



CITY H is an air purifier engineered with a suction arm to protect people and processes by reducing airborne contaminants. The high efficient and individually scanned filters according to EN 1822 standard provides proof of classified H14 filters. City H is most applicable in places such as dentists, hospitals, and laboratories where a major concern is the risk of airborne infection. Airborne contaminants can come into contact with the airways, mucous and eyes of the employees and patients resulting in the risk of airborne infection.

Particle and microbiological contamination are compounded by the release of contaminants generated by treatments and the sanitization of surfaces and tools. Disinfection procedures are necessary to remove microbiological deposits from surfaces and tools, but have no effect in removing particles in the air. It is therefore necessary to intervene through air purification to break down the concentration of airborne contaminants thus limiting their aerial diffusion and sedimentation.

### Air quality recommendations with the air purifier with suction arm

Compared to common products on the market, the amount of the filter media used in the City H can be up to 14 times higher than other air purifiers. This results in a longer filter life and dust retention capacity, without compromising the passage of air. City H is equipped with high-efficiency HEPA H14 filters that will remove 99.995% of MPPS (most penetrating particle size) particles from 0.1 to 0.25 microns. Clean air – free of harmful particles and pollutants – is dispersed in all directions, at 360 degrees.



Combating the most penetrating particulate size	Risk reduction of airborne infection
Each filter is tested individually and certified	Reducing microbiological contamination
Plug & Play	Less dust

### Filter

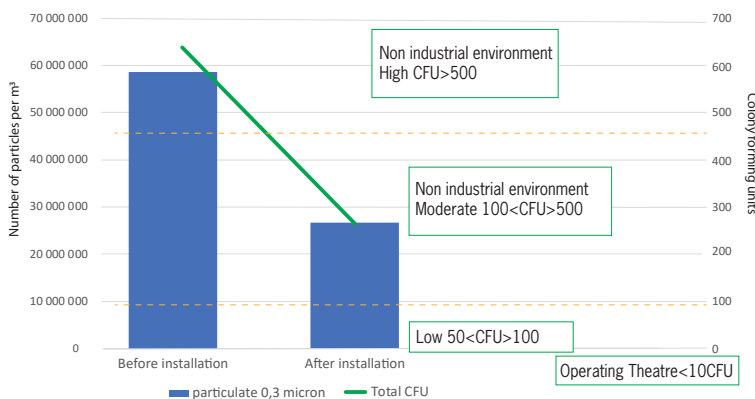
#### Why HEPA filtration:

HEPA filters are part of the category of so-called “absolute filters”, the term is justified by the fact that filters have a high filtering efficiency. The City H air purifier is equipped with two HEPA H14 filters. HEPA H14 filters have an efficiency of 99.995% calculated on the size of MPPS.

At Camfil, each filter is tested according to EN1822 to certify the filter efficiency before they are shipped.

#### Particle and microbiological graph improvement by air cleaner with 3 air changes per hour (ACH)

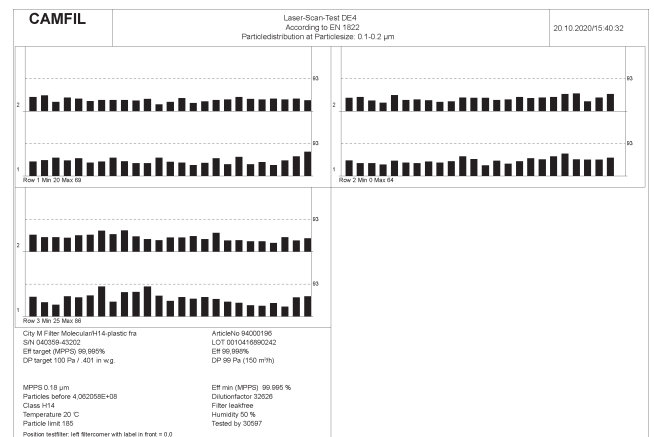
Room (20m<sup>2</sup>) - Airborne purification impact with air purifier treatment



\*) CFU = colony forming unit, is a unit used to estimate the number of viable bacteria or fungal cells in an air sample

#### What is MPPS and its link to viruses?

The efficiency of HEPA filters is measured in MPPS (most penetrating particle size), which is the particle size that is most likely to navigate its way through a filter that represents the lowest efficiency of the filter. MPPS is generally between 0.1 and 0.25 microns. This means that a filter in class H14 allows for a passage of 0.005% of the particles of 0.1 microns. For smaller or larger particles, the performance of that filter is even better. HEPA filters are also used in operating rooms, analysis labs, high containment laboratories (BSL3/BSL4) and in pharmaceutical industries.



An example of the EN1822 scan test certificate that accompanies each individually scanned filters

### HEPA Filter H14



- Article Number (incl. 2 pcs):** 94000194
- Dimension (WxHxD):** 300x460x98 mm
- Airflow:** 150 m<sup>3</sup>/h
- Pressure drop:** 55 Pa
- Frame:** White plastic profile
- Gasket:** Seamless PU-foam
- Media:** HEPA glass fiber
- Separator:** Hot melt beads
- Sealant:** Polyurethane (2-K-sealant)
- Grille:** Protective mesh on HEPA side
- Efficiency:** H14 according to EN1822
- MPPS efficiency:** ≥99,995%
- Individually scanned filters:** Certificate with minimum efficiency on MPPS typically between 0,1-0,25 µm.
- Max. final pressure drop:** 500 Pa
- Max Temperature:** 60°C
- Relative Humidity max:** 100%
- Weight:** 2.0 kg

### Technical data and dimensions

**Article Number:** 94000203

**Dimension without arm (WxHxD):** 454x720x454 mm

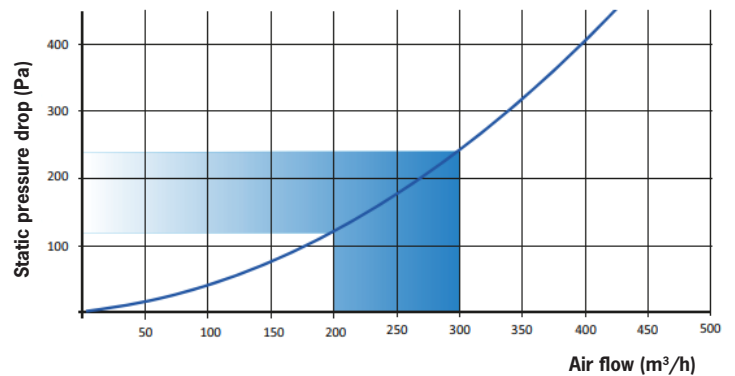
**Maximum height with arm:** 1290 mm

**Colour:** White

**Weight:** 25 kg (including filters)



#### OPTIMAL AIR FLOW FOR EXTRACTION ARM

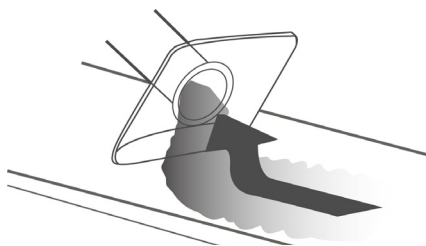


Static pressure drop is measured in accordance with ISO standard 5167-1

Fans speed setting	Airflow (m <sup>3</sup> /h)	Suction arm velocity (m/s)	Noise level (dBA)	Power consumption (W)
1	70	1,4	25	5
2	150	2,7	46	15
3	200	4,1	52	24
4	240	5,5	57	35
5	270	7,7	60	45
6 Max.	300	9,8	64	61

### Flat Screen Suction Hood

The flat screen suction hood is designed to maximise the working area without obscuring the object from the user. A good example would be dental clinics, where the suction hood can't be too close to the working area and dental instruments. It has a suction distance of 200 to 700 mm. The CITY H recirculates up to 8 ACH (air changes per hour) in a room and therefore is very efficient and a good complement to the existing ventilation system.



Recommended suction distance: 200 - 700 mm. The suction hood material is made from cleaning agent resistant plastic (PETG)

