



Aref
company
trading company



areftrading.com
arefteb.com



info@areftrading.com



+989152076608
+98 9155253326



4

About Us

6

Types of Home Oxygen Concentrators

8

5-Liter Home Oxygen Concentrator

10

6-Liter Home Oxygen Concentrator

12

10-Liter Home Oxygen Concentrator

15

Types of Hospital Oxygen Concentrators

16

Modular Hospital Oxygen Concentrator

18

Twin Tower Hospital Oxygen Concentrator

20

Compressor

20

Electromotor and Air End

21

Dryer

21

Filtration

22

Mid-range Oxygen Concentrator

24

Compressed Air and Oxygen Storage Tanks

25

Summary Comparison of Oxygen Concentrator Packages

25

Ambulance Oxygen Concentrator

26

Features

27

Advantages of Using These Devices

centrator. In this article, we will examine this home oxygen concentrator and its applications.

A home oxygen concentrator is a device that helps enrich the oxygen in the air. Simply put, if you place this device in your living area, it will concentrate the oxygen in the space using its available technologies, providing high-quality, enriched oxygen for individuals, especially patients.

Types of Home Oxygen Concentrators

In general, home oxygen concentrators are divided into two main types

Portable Oxygen Concentrators

Non-Portable Oxygen Concentrators

As the name suggests, portable oxygen concentrators usually have smaller dimensions, allowing you to use them anywhere and move them easily. It is worth noting that this type of device is particularly suitable for individuals who have limited storage space and are frequently moving from one location to another.

It is evident that home oxygen concentrators are not very portable and are designed for fixed use, intended for limited mobility. Interestingly, most home oxygen concentrators used by individuals, especially in Iran, are of the stationary type.

About Aref Company



The Aref Company has started its activities in the field of exporting and selling in global markets by increasing the quantity and quality of various home and hospital oxygen concentrators in the domestic market. Providing services to our dear customers is one of our main business plans to gain your satisfaction and trust. We are very pleased to serve you and hope to meet your expectations.

Many people may pay less attention to this issue or not notice it over time, but the air we breathe can significantly impact our longevity, health, and most importantly, our mental state in the long term. Therefore, it is crucial to give it a lot of importance. One of the tools that can improve the air quality in our home is a home oxygen con-



5-liter home oxygen concentrator

6-liter home oxygen concentrator

10-liter home oxygen concentrator





Specifications for the Soshya 5-Liter Home Oxygen Concentrator

| Device Noise (db) | Oxygen Purity (%) | Maximum Output (lit/min) | Weight (kg) | Power Consumption (w) | Dimensions (cm) |
|-------------------|-------------------|--------------------------|-------------|-----------------------|----------------------------|
| 47 | 93 ± 3 | 5 | 17.5 ± 0.3 | 300 | L: 42 x W: 36 x H: 65 (cm) |

5-Liter Home Oxygen Concentrator

A device that produces pure oxygen above 94% by drawing in ambient air without needing oxygen refills or any other stimulus. The 5-liter oxygen concentrator has obtained all necessary standards for product production and quality assurance and is considered a competitor to global brands.

- Very low noise
- 24-hour operation
- Large display
- Separate nebulizer outlet
- Oxygen purity monitor using ultrasonic wave-based oxygen sensor
- Equipped with 5 separate filters and an antibacterial filter
- Smart board and automatic alarm for high temperature, low or high pressure, power outage, and oxygen purity drop
- Timer system for automatic shutdown
- Operational data storage system
- High output pressure for using longer tubes
- Oxygen purity: $93\% \pm 3\%$ with a maximum output of 5 liters/minute
- Dimensions (cm): Length 42, Width 36, Height 65
- Weight: 17.5 kg
- 2-year warranty and 10 years after-sales service



Specifications for the Prana 6-Liter Home Oxygen Concentrator

| Device Noise (db) | Oxygen Purity (%) | Maximum Output (lit/min) | Weight (kg) | Power Consumption (w) | Dimensions (cm) |
|-------------------|-------------------|--------------------------|-------------|-----------------------|-----------------------|
| 45 | 93 ± 3 | 6 | 15 ± 0.3 | 300 | L: 50 x W: 32 x H: 32 |

6-Liter Home Oxygen Concentrator

A device that produces pure oxygen above 93% by drawing in ambient air without needing oxygen refills or any other stimulus. The 6-liter home oxygen concentrator has obtained all necessary standards for product production and quality assurance and is considered a competitor to global brands.

- Smaller dimensions compared to previous models
- Oxygen purity: 96% with a maximum output of 6 liters/minute
- High-lifespan zeolite
- Equipped with a high-lifespan American compressor
- Very low noise
- Suitable for 24-hour operation
- Touch digital display
- Separate nebulizer outlet
- Oxygen purity monitoring using ultrasonic wave-based oxygen sensor
- Equipped with 5 separate filters and an antibacterial filter
- Smart board and automatic alarm for high temperature, low or high pressure, power outage, and oxygen purity drop
- Timer system for automatic shutdown
- Operational data storage system
- High output pressure for using longer tubes
- Weight: 15 kg
- 2-year warranty and 10 years after-sales service



Specifications for the Soshya 10-Liter Home Oxygen Concentrator:

| Device Noise (db) | Oxygen Purity (%) | Maximum Output (lit/min) | Weight (kg) | Power Consumption (w) | Dimensions (cm) |
|-------------------|-------------------|--------------------------|-------------|-----------------------|----------------------------|
| 55 | 93 ± 3 | 10 | 23.5 ± 0.3 | 650 | L: 42 x W: 36 x H: 65 (cm) |

10-Liter Home Oxygen Concentrator

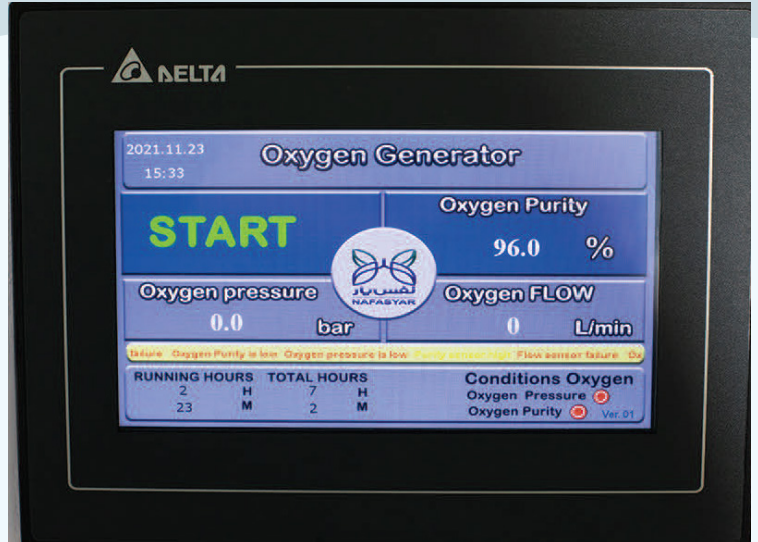
A device that produces pure oxygen above 94% by drawing in ambient air without needing oxygen refills or any other stimulus. The 10-liter oxygen concentrator has obtained all necessary standards for product production and quality assurance and is considered a competitor to global brands.

- Very low noise
- 24-hour operation
- Large display
- Separate nebulizer outlet
- Oxygen purity monitor using ultrasonic wave-based oxygen sensor
- Equipped with 5 separate filters and an antibacterial filter
- Smart board and automatic alarm for high temperature, low or high pressure, power outage, and oxygen purity drop
- Timer system for automatic shutdown
- Operational data storage system
- High output pressure for using longer tubes
- Oxygen purity: $93\% \pm 3\%$ with a maximum output of 10 liters/minute
- Dimensions (cm): Length 42, Width 36, Height 65
- Weight: 23.5 kg
- 2-year warranty and 10 years after-sales service

Modular Hospital Oxygen Concentrator
Twin Tower Hospital Oxygen Concentrator
Mid-Range Oxygen Concentrator
Ambulance oxygen concentrator







Capacity of the NYT-Modular Oxygen Concentrator:

| Equivalent to the number of 40-liter cylinders in 24 hours | Oxygen 93% + 3% L/min | Unit SA | Model |
|--|-----------------------|---------|----------|
| 30 | 100 | 2 | NYT-M100 |
| 45 | 150 | 3 | NYT-M150 |
| 60 | 200 | 4 | NYT-M200 |
| 75 | 250 | 5 | NYT-M250 |
| 90 | 300 | 6 | NYT-M300 |
| 120 | 400 | 4+4 | NYT-M400 |
| 150 | 500 | 5+5 | NYT-M500 |
| 180 | 600 | 6+6 | NYT-M600 |
| 225 | 750 | 5+5+5 | NYT-M750 |
| 270 | 900 | 6+6+6 | NYT-M900 |

NYT-M oxygen concentrator

- Produced with a dedicated generator by Aref Company, designed and manufactured using PSA and Bank Type (modular) technology with 93% oxygen purity and production capacity from 90-100 liters per minute.
- Strong engineering with industrial PLC control and a touch color panel.
- Cost-effective with minimal maintenance and energy consumption.
- Capable of monitoring and network control.
- Operating pressure: 4-6 bar, adjustable.
- 1-year warranty and 10 years after-sales service.
- High flexibility in installation and capacity upgrade from 100-900 liters per minute with 93% ± 3% purity.
- Equipped with a smart analyzer with the capability to connect and install sensors for pressure, flow, oxygen gas temperature, and oxygen purity for web-based monitoring.
- Approved by the Ministry of Health and compliant with national and international standards.
- Integrated welded piping system and stainless-steel piping system.
- 10-year zeolite package warranty.



NYT-T Oxygen Concentrator

- Approved by the Ministry of Health and compliant with national and international standards.
- Very favorable Ari Factor and highest efficiency.
- Ultrasonic wave-based purity sensor, No need for periodic calibration and with a continuous resolution of 0.01%.
- Capable of installing a sensor at the end of the consumption path.

Capacity of the NYT-Modular Oxygen Concentrator:

| Equivalent to the number of 40-liter cylinders in 24 hours | Oxygen 93% + 3% L/min | Unit SA | Model |
|--|-----------------------|---------|----------|
| 30 | 100 | 2 | NYT-M100 |
| 45 | 150 | 3 | NYT-M150 |
| 60 | 200 | 4 | NYT-M200 |
| 75 | 250 | 5 | NYT-M250 |
| 90 | 300 | 6 | NYT-M300 |
| 120 | 400 | 4+4 | NYT-M400 |
| 150 | 500 | 5+5 | NYT-M500 |
| 180 | 600 | 6+6 | NYT-M600 |
| 225 | 750 | 5+5+5 | NYT-M750 |
| 270 | 900 | 6+6+6 | NYT-M900 |

Dryer



- Made by Kaishan Company.
- Double the air volume drying capacity.
- Equipped with a separate refrigeration-type dryer that operates with a dew point of 3°C.

Filtration



- In accordance with international standard ISO 8573-1 and class 1-4-1.
- Includes particle filters, microfilters, and activated carbon, double.
- Equipped with an antibacterial filter.
- Equipped with 10 separate filters.

Compressor



- Made by Kaishan, the world's third-largest compressor manufacturer with over 60 years of production history.
- Oil-injected Screw Compressor type with 8-bar working pressure.
- Direct drive transmission system from the electromotor to the Air end unit.
- Note: Aref Company's oxygen concentrator package can use various leading compressors as per customer request.

Electromotor and Air End



- Electromotor made by Schneider Electric, France.
- Electrical control system of the electromotor with inverter using VFD technology.
- Reduces compressor wear and electricity consumption by up to 50%, doubling the compressor's useful life. Thermal class F for optimal high-temperature endurance.
- Air End made by SKK Company.

Features

- Optimal design with minimal maintenance and repair costs
- Air filtration replacement every 2,000 hours / Antibacterial filter replacement every 10,000 hours
- Oil-Free ZERO compressor
- Internal absorption dryer
- Ultrasonic wave-based purity sensor without continuous periodic calibration
- In accordance with international standard 15010083, with sensor installation at the end of the path.
- One-year warranty and ten years of after-sales service after installation and commissioning.
- Zeolite warranty for ten years.
- Dryer with drying capacity appropriate to the compressor's capacity, and filtration in accordance with international standard ISO 8573-1 and class 1-4-1.
- Filtration includes particle filters, microfilters, and antibacterial double filtration.
- Oxygen storage tank with appropriate capacity, made in Iran, and compliant with European standards.
- The storage tank features an epoxy internal coating, equipped with a safety valve, pressure gauge, temperature gauge, and drain valve.
- Compressor noise at a distance of 1.6 meters is less than 85 dB.

Specifications for the NYT Mid-Range Oxygen Concentrator Model:

| Device Noise (db) | Oxygen Purity (%) اکسیژن (%) | Maximum Output (lit/min) | Weight (kw) | Power Consumption (cm) | Dimensions |
|-------------------|---------------------------------|--------------------------|-------------|--------------------------|------------|
| 85 | %93 ± 3 | 50 | 3.5 | L: 115 x W: 60 x H: 120 | liter 50 |
| 85 | %93 ± 3 | 100 | 7.0 | L: 115 x W: 60 x H: 120 | liter 100 |
| 85 | %93 ± 3 | 150 | 10.5 | L: 105 x W: 130 x H: 155 | liter 150 |
| 85 | %93 ± 3 | 200 | 14 | L: 105 x W: 130 x H: 155 | liter 200 |

Mid-Range Oxygen Concentrator (Hospital/Clinic)

This device is designed and produced by Aref Company using PSA and Modular technology with 93% \pm 3% oxygen purity and diverse production capacity.

Product has been designed to address the challenges faced by surgical centers, including high noise levels of hospital equipment, limited available space, high device costs, extensive maintenance requirements, significant power consumption, and the risk of complete equipment failure affecting oxygen supply. It is approved by the Ministry of Health and Medical Education and complies with both national and international standards.



Comparative Overview of Mid-Range Oxygen Concentrators and Hospital Oxygen Concentrators

- 50% lower power consumption.
- 85% lower maintenance costs.
- Smaller device dimensions.
- Low-cost and easy installation.

Ambulance Oxygen Concentrator Model NYTAMB10

- - The NYTAMB10 ambulance oxygen concentrator from Aref Company produces pure oxygen (93% + 3%) from ambient air without the need for oxygen recharge.
- This 10-liter model meets the necessary standards for production and quality assurance and competes with global brands.



Compressed air and oxygen

- with capacity suited to the selected model.
- Made in Iran and complies with global standards, featuring an epoxy internal coating and anti-static body color.
- Equipped with a safety valve, pressure gauge, and drain valve, with an Oxygen inspection port (man holes) for internal access.



Advantages of Using This Device:

- Availability of an oxygen source during emergencies.
- No need for transportation and regular refilling of oxygen cylinders.
- Possibility of smart integration and coordination with oxygen cylinders.
- Operation in harsh environmental conditions.
- Resistant to dust and environmental impacts.
- Continuous 24/7 oxygen supply to the patient.
- Free periodic maintenance.
- Two-year warranty and ten years of after-sales service.

Features:

- Ultra-quiet operation
- Continuous operation capability
- Long lifespan
- High build quality
- Equipped with a digital display
- Separate nebulizer output
- Includes 5 separate filter layers: antibacterial filter, HEPA filter, dust filter, and dual-layer chemical particle filters
- Smart board with automatic alarms for high temperature, low or high pressure, power failure, and oxygen purity drop
- Oxygen purity monitor using an oxygen sensor based on ultrasonic waves
- Timer system for automatic shutdown
- Oxygen purity of $93\% \pm 3\%$ with a maximum output of 10 liters per minute
- Custom design utilizing a 12V or 24V compressor
- No voltage conversion from 12V or 24V to 220V needed; the compressor inherently operates with its own power
- Utilizes the latest generation of electromotors with over 95% efficiency
- Automatic service reminder