



Meaco's Dehumidifier Buying Guide

As energy costs increase, households are looking to switch on their heating less and reduce usage of energy draining appliances like tumble dryers. This means consumers are struggling with damp, mould and condensation issues more than ever. Consumers need a solution for keeping their house as free of moisture as possible and the most viable solution for this is a dehumidifier.

Dehumidifiers have been capturing consumer attention over the last few months especially, with popularity more than doubling since November last year (based on [Google trends data](#)). While the appliance costs to purchase and run, usage can be capped at a mere 150-200 watts (the equivalent of five or six pence*) per hour. The cost of buying and running a dehumidifier can be much less than removing and repairing damp damage to a home.

There are numerous benefits of using a dehumidifier. It helps to reduce humidity, which decreases condensation and prevents the growth of mould. A dehumidifier can improve health, contribute to a good night's sleep, and transform the way laundry is dried.

Dehumidifiers are the answer to costly damp and mould and will end up saving consumers money overall, but where do you start?

We have compiled this guide to help consumers considering purchasing a dehumidifier to understand which is the right appliance for their needs, and to outline the most effective and money saving ways for dehumidifier owners to get the most out of their product.

Our guide includes:

- Understanding energy usage
- What to consider when purchasing a dehumidifier
- Types of dehumidifiers
- Finding the right dehumidifier for you
- Tips for drying laundry with a dehumidifier

*data from the [Energy Saving Trust](#)

Understanding energy usage

Before purchasing an appliance, it is good to understand how much energy it consumes and what it will cost. Most (e.g. energy hungry white goods) will either have energy labels, where usage is outlined in kWh figures, or will list wattages in the product specification or on a sticker on the product. Appliances that use this measurement will be outlining the amount of energy that the appliance uses for one hour's worth of usage. Every 100 watts costs 3.4p/hour to run (based on UK electricity cost of 34p/kWh), so a 500-watt dehumidifier will cost 17p/hour to run.

The real costs of ownership

When choosing a dehumidifier that is the best value for money you need to consider all costs involved, not just the initial purchase price. The running cost of a dehumidifier is more significant than the initial purchase price, as this represents the long-term overall cost. Many manufacturers have warranties to consider. If you buy a product with a shorter warranty, you could be purchasing another appliance sooner. While one dehumidifier may be cheaper to buy, it may be more expensive to run. If you keep the appliance for multiple years, you could be losing money without realising.

While there are low-cost dehumidifiers on the market, consumers must watch out for other dehumidifiers that can use as much as 400 watts to run. These will use a lot more electricity and therefore cost a lot more to run. The disparity between some of the best and worst performing dehumidifiers on the market is staggering, with a difference of over £700 in running costs over an appliance lifetime of five years (based on Meaco research, April 2022), so research into energy usage is critical.



What to consider when buying a dehumidifier

When purchasing a dehumidifier, there are various aspects to weigh up to ensure you buy the appliance that suits your needs the best.

What do you want it for?

Dehumidifiers can help with damp problems, improve health and help to dry washing, but some dehumidifier brands offer features that others do not. For example, some have a laundry mode specifically designed to help dry washing, and others have a HEPA filter to help clean the air as it dries. It is worth exploring these should you have a specific function requirement for the dehumidifier.

How long will you use it for?

When calculating the cost of running a dehumidifier, it's important to understand how long it will take to complete the job you'd like it to do. Leaving one on indefinitely will naturally cost considerably more. Some dehumidifiers automatically switch off after a certain amount of time drying washing or reaching a particular level of humidity to save energy which is beneficial to many consumers.

Where will you use it?

Some dehumidifiers are better designed for colder spaces, providing heat as they dry the air, which makes them a great option for an unheated conservatory, garage or utility room. Consider the conditions of the space you are buying the dehumidifier for. For a dusty space, buy one with a HEPA filter; for a space consistently below 10°C go for a desiccant dehumidifier; between 10 and 16°C a large compressor dehumidifier is best and for warmer spaces, the best options is a compressor dehumidifier.

Dehumidifiers continually pull the air through their internal elements to dry the air and consequently pull through anything else that is in the air. This may include pet hair and dust which can build up inside the dehumidifier and clog it up. The best solution to this is to buy a dehumidifier with a removable filter that you can clean and replace. This will maintain efficiency and increase the lifespan of the dehumidifier. A dehumidifier with a HEPA filter will protect the machine from hair and dander if you have pets that moult.



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It's worth considering the size of the space you wish to use a dehumidifier for to determine the size of appliance needed. This ranges from a 10 or 12-litre dehumidifier suited to an apartment or a one/two-bedroom flat, to a 25-litre machine best for a larger house or one with many occupants.



Types of dehumidifiers

There are two main types of dehumidifiers: **desiccant and compressor**. While they both collect water and dry the air, it's valuable to know the difference to ensure you're buying the right one for your requirement.

Desiccants are generally designed to operate in lower temperatures as they have a small heater inside. This means that they generate warmth to help dry out the air.

Compressors are the cheapest dehumidifiers to run by far at normal room temperatures but do your research to ensure the model you are buying is energy efficient and kind to your electricity bill. These are usually available in four sizes – 10, 12, 20 or 25 litre machines. The litres refer to the amount of water they can collect, rather than size of water tank.

Finding the right dehumidifier for you

Whether you're buying a dehumidifier with a particular room in mind or for a specific purpose, it is valuable to know which dehumidifiers perform best in different environments.

The best dehumidifier by temperature

Cold rooms - less than 10°C



A desiccant dehumidifier is recommended in any environment where the room temperature will rarely go above 10°C. This means they suit a cold conservatory or utility room, or perhaps garage, boat or caravan.

Getting extra warmth

The air generated by a desiccant dehumidifier is 10-12°C warmer than room temperature, so this extra heat can be a welcome way to keep a room a little cosier. This isn't possible with a compressor dehumidifier. Naturally creating this extra warmth has a cost so it's recommended weighing up whether this benefit offers you the best value for money for your need.

Cool rooms – 10-16°C

A large compressor or desiccant dehumidifier – 20 or 25 litres – has a larger cooling system internally and are much more efficient in cooler rooms. A smaller 10 or 12 litre machine will achieve little at these temperatures and offer less value for money.

Unlike desiccant dehumidifiers, compressor dehumidifiers only change the temperature of the air by 1-2°C as it passes through them. As there is no real effect on the room, they are cheaper to run.

Some consumers are choosing to use a desiccant dehumidifier in these situations as the bit of extra warmth from the dehumidifier is just enough to avoid turning the heating on, saving more money.

Mild to warm rooms - above 16°C

Any compressor dehumidifier will perform well in these temperatures. The warmer the room, the more moisture they will remove from the air. One 10 or 12 litre machine will dry a room, or work well if you are living in a flat or apartment. A three-bedroom house or larger property would require a 20 or 25 litre machine, or work well if you need to dry washing frequently.

The best dehumidifiers by function

Laundry drying

When it comes to drying washing, it's natural that people will hang wet washing on clothes racks to dry indoors instead of using tumble dryers, which are one of the most energy-intensive devices in the home.

This will be fine at first, but over time wet washing will take longer and longer to dry as we start to close our windows to keep precious heat in and the moisture content in the air increases from the clothes that we have been drying.

Most dehumidifiers can help dry laundry and remove this moisture from the air, but some can do it better than others. A 12-litre compressor is best for one person with a limited amount of washing to be dried, and one of the larger machines will be best if you're drying washing for 3-4 people on a regular basis. A 25-litre is best for those that have larger families or large volumes of washing every week.



A dehumidifier will be working hard to dry washing regularly, so you need to ensure your appliance is as energy efficient as possible to keep electricity bills low. Below is a table of recommended energy consumptions to look for when purchasing a dehumidifier to ensure best value for money. Use these levels as a benchmark and look for machines that match or use less energy than these figures.

| Dehumidifier size | Maximum recommended wattage | Running cost per hour in pence (based on UK electricity cost of 34p/kWh) |
|-------------------|-----------------------------|--|
| 10 / 12 litre | 150 | 5.1 |
| 20 litre | 220 | 7.5 |
| 25 litre | 270 | 9.2 |

If you are purchasing a dehumidifier to predominantly dry laundry, look for machines that automatically turn themselves off after six hours of laundry drying. This **laundry mode** means electricity consumption is capped at six hours.

Some dehumidifiers have a 'Smart Laundry' mode that will turn the compressor dehumidifier off when the relative humidity is low enough to dry the washing, switching to fan only mode to finish the drying off. This saves up to 90% of the running costs!

Reducing mould and condensation problems

Extra moisture in the air is not always visible but it will be there and, in time, problems such as mould growth, condensation and musty smells will become apparent, causing damage to wallpaper, carpets, furniture and windowsills.



Mould can grow on any organic material in the home as well as walls, so it could appear on furniture, clothes, shoes, books or even photos. Replacing these items, redecorating, or purchasing cleaning products in an attempt to remove mould can be very costly and labour intensive.

If you're only looking to reduce moisture at home to avoid mould and condensation issues, then a low energy dehumidifier is a great option.

Running a dehumidifier in your home to keep the relative humidity between 50-55%rh (a recommended average humidity for the home) will enable any heating you have on to be more efficient, as it will be heating dry air instead of damp air. This will reduce your heating bill and may even result in you turning the thermostat down a little, saving even more money.

More sophisticated dehumidifiers will have an extra function called a humidistat built in that will monitor the moisture levels in the air, and switch on when the level in the room is higher than your



target. It will also switch the appliance off when the target relative humidity is reached. There is no need to have air at home drier than 50%rh – museums and art galleries protect artifacts and collections from damp and mould at 55%rh – so setting a dehumidifier target to lower than this is a waste of electricity.

Cleansing the air and reducing allergic reactions

High levels of damp, mould and condensation in the home can make occupants unwell, **affecting health considerably**. A range of ailments including respiratory diseases, eczema, asthma and arthritis can be exacerbated by high humidity. Allergic reactions are among the most common of these ailments. Dust Mites breed in damp environments, with sneezing in the bedroom a common sign of a dust mite allergy, and mould spores can trigger asthma.

HEPA filters are particularly useful if you an allergy sufferer. An H13 medical grade HEPA filter provides an additional function to the dehumidifier by helping capture mould spores or dust mite dander while removing moisture from the air.



Choosing the right size dehumidifier for your home

This table summarises the best dehumidifier to look for based on size of home, varying conditions and function.

| Conditions and/or preferred function | Up to 2-bedroom flat/house | Up to 3-bedroom house | Up to 4-bedroom house | Up to 5-bedroom house or townhouse |
|--|----------------------------|-----------------------|-----------------------|------------------------------------|
| <p>Slightly damp 50%-60% relative humidity Light mould/condensation</p> | 10L | 12L | 20L | 20L |
| <p>Moderately damp 60%-70% relative humidity Musty smells/regular mould/condensation</p> | 12L | 12L | 20L | 25L |
| <p>Very damp 70%-80% relative humidity House always cold/mould and condensation in multiple rooms. Drying washing</p> | 12L | 20L | 25L | 25L x 2 |
| <p>Wet 80%-100% relative humidity Condensation on walls, mould on furniture/clothes Drying washing</p> | 20L | 20L | 25L x 2 | 25L x 2 |

Tips for drying laundry with a dehumidifier

1. Recreate warm, dry and airy conditions

When we are drying washing outside on a line, we look for warm, dry and breezy days as the clothes will dry the quickest in these conditions. Replicating these conditions indoors will have the best outcome.

2. Choose small spaces

Select as small a space as possible to dry laundry. The smaller the air volume in the room, the faster the dehumidifier will reduce the relative humidity, giving the best conditions for clothes to dry.

3. Utilise extra spins

Use your washing machine to get as much excess moisture from clothes as possible before drying the clothes. You can do this by setting it to complete an extra spin cycle.

4. How to use a clothes horse

Put smaller clothes on the bottom of a clothes horse and large ones at the top, using hangers where possible to spread clothes out. All the clothes should be exposed to the dry air from the dehumidifier but avoid any from dripping water onto the dehumidifier.

5. Get help from a fan

If you have a regular cooling fan left over from summer, then you can point this at the clothes to increase airflow. This helps force moisture out of clothes and dry them much faster.

