

# Snapmaker 2.0 Air Purifier

Product Introduction Manual

2021



# Make In Fresh Air

Chemicals such as PM (Particle Matters) and VOCs (Volatile Organic Compounds) can be released when you 3D print with or laser engrave on certain types of materials. You can further filter them with a Snapmaker 2.0 Air Purifier.

- 📄 Exclusive Filter Cartridge
- 📄 Filter Detection
- 🕒 Filter Life Detection
- 🌀 Fan Speed Control
- 💡 Status Light
- 🔩 Full-metal Design



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# Full-metal Design

The Air Purifier is neatly designed as ever. The CNC-machined aluminum shell, with its surface anodized, delivers great durability, super-fine texture, a consistent silver gray looking, as well as well-sealed machine body. It's powerful, yet adorable.



# Close-up Shot



# Parts List



Air Purifier × 1



Cover × 1



Filter Cartridge × 1



Hose × 1



Power Adapter × 1



Hose Clamp × 1

Quick Start Guide × 1



Connecting Cable × 1

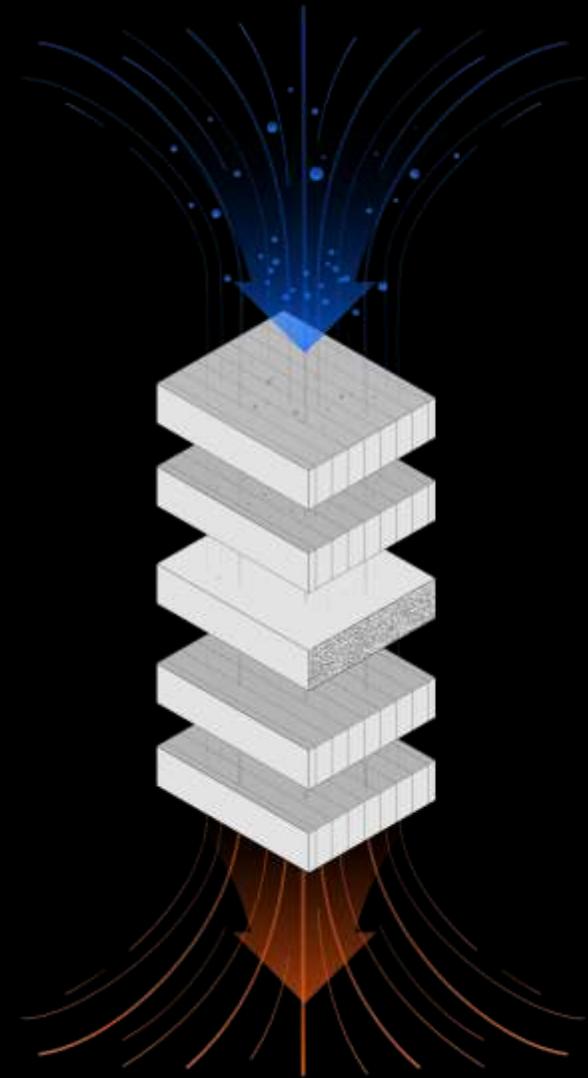
# Exclusive Filter Cartridge

## The Exact Filter Cartridge You Need

Tailor-made filter cartridge for your Snapmaker 2.0, with five layers of different filters consolidated into one, it is designed to absorb what's actually emitted during laser engraving or 3D printing process<sup>[1]</sup>.

All in one, Snapmaker 2.0 Air Purifier can be a pretty efficient emissions eliminator <sup>[2]</sup>.

1. Using the Air Purifier when printing with ABS or other thermo-sensitive filaments may lead to poor printing quality. If you need to filter 3D printing emissions, it's recommended to turn on the Air Purifier after printing job is finished.
2. Tested by CAS Testing Technical Services (Guangzhou) Co., Ltd, according to standards GB/T 14295-2019 and GB/T 34012-2017. Report No.: JKK21030129A(E), JKK21030129B(E).



# Exclusive Filter Cartridge

## G4 Filter for Coarse Filtration

Aims at relatively bigger particles ( $\geq 5 \mu\text{m}$  in diameter). It filters out more than 90% of PM10 and PM5.

## F9 Filter for Finer Filtration

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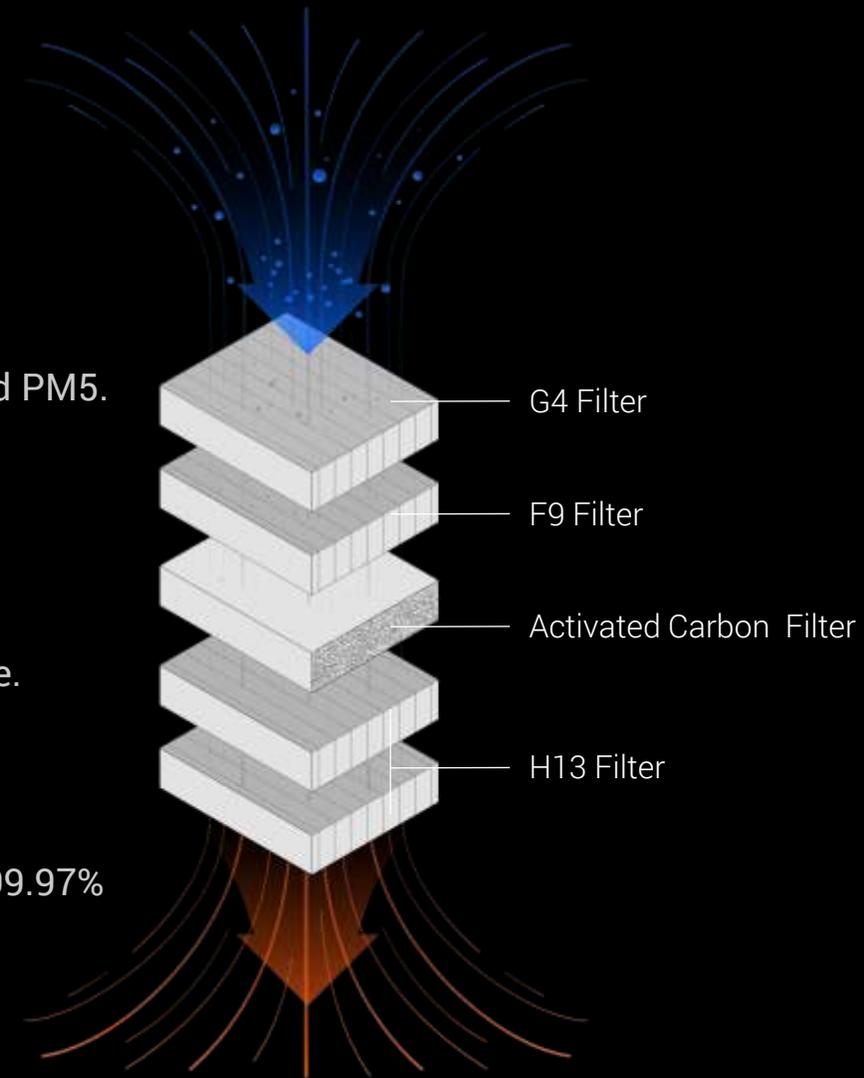
## Customized Activated Carbon Filter

A dense pack of activated carbon is also added to absorb VOCs that no other filters can capture.

Unpleasant odor is no longer a problem.

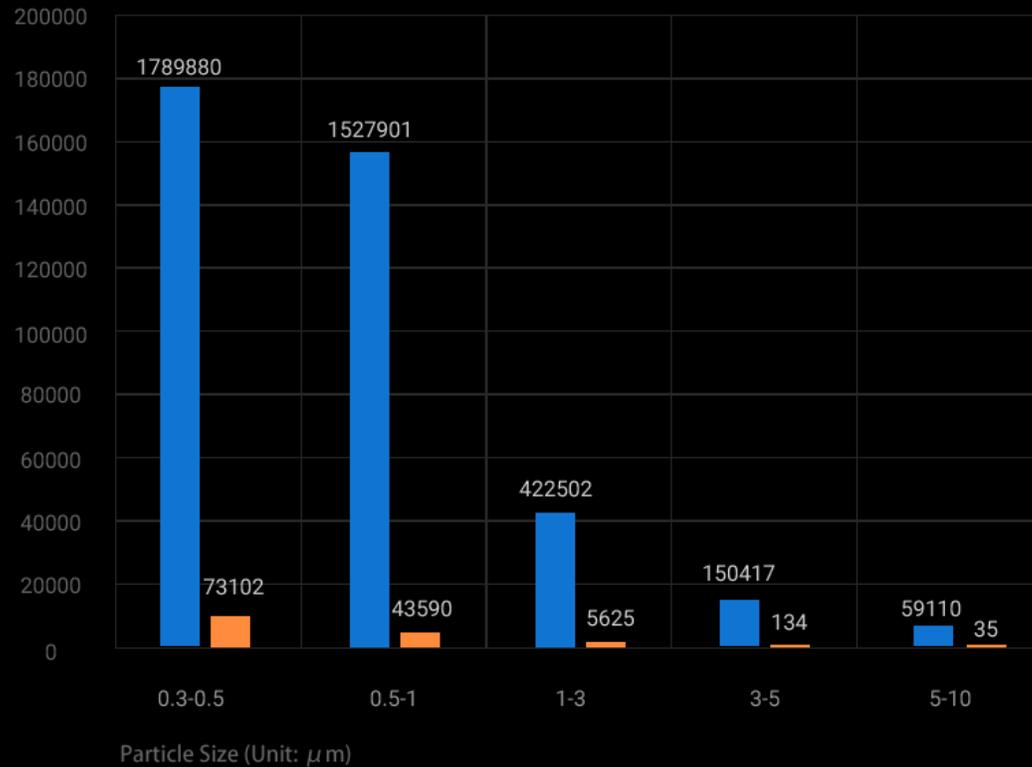
## Ultra-dense HEPA H13 Filter

Two layers of 70 mm-thick HEPA H13 filter as the final stage gate. They are able to trap up to 99.97% of  $0.3 \mu\text{m}$ -sized particles that are known to be the most penetrating particles in the air.

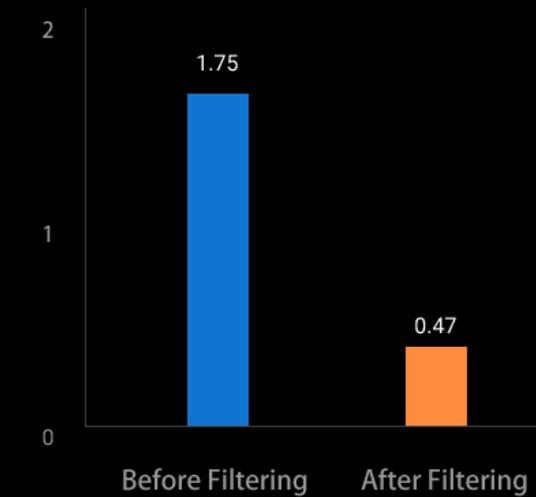


# Exclusive Filter Cartridge

Density (Unit: P/L)



TVOC (Unit:  $\text{mg}/\text{m}^3$ )



# Filter Life Detection and Filter Detection

## Long Live the Filter Cartridge

Efficiency is not all that matters. The different levels of filter are arranged in certain order inside the cartridge to maximize its lifespan, so that you won't need to replace the cartridge until it gets fully used.

Snapmaker 2.0 carries out a real-time monitoring on the Filter Cartridge and shows its lifespan on the Touchscreen. It lets you know when it's time to pop in a new one.

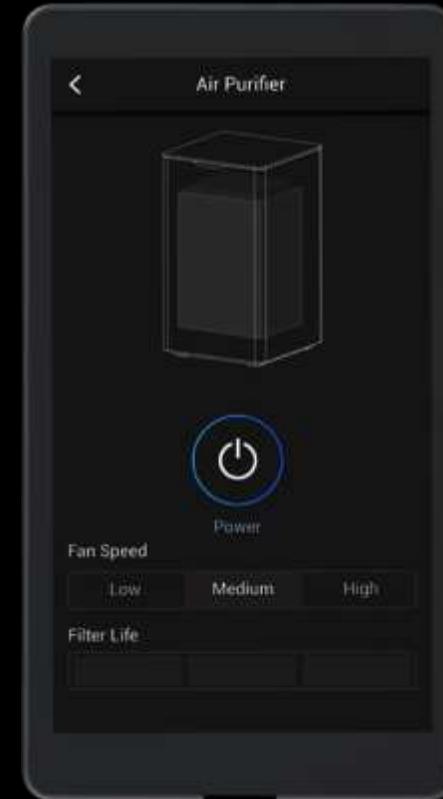


# Fan Speed Control

## Fan Speed Control

Tap on the Touchscreen to set fan speed for different types of job [1].

1. The Touchscreen UI is subject to change due to iterations.



# Status Light

## Be in the Know

The built-in LED strip shows you how the Air Purifier is working through its color change, flowing, breathing, and flashing.

- No observable light: Unpowered
- White light breathing: Working normally
- White light flowing: Connecting to the Controller
- Yellow light flashing: Filter Cartridge taken out
- Orange light on: Low filter life or blocked inlet/outlet
- Red light flashing: Danger



# Steps

## Assembly

1. Connect the cables.
2. Connect the hoses.

## Using the Air Purifier

1. Scenarios
  - a. Laser Engraving (On)
  - b. 3D Printing (Off)
  - c. CNC Carving (Off)
2. Connect to Power
3. Check the Assembly
4. Update Firmware(V)
5. Operation
6. Read the Status

## Filter Cartridge Replacement

1. Open the lid, and take out the cover.
2. Remove the Filter Cartridge.
3. Put in the replacement cartridge and ensure the handle strings face upward.
4. Put the cover back and close the lid.

# All-around Protection for Your Creation

**Laser Reduction**

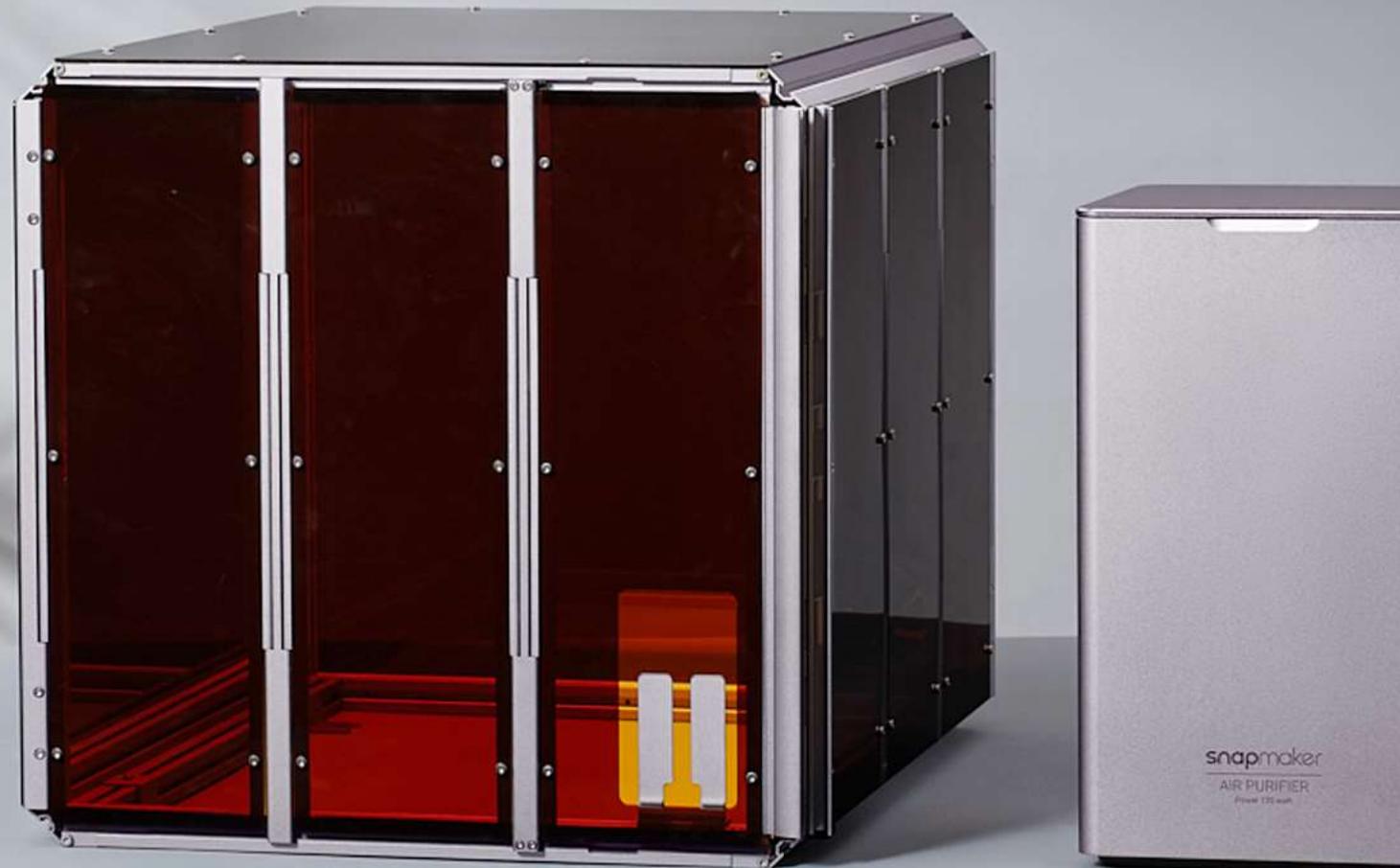
**Physical Safeguards**

**Dust Isolation**

**Exhaust System**

**Tri-fold Magnetic Doors**

**Door Detection**



# Creativeness knows no bounds

**Along with the CAN Hub, you can use the Enclosure and the Air Purifier together with all the existing and upcoming Snapmaker 2.0 addons.**



<b>Snapmaker 2.0 Air Purifier</b>	
Air Inlet Diameter	70 mm
Air Volume	130 m <sup>3</sup> /h
Cable Length	2,000 mm
Clamp Diameter	65–89 mm
Filter Cartridge Dimensions (W × D × H)	191 × 229 × 308 mm
Filter Cartridge Lifespan <sup>(1)</sup>	Approx. 480 hours
Filter Cartridge Weight	2.4 kg
Hose Dimensions (Diameter × L)	75 × 2,000 mm
Input Voltage	AC 100 V – 240 V
Main Unit Dimensions (W × D × H)	240 × 271 × 420 mm (With Air Outlet Connector) 240 × 240 × 420 mm (Without Air Outlet Connector)
Main Unit Weight	8.8 kg
Maximum Noise	65 dB
Package Dimensions	316 × 360 × 595 mm
Package Weight	12.7 kg
Power Cord Length	2,000 mm
Rated Current	5 A
Rated Power	120 W
Rated Voltage	24 V DC
Operating Temperature	0°C–35°C
Storage Temperature	-4°C–45°C
Outer Shell Material	Aluminum alloy
<b>Approvals</b>	<i>CE, FCC, UL62368, IC, RCM, ROHS, WEEE</i>

1. This data is obtained under the condition of typical laser use, and is for reference only.

<b>Filter Cartridge</b>	
Dimensions (W × D × H)	191 × 229 × 308 mm
Lifespan	480 hours
Weight	2.4 kg

<b>CAN Hub</b>	
Dimensions (W × D × H)	136 × 51 × 26 mm
Connector Type	4 Pin
Number of Output Ports	4
Cable Length	2 m
Net Weight	0.16 kg
Package Weight	0.70 kg

## **What are the warranty policies Air Purifier and Enclosure?**

2-year warranty for the customers from the EU countries. 1-year warranty for the customers from the Non-EU countries.

## **How long can the Filter Cartridge generally last?**

The estimated lifespan of the Filter Cartridge is 3 months if it works properly with the laser module. This data is based on laboratory tests. The actual lifespan also depends on the working circumstance, such as the material, scenario, frequency, and so on.

When it has served for about 3 months, we suggest that you replace the old Filter Cartridge with a new one to achieve a better purification effect.

## **What standard does the Snapmaker Air Purifier meet?**

The Snapmaker Air Purifier meets the following standards: GB/T 14295-2019, GB/T 34012-2017, GB/T 2423.2-2008, GB/T 2423.1-2008, and GB/T 2423.34-2012.

GB/T 14295-2019: This standard is mainly for the test of particles with different diameters from 0.3 $\mu$ m to 10 $\mu$ m.

GB/T 34012-2017: This standard is mainly for the TVOC test.

GB/T 2423.2-2008: This standard is mainly for reliability and high-temperature operation tests.

GB/T 2423.1-2008: This standard is mainly for the low-temperature operation test (including the cold start test).

GB/T 2423.34-2012: This standard is mainly for the combined cycle test of temperature and humidity.

## **The normal operation of the Purifier requires its correct connection with both the power plug and the 4-pin plug at the same time. What if only one of the plugs is connected?**

The Purifier is an accessory product. Suppose you only connect the Purifier with the power plug. In that case, the Purifier will not work because it can't receive the instruction to boot without the connection with the 4-pin plug. Likewise, if you only connect the Purifier with the 4-pin plug, the Purifier will not work too because it is not powered. For safety reasons, the Purifier is off by default when powered.

## How to connect the Purifier to use?

There are three scenarios as follows.

Scenario 1: You have purchased the Enclosure and the Purifier but have not purchased the CAN Hub.

Method: Connect the Enclosure to the Add-on 3 port of the controller, and then connect the Purifier to the Enclosure.

Scenario 2: You have purchased the Enclosure, the Emergency Stop Button and the Purifier but have not purchased the CAN Hub.

Method: In this scenario, you cannot use the Emergency Stop Button and the Purifier simultaneously. Connect the Enclosure to the Add-on 3 port of the controller, and then connect the Purifier or the Emergency Stop Button to the Enclosure.

Scenario 3: You have purchased the Enclosure, the Emergency Stop Button, the Purifier, and the CAN Hub.

Method: Connect the Enclosure to the Add-on 3 port of the controller, connect the CAN Hub to the Enclosure, and then connect the Purifier and Emergency Stop Button to the CAN Hub.

## What is the difference between the Snapmaker Air Purifier and the household purifier?

The Snapmaker Air Purifier is a duct-structured purifier specially designed for the Snapmaker 2.0 machine and the Enclosure, while household purifiers are often used for continuous filtration of a certain space. The Snapmaker Air Purifier features an exclusive filter cartridge, supporting laser engraving and cutting and 3D printing scenarios.

## Is it possible to buy a longer purifier hose?

Yes, and the inner diameter of the hose must be 75mm.

## Can I disassemble and replace the switch panel, cover, base plate, lid, and blower by myself?

We don't recommend that you disassemble any part by yourself. Please contact our support if there is any problem.

## Which models can the Purifier be used with?

The Purifier can be used with our Snapmaker 2.0 A150, A250, and A350 machine.

## I already have the Snapmaker 2.0 machine, but I'm not going to buy the Enclosure. Can I use the Purifier?

No, the Purifier must work with the Enclosure.

