Breathe Easy with a Portable Oxygen Concentrator

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Portable Oxygen Concentrators

For many people with respiratory diseases like chronic obstructive pulmonary disease (COPD), supplemental oxygen is a necessary lifeline. Luckily, there are portable and user-friendly options that will improve your overall quality of life. Portable oxygen concentrators are available in different sizes so you can find one that fits your personal needs.

What Is a Portable Oxygen Concentrator?

Portable oxygen concentrators (POCs) are the latest advancement in the medical oxygen field that provide greater benefits and usability than standard metal oxygen tanks. Instead of weekly refills, you simply recharge a lithium ion battery.

A POC works by taking ambient air and filtering it through a sieve bed to produce medical grade oxygen. When making the switch from oxygen tanks to a portable oxygen concentrator, you may be overwhelmed with options — but the main thing you want to ensure is that it meets your prescribed oxygen needs, not only today but in the future as well.

Today we will discuss the varying POC options that are available so you can choose one that not only satisfies your oxygen needs, but also your lifestyle needs.

Pulse vs. Continuous Flow Oxygen Concentrators

When you first start to check out portable oxygen concentrators, you will notice you have two options, pulse flow or continuous flow.

- **Pulse Flow:** A pulse flow POC will deliver a pulsed dose of oxygen on-demand when the device senses a breath is being taken.
- **Continuous Flow:** Continuous flow POCs are a little different — instead of delivering oxygen when a breath is sensed, they deliver a continuous stream of oxygen.

When you receive a diagnosis that requires the need for medical grade oxygen, your doctor will assess your needs and will prescribe a recommended flow of oxygen. You may be prescribed either pulse or continuous flow, or your doctor may recommend a continuous flow during more strenuous activities such as exercise and pulse for less demanding tasks.

Your Oxygen Prescription Includes…

1. **The flow rate or percentage of oxygen required at rest, during exercise and during sleep.** (For example, 2 liters per minute (LPM) continuous, or 2 pulse flow).

2. **The length of daily oxygen treatment.** How long you should be using your POC to receive oxygen therapy each day.
3. **Oxygen delivery method.** Either by mask or nasal cannula.

If you are an oxygen patient who also suffers from obstructed sleep apnea (OSA), connecting your CPAP or BiPAP machine is possible, but with only the use of a POC with continuous flow capabilities.

Things to Take Into Consideration While Looking at a POC

- **Flow Rate:** Will the machine meet your oxygen needs today and in the future as the disease progresses?
- **Battery Life:** How many hours can you enjoy oxygen therapy for without the use of a power outlet.
- **Size:** Find the smallest POC that will satisfy your clinical oxygen needs.
- **Weight:** How much does the POC weigh? Will you be able to transport it day in and day out?

Pulse Flow Portable Oxygen Concentrators

AirSep Focus

- Internal Battery: No
- External Battery Options: Micro Battery, Extended 8-Cell Battery
- Carrying Options: Carrying Case (Belt Clip), Dual Battery Carrying Case (Shoulder & Handle Strap)
- Maximum Operating Altitude: 10,000 ft.

AirSep FreeStyle 3

- Internal Battery: Yes
- External Battery: 8-Cell Battery
- Carrying Options: Carrying Case, Backpack Harness (Additional Cost)
- Maximum Operating Altitude: 12,000 ft.

AirSep FreeStyle 5

- Internal Battery: Yes
- External Battery: 8-Cell Battery
- Carrying Options: Carrying Case, Backpack Harness (Additional Cost)
- Maximum Operating Altitude: 12,000 ft.

Lifechoice Activox Pro

- Internal Battery: Yes
- External Battery: Yes (Additional Cost)
- Carrying Options: 4-Way Carrying Case can be used as a Shoulder Strap, Briefcase, Backpack, or Worn on the Waist
- Maximum Operating Altitude: 10,000 ft.

Lifechoice Activox Sport

- Internal Battery: Yes
- External Battery: Yes (Additional Cost)
- Carrying Options: 4-Way Carrying Case can be used as a Shoulder Strap, Briefcase, Backpack, or Worn on the Waist
- Maximum Operating Altitude: 10,000 ft.

Pulse Flow Portable Oxygen Concentrators

Lifechoice Activox 4L

- Internal Battery: Yes
- External Battery: Yes (Additional Cost)
- Carrying Options: 4-Way Carrying Case can be used as a Shoulder Strap, Briefcase, Backpack, or Worn on the Waist
- Maximum Operating Altitude: 13,000 ft.

Respironics EverGo

- Internal Battery: No
- External Battery: Yes (Includes 2)
- Carrying Options: Carrying Case (Shoulder & Handle Strap), Wheeled Travel Cart (Additional Cost)
- Maximum Operating Altitude: 8,000 ft.

Inogen One G2

- Internal Battery: No
- External Battery: 12 or 24-Cell
- Carrying Options: Carrying Case (Shoulder & Handle Strap), Wheeled Travel Cart and Backpack (Additional Cost)
- Maximum Operating Altitude: 10,000 ft.

Inogen One G3

- Internal Battery: No
- External Battery: 8 or 16-Cell
- Carrying Options: Carrying Case (Shoulder & Handle Strap), Backpack and Wheelchair Bag (Additional Cost)
- Maximum Operating Altitude: 10,000 ft.

Invacare XPO2

- Internal Battery: Yes
- External Batery: Yes
- Carrying Options: Carrying Case (Shoulder & Handle Strap), Travel Cart (Additional Cost)
- Maximum Operating Altitude: 10,000 ft.

Continuous and Pulse Flow Portable Oxygen Concentrators

DeVilbiss iGo

- Internal Battery: No
- External Battey: Yes
- Carrying Option: Protective Wheeled Travel Case/Cart
- Maximum Operating Altitude: 13,123 ft.

Oxlife Independence

- Internal Battery: No
- External Battery: Yes, Option to Run 1 or 2 Batteries at a Time
- Carrying Option: Built-in Wheeled Travel Cart
- Maximum Operating Altitude: 13,123 ft.

SeQual Eclipse 5

- Internal Battery: No
- External Battery: Yes
- Carrying Options: Wheeled Travel Cart, Wheelchair Pack (Additional Cost)
- Maximum Operating Altitude: 13,123 ft.

SeQual eQuinox

- Internal Battery: No
- External Battery: 12 or 24-Cell
- Carrying Option: Wheeled Travel Cart
- Maximum Operating Altitude: 13,130 ft.

Respironics SimplyGo

- Internal Battery: No
- External Battery: Yes, Optional External Battery Module (Run 2 Batteries at Once)
- Carrying Option: Carrying Case (Shoulder & Handle Strap), Wheeled Travel Cart
- Maximum Operating Altitude: 10,000 ft.

Continuous and Pulse Flow Portable Oxygen Concentrators

Invacare SOLO2

- Internal Battery: No
- External Battery: Yes
- Carrying Option: Wheeled Travel Cart
- Maximum Operating Altitude: 10,000 ft.

FAA Approved

Unlike oxygen tanks that don't provide you with the freedom to travel, all the POCs listed on the previous page are approved by the FAA for in-flight use. Each airfare provider may have their own set of rules and regulations. So before you head for the airport, call your airfare provider in advanced and let them know you are a medical oxygen patient traveling with a POC.

Another thing to keep in mind while enjoying your newly restored traveling ability is that the FAA requires all supplemental oxygen patients to have 150% of flight time in battery life. For example, if your flight is 3 hours you would be required to have a minimum of 4.5 hours of battery life.

Mobility Options

Something else to consider while assessing the different POC options available is the unit's transportation options. Specifically, what options will you be provided with to carry your POC?

If you are prescribed strictly a pulse flow setting then you will be able to enjoy the lightest POCs. The majority will include a carrying case allows you to wear the unit as a shoulder bag, or simply carry it like a briefcase. Some pulse flow units also feature an optional wheeled travel cart and backpack attachment to provide hands-free operation.

If you are prescribed a pulse and continuous flow depending on what you are doing, the increased oxygen production capabilities result in a heavier weight than pulse only units. But that doesn't mean you will be required to carry a 14+ pound concentrator day in and day out — instead, these units feature a wheeled travel cart that delivers seamless and strain free operation.

Conclusion

Now that you are aware of all the available POC options, start to weigh the pros and cons of each machine. The most important thing to ensure is that the POC that you do choose will meet your oxygen demand today and in the future as your disease progresses.