



**Dual-Person Hard Shell  
Sitting Type Hyperbaric Oxygen Chamber**



module	name	parameter
Cabin module	model	OLV-YZM01
	size	223*190*197cm (length * width * height)
	weight	750kg
	design pressure	110Kpa
	working pressure	0-100Kpa
	noise	≤60DB(A)
	power input	AC 240V/AC 110V, 50/60Hz
	interiorinput power	200W
Other configura-tions	Sofa (doubles), TV (43 inches), air conditioning, walkie-talkie, internal control panel, external control panel, emergency stop button, emergency pressure relief device, BIBIS respiratory system	
Air conditio ning module	size	External machine: 365*445*600 mm (length * width * height) Internal engine: 530*170*260 mm (length * width * height)
	weight	Outpost: 30 KG Internal engine: 4.15 KG
	Control range	2-10°C
	blowing rate	420m <sup>3</sup> /hour
	wind speed	5m/s
	power	200W

# Modular and Integrated

## Structure principles

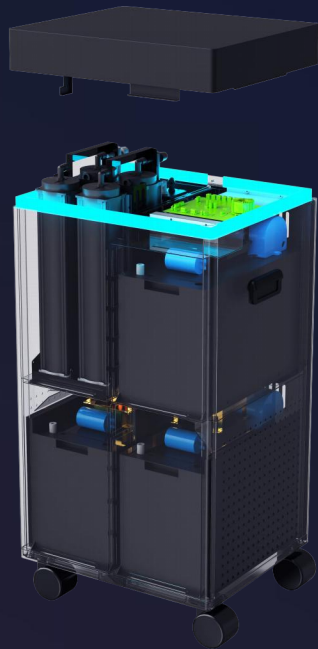
It consists of one booster and two 20L oxygen generators  
Main components: sheet metal shell, air compressor components, molecular sieve components (only oxygen generator included), electronic control board, oxygen outlet interface, air outlet.

## operational principle

The oxygen chamber is closed and pressurized. By introducing oxygen and air into the cabin, a micro-high pressure environment is formed in the cabin. Patients receive oxygen therapy in the cabin, providing effective and sufficient oxygen to the hypoxic body and increasing the oxygen storage in tissues.

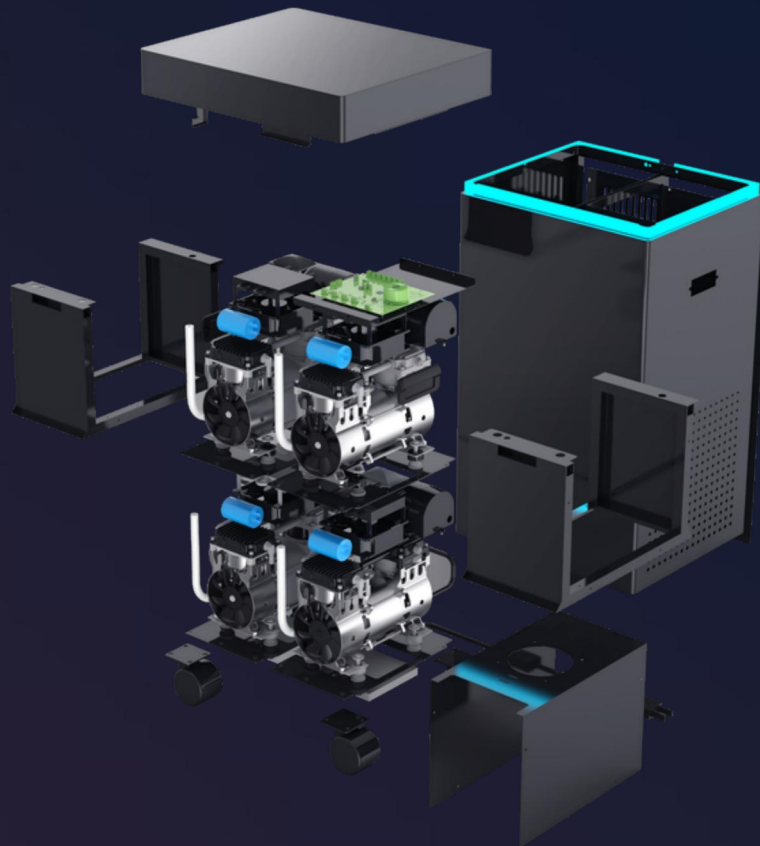


## Dual-Core Drive, Efficient Oxygen Production | Module Separation, Efficiency Integration



module	name	Parameter
Oxygenation module	Model	OLV-YC20S
	Size	500mm*400mm*960mm (length * width * height)
	Weight	Oxygen generator: 90kg
	Output pressure	>200Kpa
	Oxygen flow	0-20L/min (x2)
	Oxygen supply concentration	90±3%
	Pressure of oxygen supply	>350Kpa
	Noise	≤60dB
	Power input	AC 240V/AC 110V, 50/60Hz
	Power	1450W*2

Precise Pressure Stabilization, Durable: the Booster Module Protects the Oxygen Chamber Every Moment of Safety and Efficiency



Module	Name	Parameter
Pressure booster module	Model	OLV-YCZ01
	Size	500mm*400mm*960mm (length * width *height)
	Weight	100kg
	Output pressure	>350Kpa
	Air discharge flow	>400L/min
	Noise	≤60dB
	Power input	AC 240V/AC 110V, 50/60Hz
	Power	3100W

# **Chamber Section**

**Dual-Person Sitting Type Hard Shell Hyperbaric Oxygen Chamber**



## External Chamber components

### Chamber shell

Chamber Decorative Parts

Decorative light strips

22 Inch Control Screen

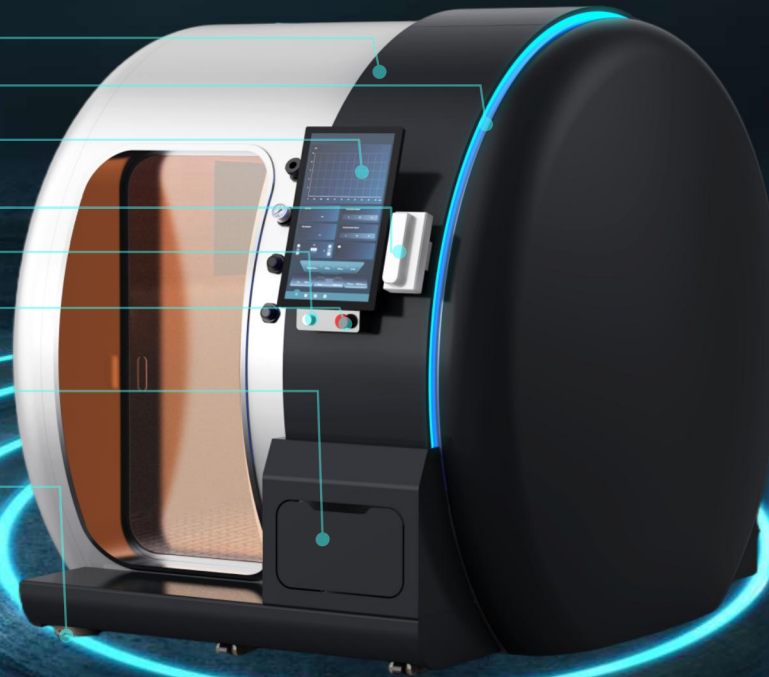
External Walkie-Talkies

Switch Button

Emergency Stop Button

Storage Compartment

Crankset\* 8





## External Chamber components

Manual Emergency Pressure Relief Valve

Manual pressure relief valve

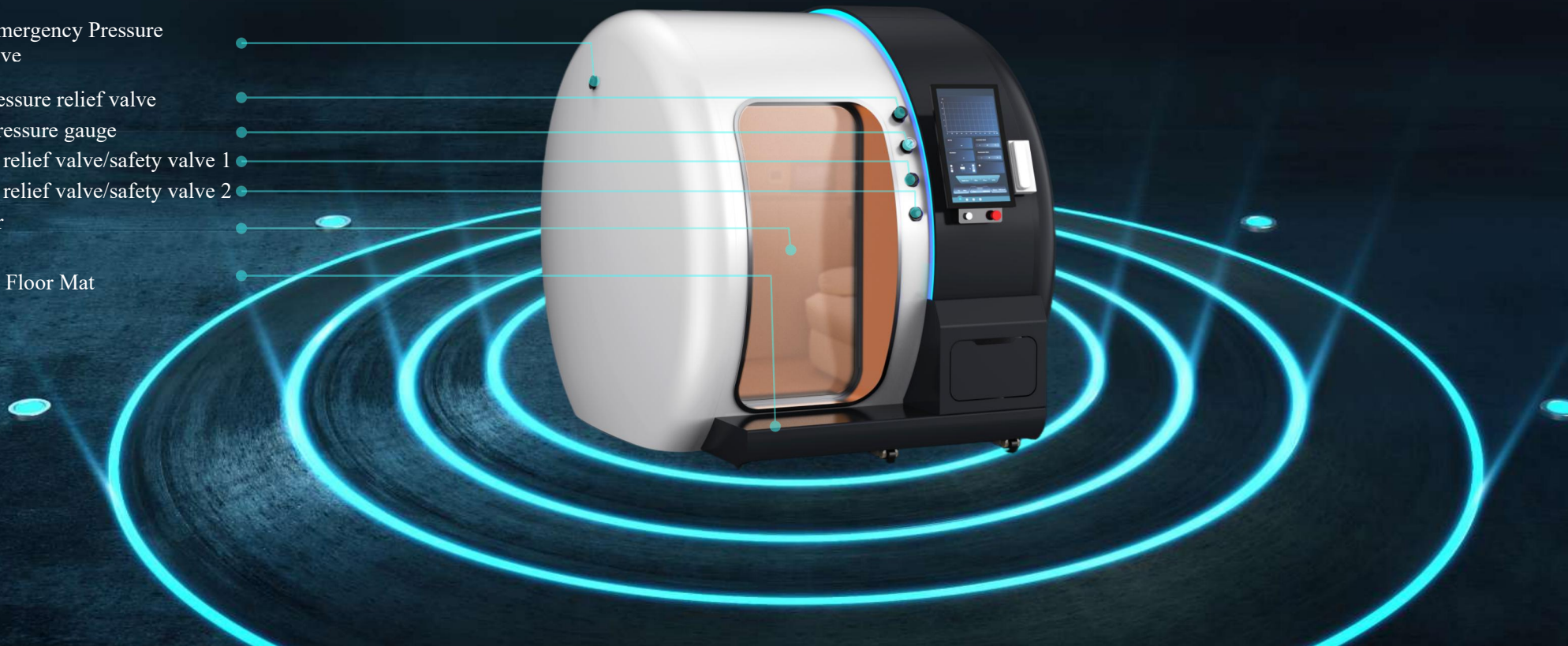
External pressure gauge

Automatic relief valve/safety valve 1

Automatic relief valve/safety valve 2

Hatch door

Step/Static Floor Mat





## Internal Chamber components



①



②



③



④



⑤

### List of chamber components:

①15.6-inch Control Screen

②Telephone

③Abrupt Stop Mechanism


④Photo-Catalytic Disinfection Unit

⑤43-inch LED LCD TV

⑥Air Conditioning Indoor Unit

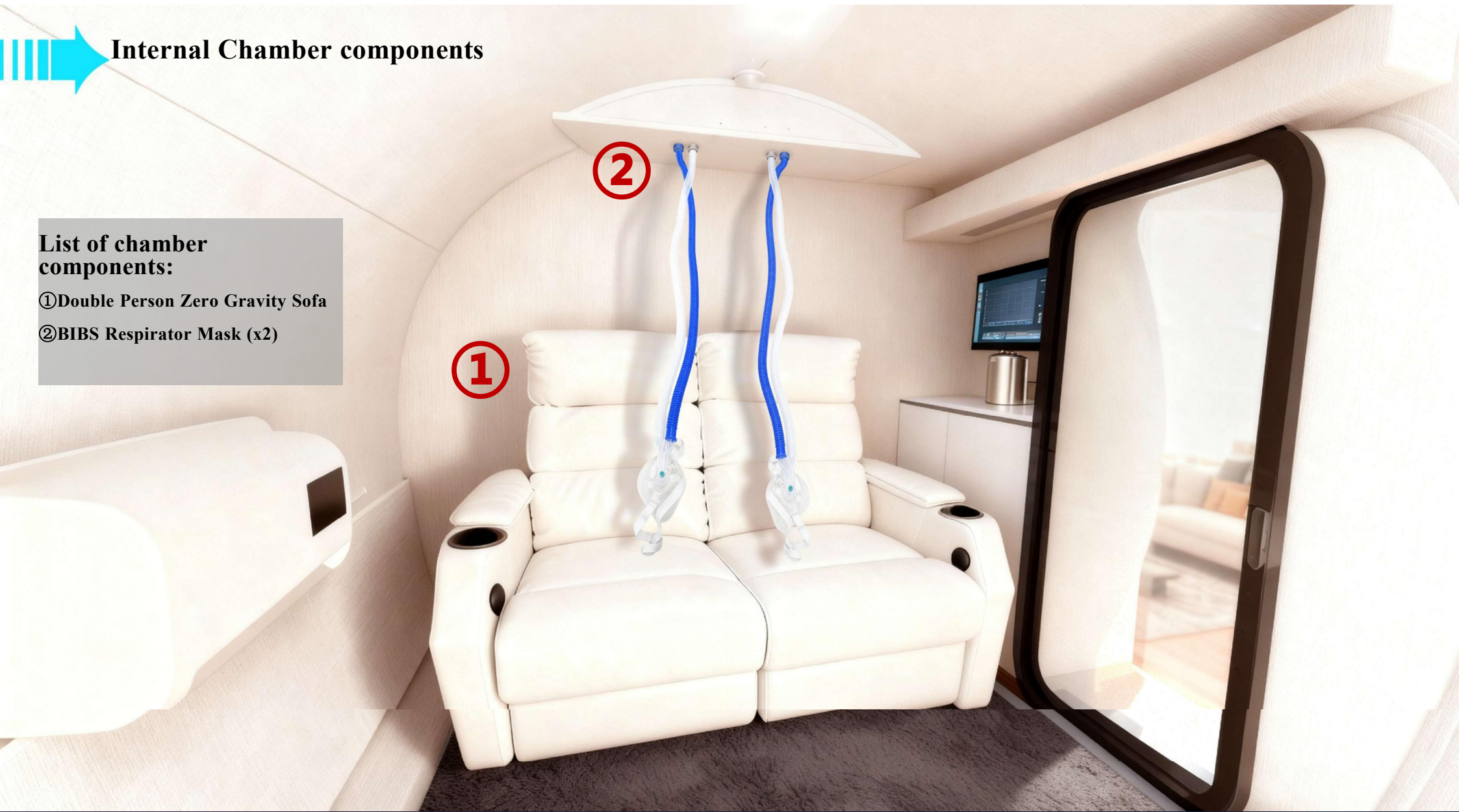


⑥

 **Internal Chamber components**

**List of chamber components:**

- ① Double Person Zero Gravity Sofa
- ② BIBS Respirator Mask (x2)



# Materials Section

Almag

Aluminum Magnesium Alloy



Almag

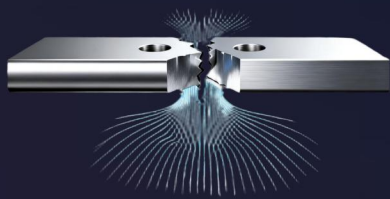
Aluminum Magnesium Alloy

## Model: 5182H34

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The 5-series aluminum-magnesium alloy adopted represents the gold standard for safety and durability. Featuring tensile strength, exceptional corrosion resistance, and excellent weldability without requiring heat treatment strengthening. It is ideal for high-pressure environments with stringent corrosion resistance requirements, such as medical oxygen chambers and diving decompression chambers.

5182H34 Key performance:



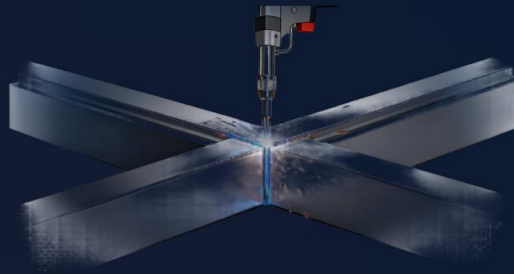
Tensile Strength

305-380MPa (H112 state)  
yield strength 170-210MPa



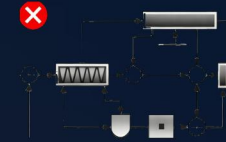
Excellent Corrosion Resistance

Marine grade corrosion resistance,  
pitting resistance, stress corrosion resistance.



Excellent Corrosion Resistance

The weld strength is more than  
80% of the base material.



No Heat Treatment Strengthening

Stable performance by cold processing  
or solid solution strengthening.



*Recyclable* 

### Recyclability of Aluminum Magnesium Alloys: the Best in Metal Materials

- Recycling rate: nearly **100%** efficient recovery
- Recycling energy consumption: only **5%** of the energy used in native production
- Performance stability: the performance is almost no attenuation after regeneration

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Aluminum alloy stands as one of the rare engineering materials on Earth that can be recycled infinitely without losing inherent properties. This means that the cabin structures we build today will retain their material value intact when they reach the end of their service life decades later. Recycled aluminum alloys maintain identical chemical composition and mechanical properties to virgin aluminum. The recycled aluminum can also be used to manufacture high-performance aviation-grade and automotive-grade products, achieving "same-class recycling".

# New Generation PC (polycarbonate) Safety Hatch

—— [ Three breakthroughs: transparent vision, hard core protection and precision structure

## PC Aviation Grade Material

Transparent and durable

**40mm**

Wall thickness design

**250 times**

Impact resistance of glass

**> 90%**

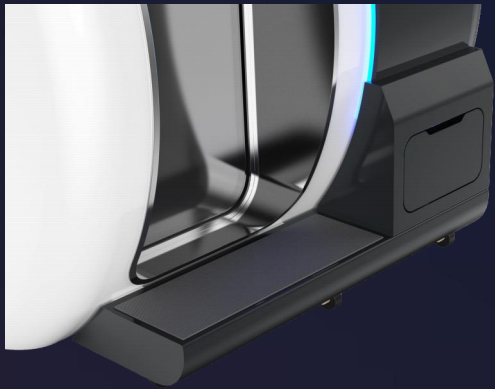
Transparency

## Structural technology

- **Suspended track system:**The switch is light and smooth, and the operation is silent and without hesitation
- **Double airbag sealing technology:**The upper and lower airbags fit together tightly to ensure "zero leakage" pressure

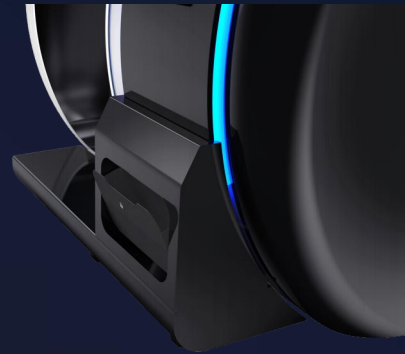


## Craftsmanship Details: From "stepping Into Experience" to "micro Protection" for Your Consideration



**Humanized half-step ladder**

Easy access, seamless connection



**Enjoy the storage box**

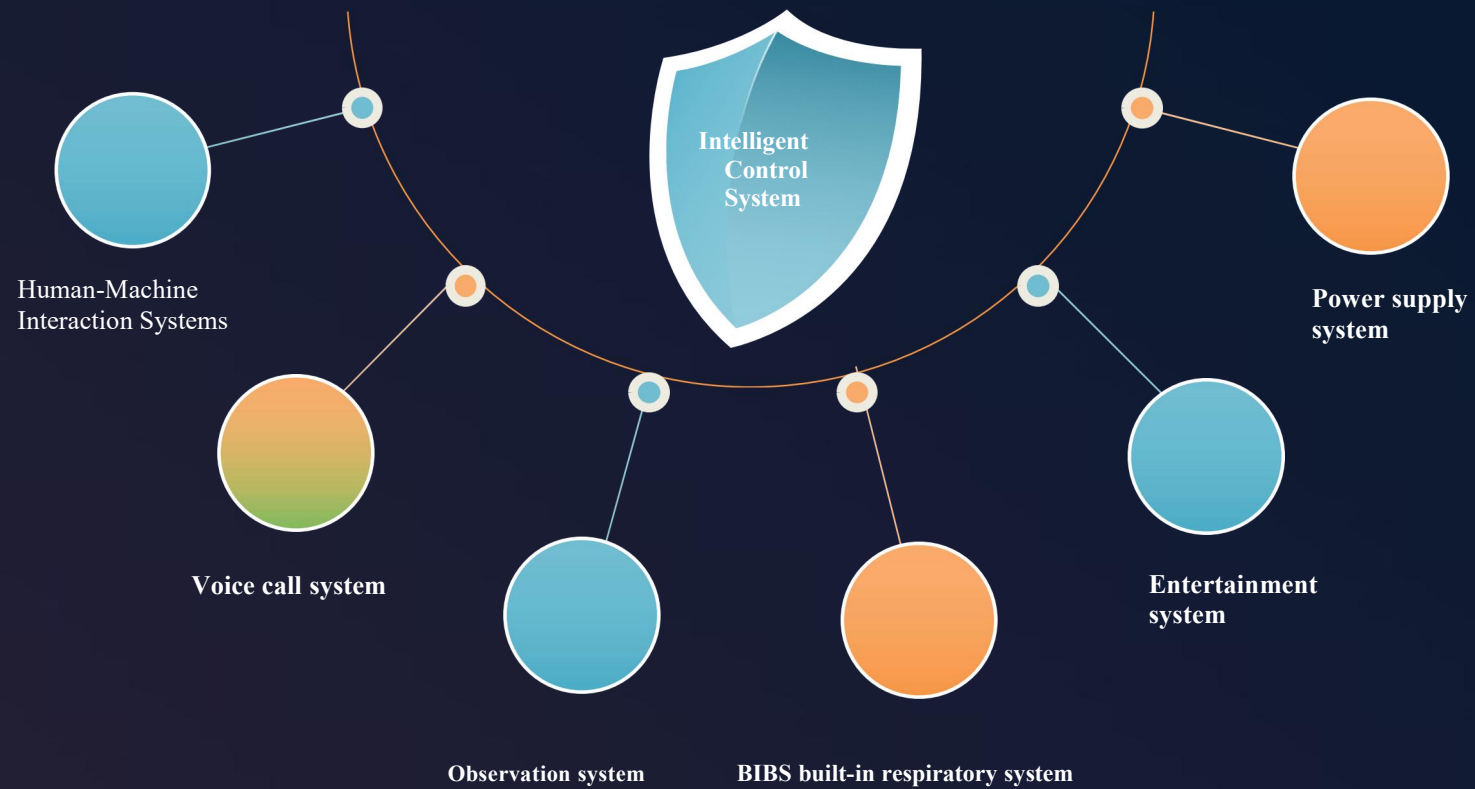
Small space, hidden big care



**Anti-static protection**

Invisible details, visible peace of mind

# Intelligent Control System



### Human-Machine Interaction System

The Human-Machine Interface (HMI) is the core part of the oxygen chamber control system, which is responsible for the information interaction between the operator and the oxygen chamber equipment. For example, touch screen, indicator light, user interface (UI), etc.

### Voice call system

Realize the interaction between the internal and external operators of the oxygen chamber.

### Observation System

Real-time monitoring of cabin environment and equipment operation status. Collect and display oxygen concentration, pressure, temperature and humidity parameters in the cabin, and monitor system operation faults and generate alarm

### BIBS built-in respiratory system

The BIBS (Built-In Breathing System) mask is a specialized respiratory device designed for high-pressure oxygen chambers, primarily used to deliver high-concentration oxygen and ensure breathing safety in high-pressure environments. It features a separate inhalation and exhalation system, allowing users to inhale pure oxygen while expelling carbon dioxide through dedicated channels, effectively preventing carbon dioxide buildup.

### Entertainment System

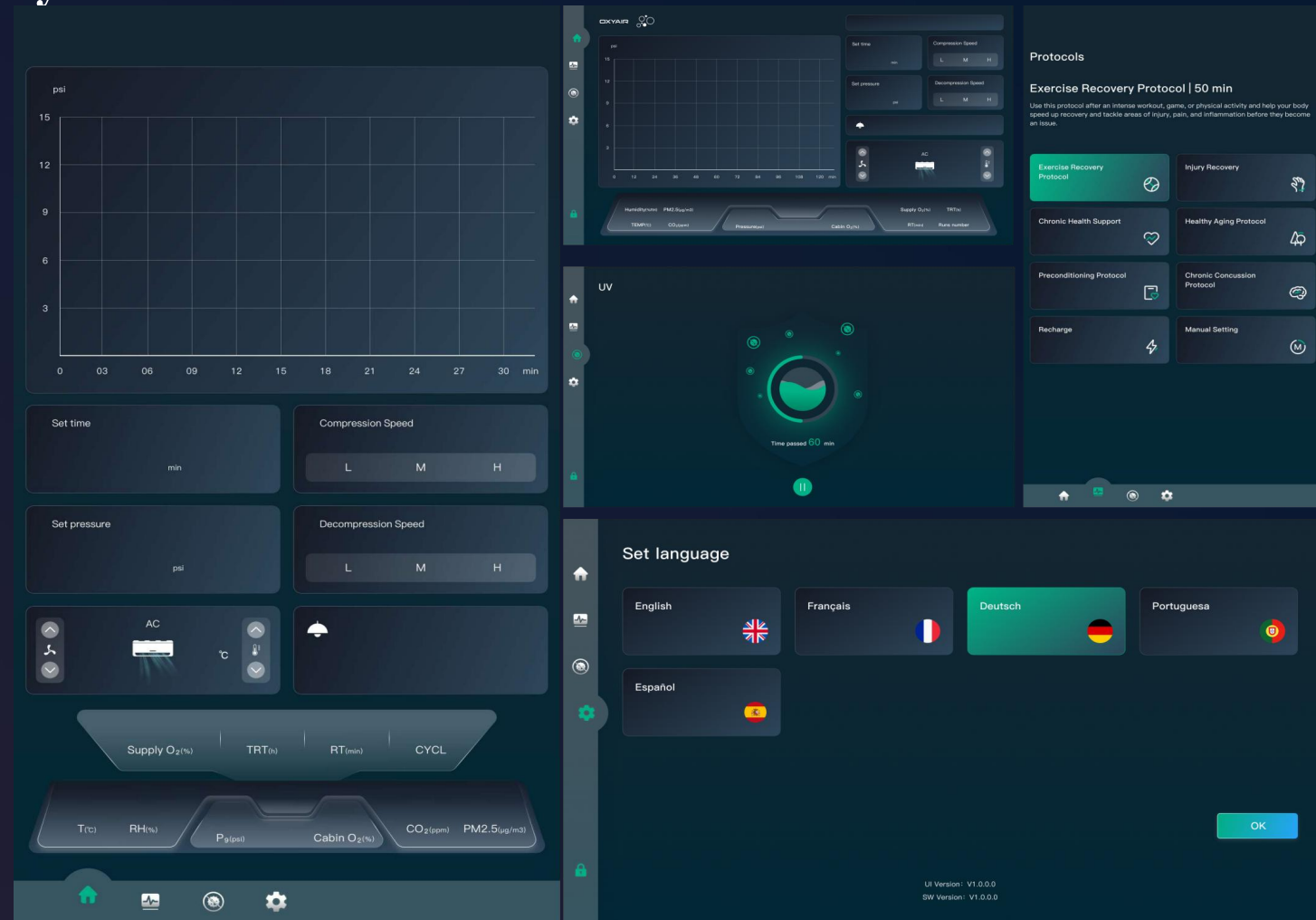
The multimedia system designed to enhance the user experience in the oxygen chamber aims to alleviate monotony and provide relaxation and entertainment functions. By integrating audio-visual entertainment, interactive features, and environmental controls, it creates a comfortable and enjoyable oxygen therapy environment for users.

### Power Supply System

The core part of providing stable and reliable power for the oxygen chamber equipment, ensuring the functions of the oxygen chamber, meeting the requirements of high safety, stability and energy efficiency

# Human-Machine Interaction Systems

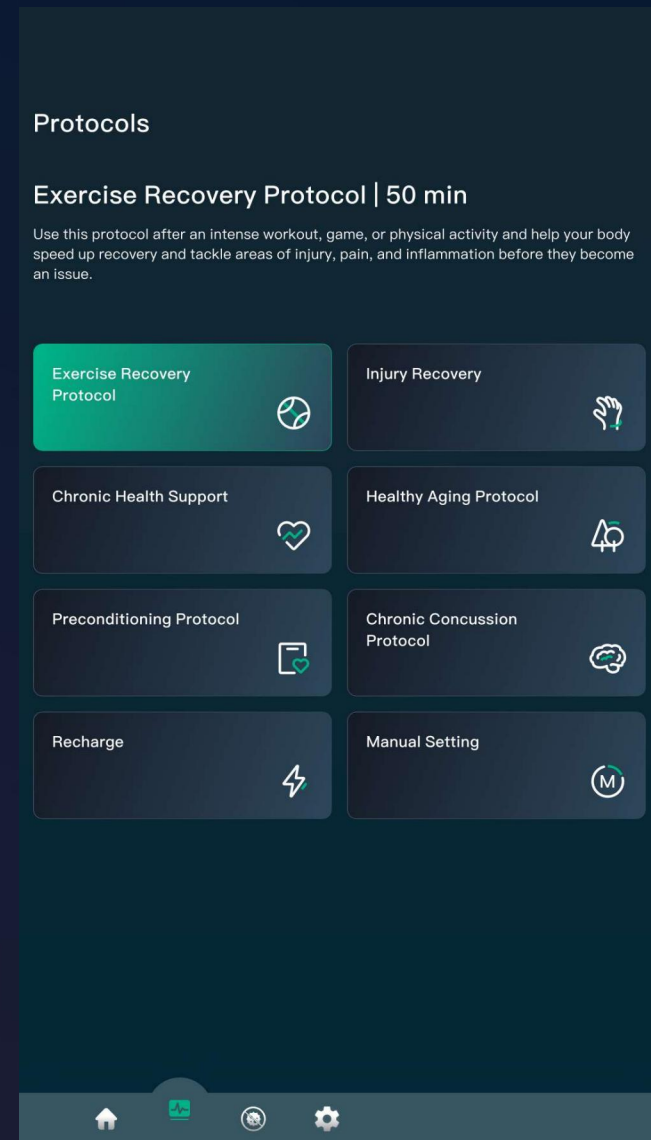
- > Oxygen chamber control
- > Parameter setting
- > Operation
- > Data monitoring
- > Operation status indicator
- > Alarm information



# 7 Scenario Planning

One key change, precise setting: preset multiple oxygen therapy plans to initiate a pioneering rehabilitation.

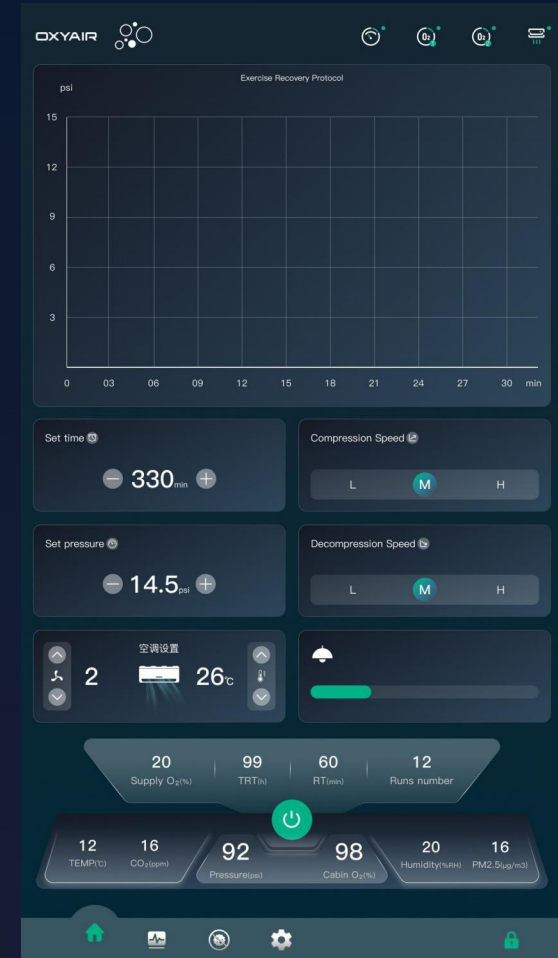
- Exercise recovery programme
- Rehabilitation programme for the wounded
- Chronic Health Support Program
- Aging in Health Programme
- Pre-treatment programme
- Chronic concussive concussion protocol
- Charging programme
- manual mode



## Parameter Setting



- Performance period
- Treating stress
- Rate of rise
- Decompression rate
- Cabin lighting
- Air conditioning temperature
- Air conditioning fan speed



## Run Data Monitoring — Pressure Curve Chart

The real-time recording chart takes time as the horizontal axis and cabin pressure as the vertical axis. It visually depicts the dynamic change of oxygen chamber pressure during the whole process of hyperbaric oxygen therapy.

### real time protection

Operators and patients can more intuitively view the pressure curve of the three stages of cabin pressurization, pressure stabilization and pressure relief.



# Environmental Monitoring



Pressure



Oxygen Concentration



Carbon Dioxide Concentration



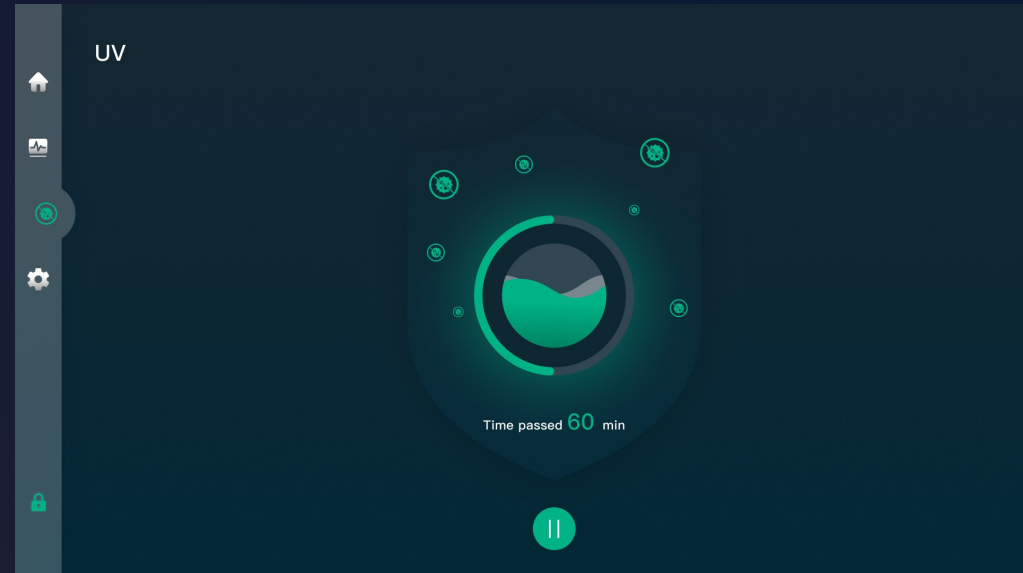
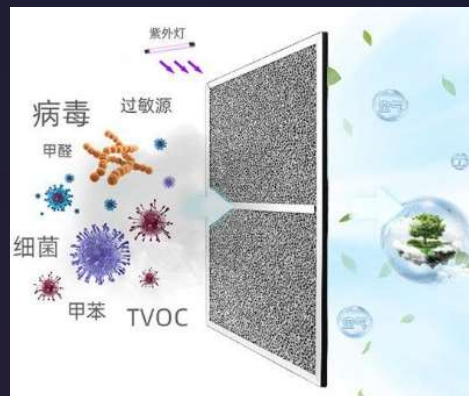
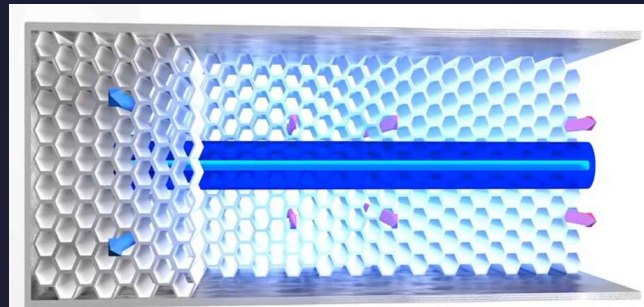
Air Quality PM2.5



Temperature and Humidity

# Photocatalytic Oxidation (PCO)

Using a specific light source (usually ultraviolet light) to irradiate the nanoscale photocatalytic material (titanium dioxide  $\text{TiO}_2$ ), strong oxidizing substances are produced to decompose and oxidize air pollutants, bacteria, viruses and so on.



# BIBS Intraosseous Respiratory System

B U I L T - I N B R E A T H I N G S Y S T E M

## ✔ Reduce the risk of carbon dioxide buildup

The accumulated oxygen and carbon dioxide are prevented by the discharge of exhaled gas to the outside.

## ✔ Controlled oxygen concentration

Even if the pressure fluctuates inside, the oxygen flow rate can be precisely adjusted to provide the desired concentration.

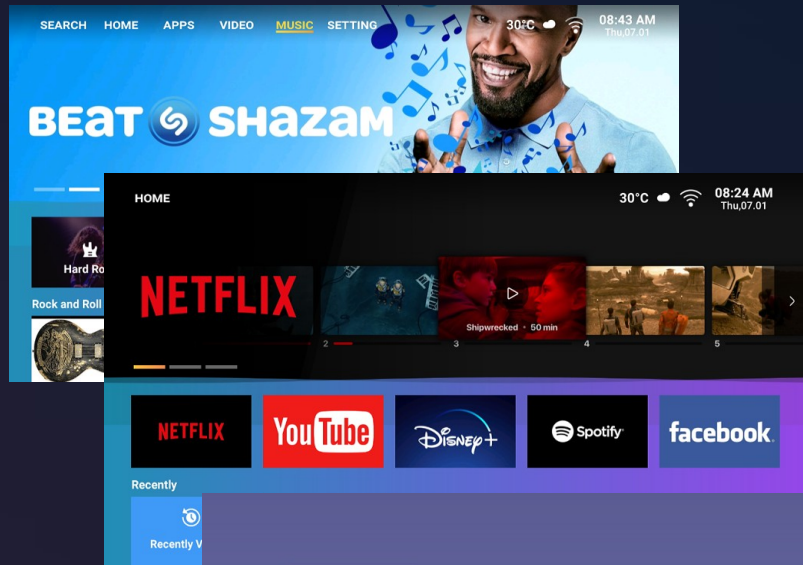
## ✔ Continuous flow of oxygen

Regardless of breathing patterns, the BIBS system provides a constant oxygen flow that may be beneficial for patients with deep breathing difficulties or impaired respiratory muscles.

## ✔ simplicity of operator

Secure oxygen intake through a comfortable mask. Patients with limited mobility or cognitive impairment are more likely to use it

# Entertainment System



## Multimedia Component

Images, audio, video, installation packages, storage devices, and local storage

## Android Component

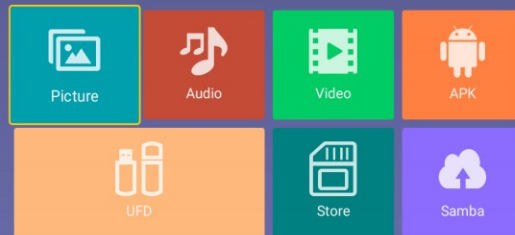
Home page, Settings, Network, Six languages (English, French, German, Italian, Spanish, Russian)

## Joggle

HDMI, AV, ATV, DVB

## 43-Inch Aluminum Alloy

HD 1080P, 1920\*1080, 16:9, Android 9.0, 8G storage, 1G running, quad-core main frequency



# Multilingualism

Set language

English



Français



Deutsch



Portuguesa



Español



OK

UI Version: V1.0.0.0

SW Version: V1.0.0.0