Clean air buyer’s guide
A consumer’s guide to understanding and buying air purifiers
Top 8 questions to ask when buying an air purifier:

- Why do I need one?
- Does it clean effectively?
- Will it help my health?
- What size do I need?
- Is it quiet?
- Is it energy efficient?
- Who can I trust?
- Is a warranty important?
Why do you need one?

What’s really floating around in the indoor air you breathe? Think about it. It’s important — especially when you consider that you spend about 90% of your time indoors.

Sure, there’s dust. But there are also particles and gases from everyday household products, such as cleaning supplies, paint and varnish to floors, carpets and upholstery treated with stain protectors. The list can be endless.

Then add the outdoor pollution — pollen, vehicle exhaust and industrial contaminants that sleep in — and take into account inadequate indoor ventilation. Suddenly, the quality of your indoor air is sub-par. And every breath puts you at risk for respiratory disease and allergies if you don’t already suffer from indoor airborne contaminants.
Does it clean effectively?

Don’t be fooled by manufacturer claims. With the Clean Air Delivery Rate (CADR) standard, it’s easy to tell which room air purifier works best. CADR measures the volume of filtered air in cubic feet per minute (CFM) that an air purifier, operating at its highest setting, delivers into a standard-sized room. There are three key numbers for the most common indoor air pollutants: tobacco smoke, dust and pollen.

Sounds like techno-jargon? Here’s a plain language interpretation. The higher the CADR number, the faster the rate at which the room air purifier removes indoor air pollutants. If two room air purifiers are doing the same job in a 20-square-meter room, and room air purifier #1 has a CADR dust rating of 180 and room air purifier #2 has a CADR dust rating of 220, room air purifier #2 does a better job at removing dust from indoor air.

CADR is independently tested and certified by the Association of Home Appliance Manufacturers. It is often the first step and one of the most important factors to consider when buying a new room air purifier. Many air purifiers have a CADR number, but may not be verified by AHAM. For best results, look for the AHAM Verifide symbol.
Will it help my health?

The best way to reduce adverse health effects related to indoor air pollution is to control or remove contaminants at the source. A room air purifier can help mitigate your health issue. But as always, there are many different factors such as type of filter technology that contribute to just how effective a room air purifier can be.

So be sure to identify which contaminants you want to eliminate from your indoor air and select your unit accordingly. By doing so, you are more likely to reduce allergy, asthma and other respiratory health risks and improve your overall well-being.
Indoor air quality is constantly affected by airborne contaminants that are always present, both inside and out. That is why it’s important to select an air purifier with the capacity to handle the total air volume on a continuous basis.

To choose the right air purifier size, use some basic geometry. Just measure the length and width of the room, then multiply the two for the total area in square meters. Standard room sizes are based on a 2.4 meters ceiling height. The AHAM recommended room size of an air purifier is based on five air changes per hour, which means that the unit filters the total air volume in the room every 12 minutes. Then make sure that the recommended room size on the AHAM label on the unit’s packaging matches the size of your room. But keep in mind that you can’t go wrong by purchasing an air purifier that filters the air in the room more than five times per hour. What you get is cleaner, fresher air — more often!
Noise levels, measured in decibels (dB), can vary widely depending on various factors, including the opening setting, energy efficiency, type of technology, filter and sound insulation.

If quiet operation is a concern, consider the World Health Organization’s guidelines for acceptable levels of continuous background noise levels indoors — below 45 dB during the day and 35 dB at night. Typical refrigerator noise measures in at 50 dB, while the sound of a whisper in a library is 30 dB. It may therefore be acceptable that an air purifier in a room for daytime use is somewhat louder than one used in a bedroom.
Energy Star certified room air purifiers are 40% more energy-efficient than standard models, saving consumers about 230 kWh and $25 per year on utility bills. This adds up to about $2000 in energy savings over the lifetime of the unit.


Is it energy efficient?

To figure out how much electricity a room air purifier uses, check out the wattage. A watt measures the maximum amount of power required to run the unit. The higher the wattage, the more energy it consumes. An energy-efficient room air purifier can use as little as 20 watts of power running at its highest setting while another can draw up to 200 watts.

To save money and the environment, look for the Energy Star label when choosing a room air cleaner. Energy Star is essentially synonymous with energy efficiency and energy savings.

No wattage listed? Do the math. Watts = Volts x Amps
Who can I trust?

The most reliable sources for unbiased information for performance and energy efficiency are:

The Association of Home Appliance Manufacturers, which publishes independent test results and CADR performance ratings and is accredited as a standards developing organization by the American National Standards Institute. www.ahamverifide.org

Energy Star, a voluntary energy-efficiency program established by the U.S. Environmental Protection Agency and U.S. Department of Energy. www.energystar.gov

Before you buy, be sure to verify the legitimacy of the company and its performance claims. Ask a lot of questions and get answers. Being a smart shopper always pays off in the long run.
Is a warranty important?

A warranty is an assurance made by a manufacturer to the buyer of product quality. It is a promise that the manufacturer will assume responsibility to repair defective parts and replace, or provide a refund for, a defective product within a certain time period. Most room air purifiers come with a limited warranty that covers only what’s specified, which may not cover the fault-finding costs, labor and/or shipping in the event of product failure.

Smart consumers usually shop around before buying — not only for the best product but for the best, long-lasting warranty available. Warranties are usually available at the point of purchase, even when you buy your room air purifier online. And don’t forget to submit the required forms to make sure your room air purifier purchase is covered.