 650kg | 380V | 11 | 71 | 1650X1280X1900 |
| ETV-15 | 500 | | 780kg | 380V | 15 | 73 | 2100X1350X1900 |
| ETV-22 | 800 | | 950kg | 380V | 22 | 74 | 1650X1280X1900 |

Vacuum Suction Gas Treatment Device

This product adopts the technical principle of thermal inactivation, which can be inactivated immediately after the inactivation temperature is raised to 200 ℃, so as to realize the continuous disposal of the highly polluted toxic waste gas discharged from the vacuum suction system of the hospital, and remove the bacteria that may be entrained in it. , micro-organisms, viruses and aerosols are cleaned and discharged after inactivation, and can be widely used in the discharge and treatment of toxic waste gas polluted by vacuum suction systems in major hospitals.



Skid Mounted Vacuum Suction System

The medical vacuum system is consisted of vacuum pump, vacuum buffer tank, sterilizing filter, cooling system, pipe fittings and electrical control system. Intelligent control and operation with touch screen, being operated and switched automatically. Skid-mounted design, good heat dissipation, cost saving, high efficiency , less maintenance, stable and reliable operation.

ETR medical vacuum plant comply to ISO7396 and HTM02-01 standards.



| Model | Power (KW) | Size (mm) L*W*H | Weight (KG) | Noise dB(A) | Capacity (Nm3/h) |
|--------|------------|-----------------|-------------|-------------|------------------|
| ETV-02 | 2.2 | 1150x900x1900 | 250 | 62 | 63 |
| ETV-03 | 3 | 1150x900x1900 | 320 | 65 | 100 |
| ETV-04 | 4 | 1150x900x1900 | 450 | 65 | 160 |
| ETV-05 | 5.5 | 1200x1400x1900 | 550 | 66 | 200 |
| ETV-07 | 7.5 | 1200x1400x1900 | 620 | 69 | 300 |

Oil-Lubrication Vacuum Suction System

ETR has independently developed an integrated vacuum suction unit composed of oil lubrication vacuum pump, vacuum tank, sterilization filter, pipe fittings and electrical control system.

It is a simple, safe and reliable device that continuously serves the wards all day long, without occupying the ward space. The negative pressure is sourced from the vacuum pump unit.

ETR medical vacuum system comply to ISO7396 and HTM02-01 standards.

◆ Features

- 01Registered medical device ISO7396 and HTM02-01 standards;
- 02Open data communication interface facilitates system's remote management;
- 03High-efficiency sterilizing filter ensure for the environment friendly sterile discharge;
- 04Intelligent control and operation with touch screen, being operated and switched automatically;



- 05Modular design, small area occupation, flexible to be placed;
- 06Oil lubrication vacuum pump, high efficiency, low noise, stable and reliable operation;
- 07Dynamic process display, operation data storage, fault protection and abnormal alarm;
- 0824 hours intelligent monitoring and recording by Mobile phone APP, with messages alarm in case of failure.

Technical Parameters

| Model | Pressure (MPa) | Inlet/Outlet | Power Supply | Power (KW) | Size (mm) L*W*H | Weight (KG) | Noise dB(A) | Capacity (Nm3/h) |
|--------|----------------|--------------|----------------|------------|-----------------|-------------|-------------|------------------|
| ETV-02 | 0.1 | G2"(DN50) | AC380V/50Hz/3P | 2.2 | 950x700x1560 | 250 | 62 | 63 |
| ETV-03 | 0.1 | G2"(DN50) | AC380V/50Hz/3P | 3 | 950x700x1560 | 320 | 65 | 100 |
| ETV-04 | 0.1 | G2"(DN50) | AC380V/50Hz/3P | 4 | 1200x850x1900 | 450 | 65 | 160 |
| ETV-05 | 0.1 | G2"(DN50) | AC380V/50Hz/3P | 5.5 | 1200x850x1900 | 550 | 66 | 200 |
| ETV-07 | 0.1 | G2"(DN50) | AC380V/50Hz/3P | 7.5 | 1200x850x1900 | 620 | 69 | 300 |

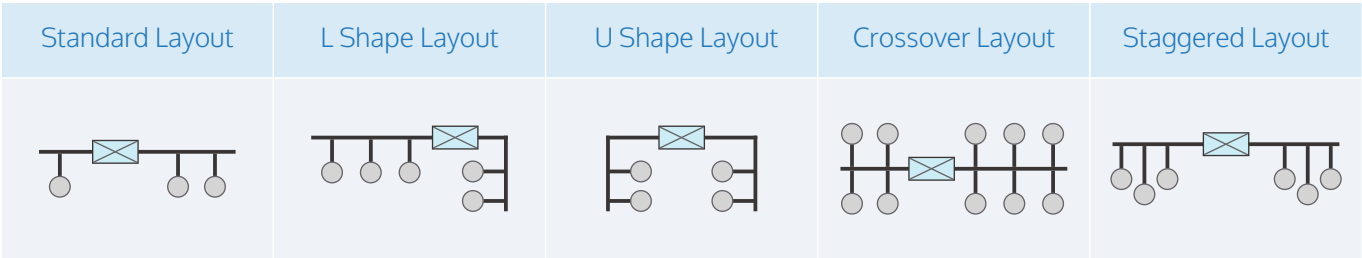
AGSS

Anesthetic gas scavenging systems (AGSS) are designed to remove by active suction system the exhaled anaesthetic gas mixtures from the atmosphere of operating theatres, anaesthetic and awakening rooms conveying them outside the building. This way, the long-term health risks, caused by anesthetic vapour pollution, to which surgeons and nurses are exposed to, decrease substantially. The advantage of this system, compared to a conditioning system, lies in the possibility of locating the aspiration directly on the source of pollution: the anesthetic device or the patient himself.



Medical Gas Manifold

Automatic medical gas manifold system is designed to provide an constantly medical gas supply without any manual adjustments. This system automatically switches over when the primary gas station is depleted. Even in case of a power failure, the system continues to supply gas without interruption. It conforms to US NFPA 99, UK HTM02-01 and 7396.



◆ Features

- 01Registered medical device ISO7396 and HTM02-01 standards;
- 02CE certification, touch screen, PLC control;
- 03Automatic switching, strong and weak electricity separation, Wall or floor mount available;
- 04With sound and light alarm function;
- 05Fully enclosed, anti-interference metal cabinet;
- 06With temperature control to prevent frost and overheating and leakage.



MEDICAL GAS PIPELINE SYSTEM



Medical Gas Pipeline System

The medical gas pipe system is designed to transport the medical gas from the gas station to the ward. It is consisted of the medical level degressed copper pipe, medical gas pressure regulator, medical gas alarm panel, area valve unit, installation fittings and accessories.

The medical gas pipeline system comply to ISO7396 and HTM02-01 standards.

The medica copper pipes can be with ISO13348 standard or ASTM standard Type K or Type L.



01 Pipe Material

- The main oxygen pipeline and the branch pipeline into the room are used of defatted purple copper tube or stainless steel tube. The pipeline inside of bed head unit is using degressed copper pipe.

02 Pipe Setting

- The gas riser pipe is designed in the pipeline well. Pipes should be piped when crossing the wall. The pipes installation should be neat and beautiful.

03 Pipe Connection

- Pipe system using welded connection;
- Metal seals throughout the pipe system connection;
- Horizontal pipe and branch pipe of bed head unit should be with maintenance valve.

04 Pipe Grounding

- Medical gas pipelines in medical rooms should be equipotential grounded; manifold/pipelines etc should be anti-static grounded;
- Independent grounding resistance should less than 10Ω .

05 Pipeline Leakage Rate

- Leakage test of medical gas pipelines when no terminal components are connected, the hourly leakage rate should not exceed 0.05%.According to Chinese standard GB50751-2012.

Medical Gas Pressure Regulator Box

The medical gas pressure regulator unit will be equipped at the medical gas branch pipe at each area to ensure the stable flowrate to the patient wards, the safety valve would be opened automatically for depression, and close when the pressure lower than the set pressure. This device and ensure for the stable pressure for different areas and keep the safety operation of the system.



◆ Features

01

Meet the standards of GB50751-2012 technical specification for medical gas engineering;

02

The input and output gas pressure gauge with maintenance valve, can be maintained without gas stopping;

03

Gas by pass circuit design: by pass circuit of emergency oxygen supply can be opened in case of system failure to ensure safely oxygen supply;

04

With emergency door lock which can be started by opening the valve box directly to close valve;

05

Automatic opening mode with pneumatic pole ensure for the convenient operation and elegant appearance;

06

Dual circuit design for the gas stop and gas pressure regulation , one for use and one for standby, which can ensure for the maintenance without gas stopping.

Medical Gas Zone Valve Box

Medical gas zone valve box is suitable for the regional gas switch control in the medical gas pipeline system, and is used for the connection of the medical gas pipeline system. It is a new and practical gas valve box. ETR zone valve box comply to ISO7396 and HTM02-01 standards.



◆ Features

01

ISO7396 and HTM02-01 standards;

02

Optional 1-7 gas control which could switch the gas on and off in the ward integrally;

04

With oxygen standby interfaces: oxygen cylinder can be connected to conduct emergency treatment in the area in case of failure of oxygen station;

03

Each gas is marked with a national standard color for easy identification;

05

User-friendly design: the operator can observe the gas gauge reading and switch state of valve through transparent window directly;

06

Arc design of the box body, the gas pipes and pipe fittings are made of degreased copper material, with high aesthetic appearance.

Medical Gas Alarm Box

The medical gas alarm unit would be equipped at the different areas of the hospital to monitoring the gas supply to the different areas. Can also set the alarm pressure for alarming. ETR medical gas alarm box can be pressure gauge display or digital display.

ETR medical gas alarm box comply to ISO7396 and HTM02-01 standards.



◆ Features

01

ISO7396 and HTM02-01 standards;

02

Powerful data post-processing function, real-time storage history; intelligent monitoring, with remote data transfer function;

03

Monitor the air supply pipeline pressure: when the pressure is higher or lower than the set value, the system will alarm by acousto-optic signals automatically;

04

It can test whether all gases' alarms work normally;

05

Pressure gauge with transparent window design: visual pressure gauge reading and related state;

06

Being developed, designed and produced independently, installed in the nurse station of ward building or the intelligence panel in operating room.

Medical Gas Monitoring And Alarming System

The medical gas management system collects the main gas monitoring parameters (such as the pressure,oxygen purity and flow of gases) in all areas of the hospital (including operating rooms, ICUs, general wards and medical gas stations) in real time,and transmits data to the monitoring computer at the monitoring center via the data bus for operating data collection, control and processing, so as to enable all-round monitoring of the gas parameters at different sites.

The medical gas management system is mainly composed of the data collector , monitoring (alarm) device, data communication network, monitoring computer and monitoring software.

ETR medical gas monitoring and alarm system comply to ISO7396 and HTM02-01 standards.

Comprehensive Data Collection

Monitoring of the six source gases and gas-consuming areas in the hospital,achieving comprehensive data collection on pressure, purity, flow and modulus under the working conditions.

Central Monitoring

Central monitoring of gas5Ources and gas-consuming areas,enabling comprehensive data browsing and operation curve analysis.

Fault Early Warning

Abnormal data analysis and trend analysis,making it possible for real-time fault alarm and pre-judgment of fault without shutdown.

Improving medical gas safety and effectiveness

Safety

- Gas working condition
- Normality of pressure
- Normality of purity
- Emergency response
- Influence of normal maintenance

Effectiveness

- Consumption control
- Partition measurement
- Effectiveness statistics and analysis
- Use motivation



◆ Features

- Printing of data reports for medical gases;
- Timely alarm signals against abnormal medical gas supply;.
- Timely identification of medical gas abnormalities in all areas;
- Intelligent modular design, providing convenient networking and scalability;
- Multiple wired or wireless transmission modes available for the actual situation;
- Data sharing,realizing cross-platform data exchange through professional data interface;
- Real-time monitoring of pressure,flow, purity and other parameters, forming a historical data report;
- Bus collection and transmission mode, achieving simple construction wiring and facilitating expansion;
- Automatic generation of oxygen consumption report, providing reliable basis for cost statistics of the hospital.

MEDICAL GAS TERMINAL



Medical Bed Head Unit

The hospital bed head unit is made of aluminum alloy sections, of which the surface is treated with acrylic painting or electrostatic spray. It is equipped with the dismountable panel, three built-in cabling channels for gas, strong electricity and weak electricity, and external leakage protectors, bedside lamps, large toggle switches, five-hole multi-function socket, gas terminal and medical wards calling system. The hospital can choose the appropriate color in line with the environmental requirements.

ETR bed head unit comply to ISO7396 and HTM02-01 standards.



Classic Bed Head Unit

Three-cavity structure , smooth and simple appearance design, with customized color lines embellishment looks dynamic, classic, fashionable.



Supreme Bed Head Unit

Four-cavity structure with integral panel design, linear smooth generous appearance is more stable and safer; The design of terminal dust cover is practical and beautiful; Excellent craftsmanship creates visual aesthetic experience and embodies unique fashion aesthetic feeling.

Vertical Bed Head Unit

Three-cavity structure design realizes the separation of strong current, weak current and gas circuit, safe and reliable;

Vertical installation on the side of the bed, easy to use.



Embedded Bed Head Unit

Four-cavity structure design, which can be embedded wall and external wall installation can be selected according to the needs of the hospital;

The socket can be embedded mounted and surface mounted,and the power sockets, switches, gas terminals, call points can be serviced without opening the panel.



ICU Bed Head Unit

Three-cavity structure design, modular combination, can freely hang monitor bracket, infusion stand, medical examination light, sundries basket and other accessories;

Easy installation, flexible operation, small space occupation.



Embedded Bed Head Unit

Material can choose aluminum alloy or aluminum alloy wire drawing;

Embedded installation, integrated design, perfectly combined with the wall.



Mural Bed Head Unit

Integrated design, embedded installation, the box and the base can be separated freely and easy for installation and maintenance;

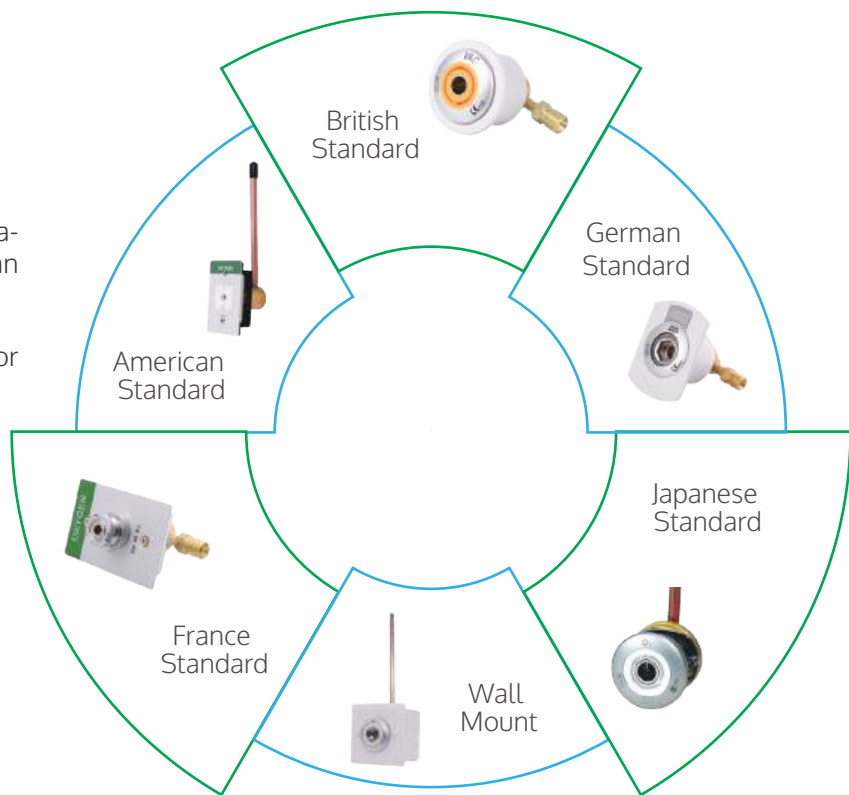
Using hidden silent industrial load sliding track to ensure mural's flexible move. Elegant shape, graceful appearance;

The installation panel is seamless and adopts aluminum alloy anodized wire drawing process. The mural pattern can be customized according to customer requirements.



Medical Gas Outlet

- British Standard/German Standard/Japanese Standard/France Standard/American Standard available;
- Specified model and color to clarify for different gases;
- Build-In maintenance valve;
- Easy for installation;
- 100% tested for gas leakage;
- With CE and ISO 13485 certificate.



Oxygen Flowmeter With Humidifier



- High strength aluminum alloy and bottle's material ABS for outstanding durability;
- Different material can be customized with antibacterial plastic;
- Each unit shall be 100% factory tested;
- Round tube chrome-plated Brass Body;
- Slim body flowmeter;
- Polycarbonate tubes for maximum durability;
- 0-15LPM/0-5LPM/0-3.5LPM capacity.

Vacuum Regulator



- Diaphragm type pressure regulator, ensure stable vacuum pressure;
- Vacuum trap prevents overflow of waste fluid from entering the suction regulator;
- With special rinsing and disinfection accessory;
- Combined assembly structure, easy for installation and maintenance;
- With CE and ISO certificate.



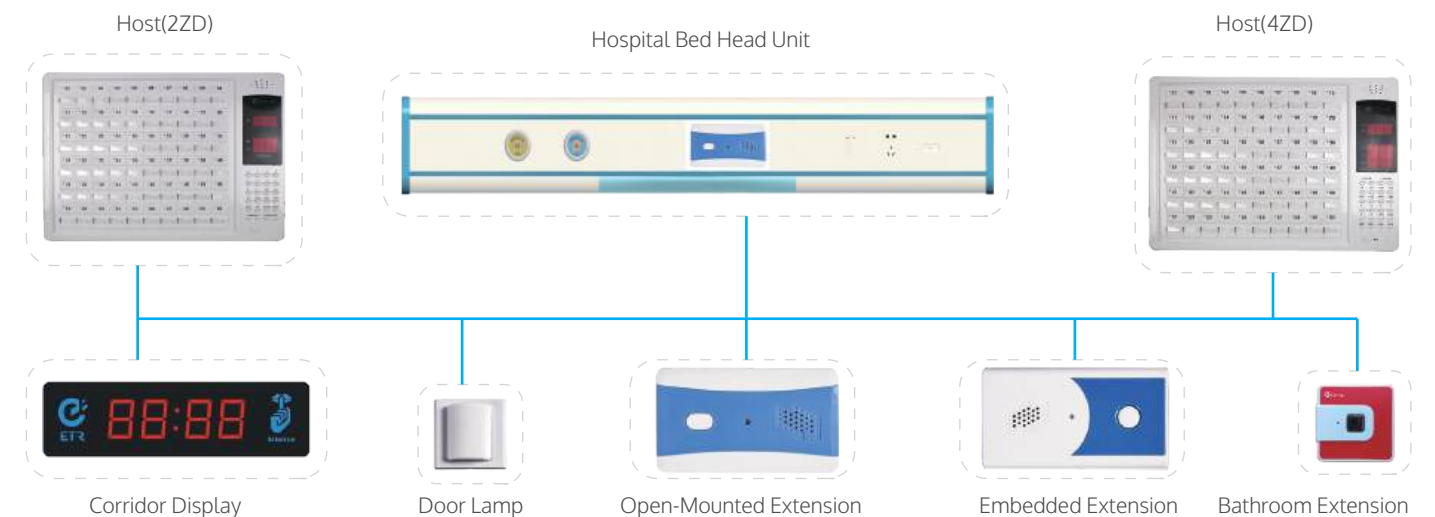
INTEGRATED SMART WARD SOLUTION



Nurse Call System

ETR medical nurse calling system is designed for providing the communication between patients in wards and medical personnel in nurses offices in case of any peculiar conditions in hospitals. With cast-into-once deluxe plastic master telephone hosing, innovative summary fixed mode, complete information electronic summary and audio number reporting system, it has higher performance-cost ration than those products of the same variety. So far, two-wire and four-wire systems are available.

It consists of host, bed extension, corridor display, door lamp, secondary host as well as optional modulus (including music, bathroom extension) for realizing some peculiar functions.



◆ Main Functions

- Numbering function;
- Display time & date;
- Two-way call and talkback;
- Counting patient number and Inquiry calling record;
- Volume is adjustable, can set low-volume period (night);
- The times and rounds of host number-telling can be set freely;
- Simultaneously max receive calls from 60 bed extensions and 10 toilet extensions;
- The host displays the call bed number, bathroom extension call number and voice report.

IOT Smart Ward Nursing System

It consists of management host, nurse extension, duty extension, patient information list, corridor display, POE data processor door extension, bathroom extension, bed extension and call handle, mobile extension, extra bed extension etc.

The System not only provides powerful and perfect communication functions for doctors, nurses and patients in a completely new way, but also creatively provides new functions such as voice reminding, information issuing, and information collection, bedside screen scanning code payment, automatic data upload and information processing with simple and multi-way connection with the testing equipment in the ward. The extension of hospital information management (HIS) system to ward is realized, which is an indispensable part of hospital digital construction. While greatly reducing the work intensity of medical staff, the quality of medical care has been greatly improved.

The Newest Android 6.0 System

Top technology for Two-Bus

Smart ward nursing system used two-bus so that reduce the complexity of installation and maintenance of the system.

Professional Application System Platform

It adopt to the advanced Android6.0 operation system, and customize the interface and function according to hospital order.

Auto-Induction of Nurse Inspection

With infrared receiver function, nurse use the mobile extension to match code with bed correspondingly so that auto-induction nurse location.

Patient Vital Signs Data Collection

Automatic collection and upload of patient vital sign data through testing equipment.

Interconnection Information

It can interconnect all kinds of system data.

Two Way Talk

The system supports two-way call and intercom for 5 to 10 people at the same time.



Nursing Intelligent Information Board

Nurses do not need to write down the nursing information manually at a blackboard at nurse station, all the information is linked to the HIS system, ensure the accurate of the information, reduce the workload of the nurses, and improve the efficient.



Nurse Station Intelligent Board

Comprehensively display the nursing information of the department, display the nursing content in real time, automatically update the nurses' shift content, reduce the nurses workload , improve the nurses' work efficiency, and completely replace the work mode of nurses' handwritten.

Doctor Station Intelligent Board

Retrieve the information that doctors need to know from the hospital HIS system timely, doctor input information so that understand the relevant situation of patients and wards.

Nursing Department Management Board

Check the patient condition at any time. Nursing data statistics, automatically uploaded. Release information to nurse stations timely. Convenient for refined management.

Medical Department Management Board

Set up electronic display screen in the medical department or conference room, display of statistics on work dynamics, staff distribution, and hospital safety management. to assist the ministry of medical affairs to grasp the medical work of the hospital in real time.



Hospital Queuing And Calling System

Hospital queuing and calling system is designed for the hospital staff and patient to do the queuing and calling online. Patient just logon with their information and the hospital staff, such as doctors or pharmacy, to call the patients from office.

◆ Features

01

The queuing and calling system is connected with the HIS system, PACS system, LIS system, etc;

02

It can be divided into automatic, semi-automatic and manual application modes;

03

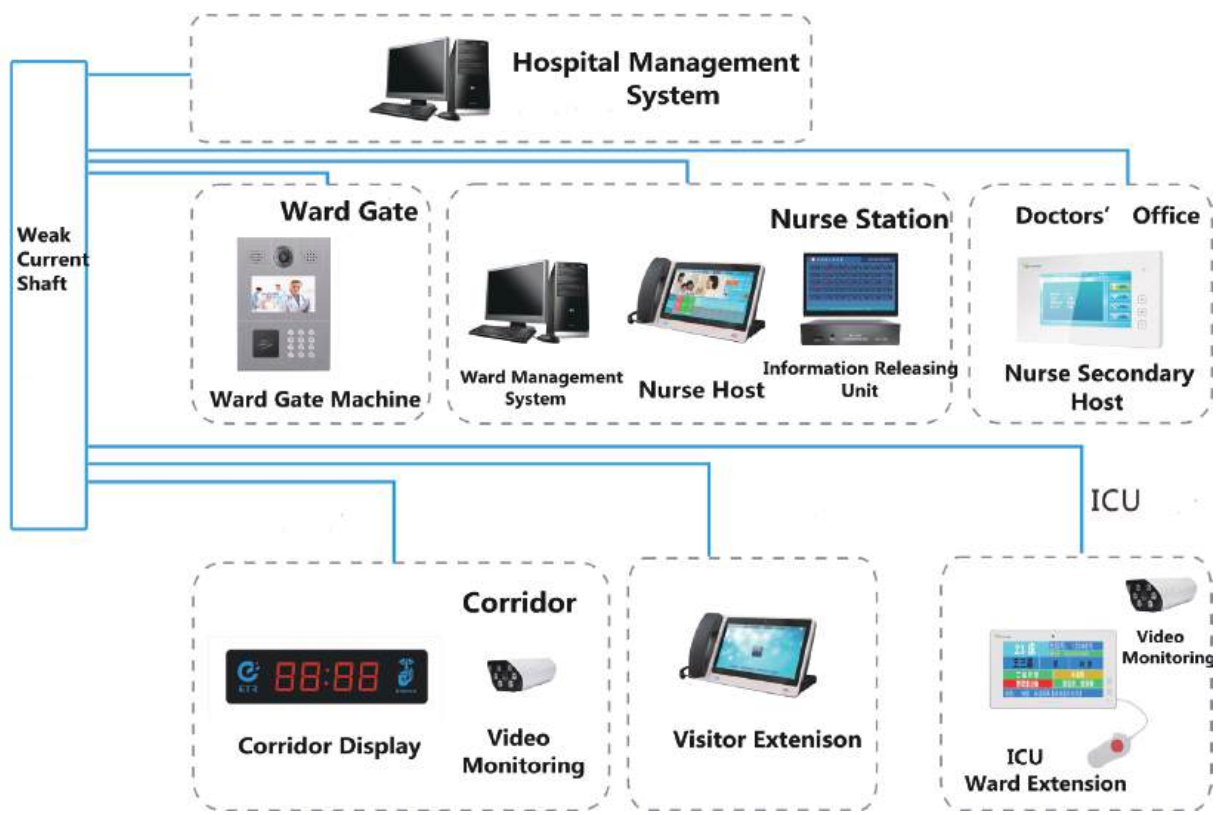
Corresponding to different queuing scenarios, improving the efficiency of queuing for medical treatment;

04

Intelligent call, synchronous voice, real-time display of queuing number information.

ICU Visiting System

ICU visiting system is designed for providing audio and video communication between the patients in the ICU which is not available for visit and the patient relations out of the ICU. They mainly consist of ICU management center, medical hosts, visiting extension, ICU extension, etc to achieve visiting interphone functions.



MEDICAL CLEAN ENGINEERING SOLUTION →



Medical Clean Engineering System

The medical clean engineering system covers clean operating rooms, ICUs, disinfecting supply rooms, laboratories, clinical laboratories, vein deployment centers and other sites. Decoration materials, clean air-conditioners and medical devices that meet the cleanliness requirements must be adopted to ensure cleanliness, especially for clean operating rooms, ICUs, disinfecting supply rooms and other sites subject to cleanliness requirements of the hospital.



Operation Room Cleaning System

The clean operating room project covers a self-contained function area composed of the clean operating room, clean subsidiary room and unclean subsidiary room. The clean air-conditioning system, clean decoration system, electrical control system and medical device are provided for the project. According to the provisions of GB50333-2013 Architectural technical code for hospital clean operating department, the scientific, rational and humanized layout of clean operating room can effectively reduce the crossover and interference between different clean areas, simplify the layout of air-conditioning system and control the functional requirements of pollutions, so as to reduce the costs and operating expenses.

Clean Air-Conditioning System

The medical clean air-conditioning system is a device dedicated to the air purification system.

It is characterized by constant temperature, constant humidity (large air flow, high filter grade and long service life), independent operation, automatic differential pressure alarm and automatic system control, etc.



Smart Operating Room Touch Screen

It displays Beijing time, surgery timing/anesthesia timing, calendar, temperature and humidity, air-conditioning control, control of lighting/shadowless lamp/automatic door, telephone and gas status, etc.



Medical Suspension Bridge And Crane Tower

The cantilever suspension bridge is appropriate for intensive care units in the hospital. It is composed of the bridge frame, dry section and wet section. The multiple joints enable it to move in a wide range of distances and rotate at 330 degrees. The pneumatic brake prevents drifting, which makes it possible to move to any area of the operating table more conveniently and adjust the terminal position accurately.



Medical Automatic Airtight Translation Door

It is featured by automatic delay closing, compact structure, high air tightness, anti-collision and sound insulation, stable operation, extremely low failure rate, elegant appearance and high safety.



Intensive Care Unit Project

With the development of medical care professionals, introduction of new medical devices and improvement of hospital management systems, the intensive care unit (ICU) has been emerging as a medical organization and management mode that integrates modern medical care techniques. The branches include pediatric intensive care unit (PICU), neonatal intensive care unit (NICU), medical intensive care unit (MICU), coronary care unit (CCU), cardiac surgery intensive care unit (CICU), emergency intensive care unit (EICU) and psychosurgical intensive care unit (NSICU).

ICU Hall

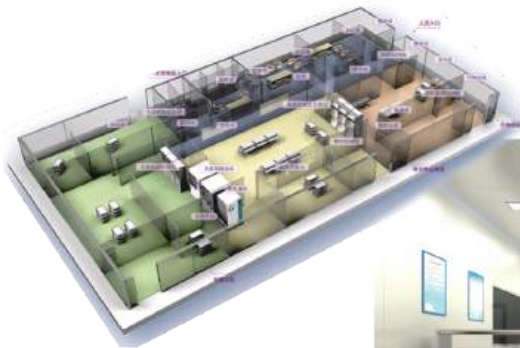


ICU Single



Disinfection Supply Room Project

Disinfection Supply Room Effect Drawing



Decontamination Room



Cleaning and Packaging Room



The disinfection supply room is an important department for a hospital to supply all kinds of sterile instruments, dressings and materials. It is divided into decontamination area, cleaning and packaging area and sterile material storage area, where the quality of work directly affects the quality of medical care and patient safety.



After Sales Service



Setting trace file for every sold product, quarterly survey for every sold product.



Providing remote instruction and training for free.



Providing on-site services and repairs for free during warranty period if problems caused by ETR.



Spare parts and on-site service would be changed with best price after warranty period.



7*24 hours online service for free, giving solution for any problems within 48 hours.



If customer required, assigning experienced after-sales engineer for on-site service with 7 days. (Visa apply should be considered)

Honorary Qualification

