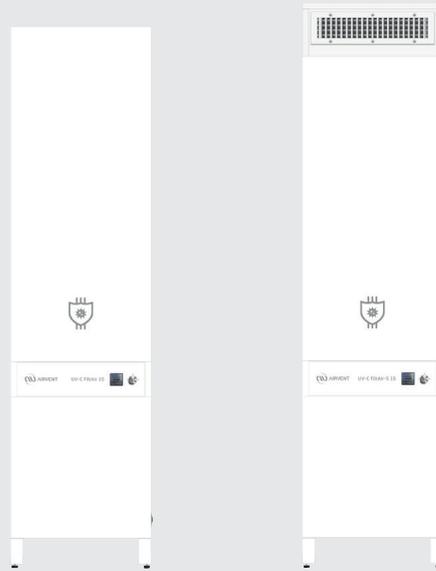


UV-C Air Sterilizer Unit
Series for Indoor
Applications

UV-C FiltAir
UV-C FiltAir-S



Design patent registered in Hungary.

The picture shows the UV-C FiltAir 15 (left) and the UV-C FiltAir-S 15 (right).

Description

The UV-C FiltAir air sterilizer unit developed by Airvent offers a simple and effective solution for the elimination of airborne viruses, while the room the unit operates in is completely safe to use.

The unit performs mechanical separation in the first phase of the operation: the air filter removes solid contaminants, and in the second phase, the UV-C radiation kills the pathogens that have passed through the filter.

Ultraviolet radiation is within the short wavelength range of natural light, UV-C radiation is in the range of 200 - 280 nm within that. When applied correctly it acts as a safe and highly efficient disinfectant as the short wavelength ultra violet radiation of 253,7 nm damages the pathogens' DNA thus prevents them from infecting any further. The bacteria, viruses and fungi spores exposed to UV-C light die, however inactivating various pathogens requires different doses of UV-C light. By applying the right UV-C light source a sterilizing rate of 99,99% can be reached.

Application

We recommend using Airvent's UV-C FiltAir sterilizer unit in the following environments.

Health, hospitality, beauty & cosmetics, office buildings, retail, education, sport, exhibition rooms.

Types

UV-C FiltAir: recommended for rooms with internal height of maximum 3 meters, air blown in vertically at the top of the unit.

UV-C FiltAir-S: recommended for rooms with internal height larger than 3 meters, air blown in horizontally at the top of the unit.

The UV-C FiltAir unit is painted white (RAL 9003) or anthracite (RAL 7016) colors.

Product Features

- Requires minimum space
- By circulating the room's air (even up to 5 times an hour), it efficiently sterilizes it.
- Operates silently thanks to the energy efficient EC fans
- Easy to undertake maintenance work on it.
- The aluminum cover is easy to clean - painted with UV resistant powdercoating (C4 corrosion class)
- The UV-C has been developed to efficiently purify the air in closed spaces*

* The UV-C FiltAir is not to be used for sanitizing surfaces in the room, it does not replace basic hygienic rules - especially those described by the law -, rather complements them.

Advantages

- The unit can inactivate the pathogens that have passed through the filter. The process does not create harmful by products.
- There is no ozone formation, and due to the efficient filtering and UV-C radiation, the cleaned air leaving the unit is practically free of pathogens.
- Creates favourable air movements, pushing the airborne particles downward and continuously circulating and cleaning the room's air without creating whirls.
- Airvent's FiltAir air sterilizer is optically closed which makes it possible to use in doctors' offices, waiting rooms, hospital patient rooms. Unlike other UV-C emitters (used in medical environments), which do not allow people to stay in the room during use.

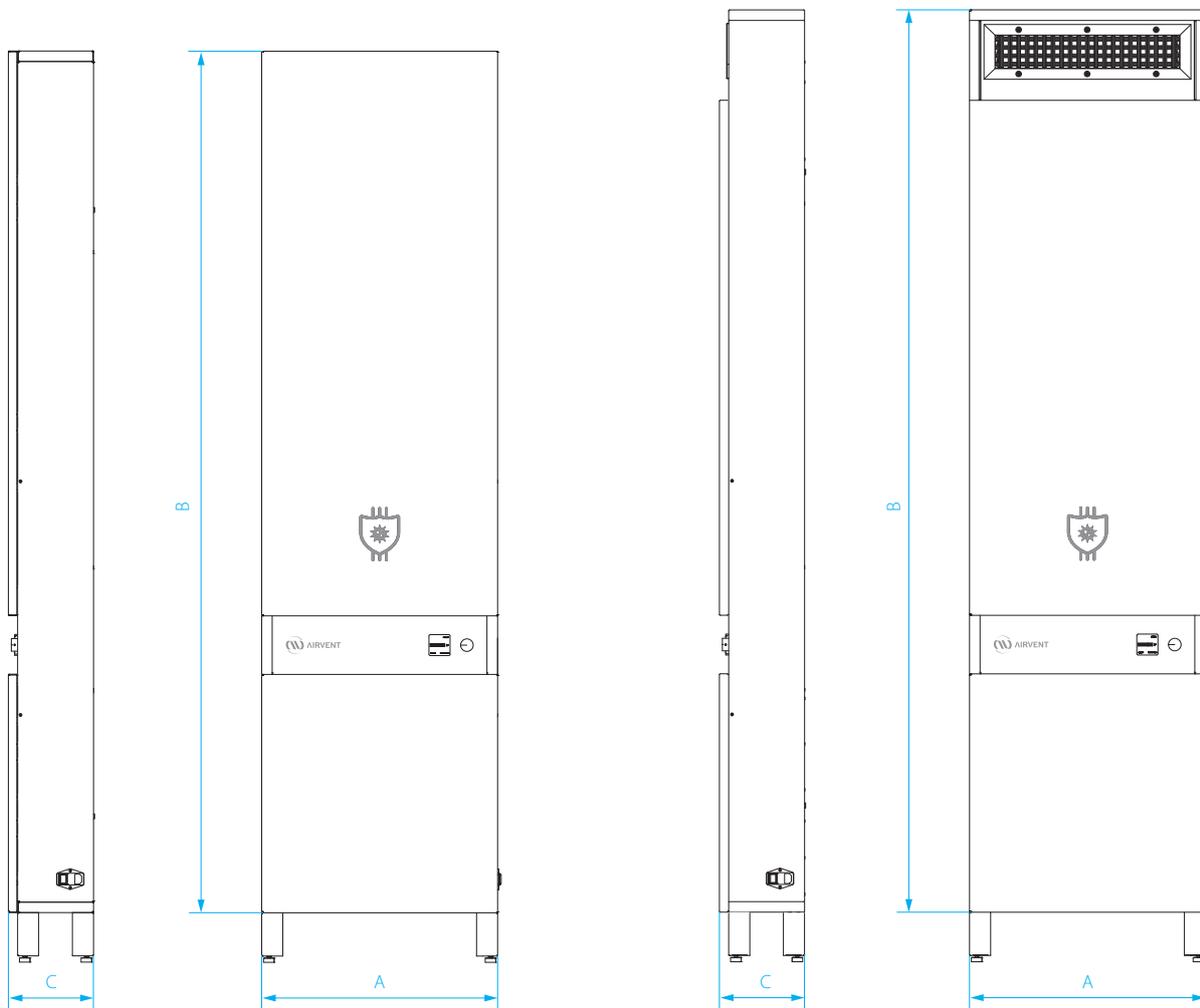
Technical Characteristics

Type	Nominal airflow [m³/h]	Recommended room		Filter type	Filter size [mm]	Filter quantity	Power supply	Consumption [W]	Noise level** L _w [dB(A)]
		internal height	area*						
UV-C FiltAir 15	50-200	up to 3 m	15 m²	M6	502x502-22	1pc	230 V 50 Hz	71-78	25-36
UV-C FiltAir-S 15		above 3 m							25-35
UV-C FiltAir 30	50-400	up to 3 m	30 m²		502x756x22			133-154	28-46
UV-C FiltAir-S 30		above 3 m							28-45
UV-C FiltAir 45	100-600	up to 3 m	45 m²		502x756x22	130-206	23-45		
UV-C FiltAir-S 45		above 3 m					23-44		
UV-C FiltAir 75	200-1000	up to 3 m	75 m²		502x502-22	2pc	210-283	23-44	
UV-C FiltAir-S 75		above 3 m						23-43	

* 5 air changes per hour.

** Depending on the set air volume, from the lowest stage to the highest. +/- 3 dB (A) depending on the room (design, casing quality, size). Measured from a distance of 3 m at a height of 1.5 m.

Dimensions



UV-C FiltAir	Product acronym	A [mm]	B [mm]	C [mm]	Weight* [kg]
15	UVC-FA	560	2060	200	29
30		820	2060	200	35
45		820	2060	250	37
75		1200	2060	300	57

* The product weight is without UV tubes and feet.

UV-C FiltAir-S	Product acronym	A [mm]	B [mm]	C [mm]	Weight* [kg]
15	UVC-FA-S	560	2150	200	31
30		820	2200	200	43
45		820	2250	250	50
75		1200	2300	300	75

* The product weight is without UV tubes and feet.

Air Movement

CFD simulation of the air movement generated by the UV-C FiltAir standing by the wall.

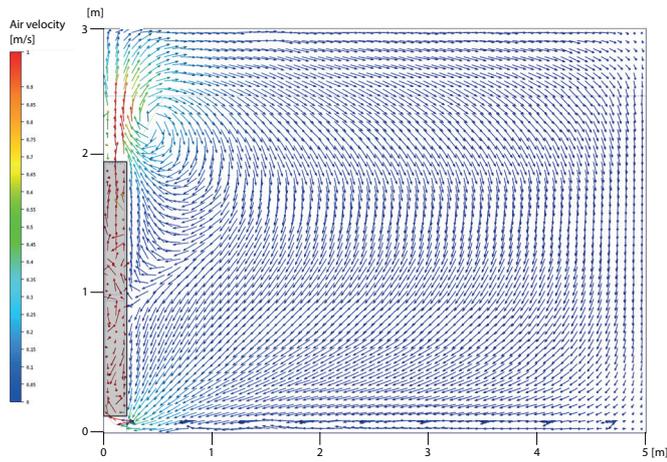


Figure 1
UV-C FiltAir

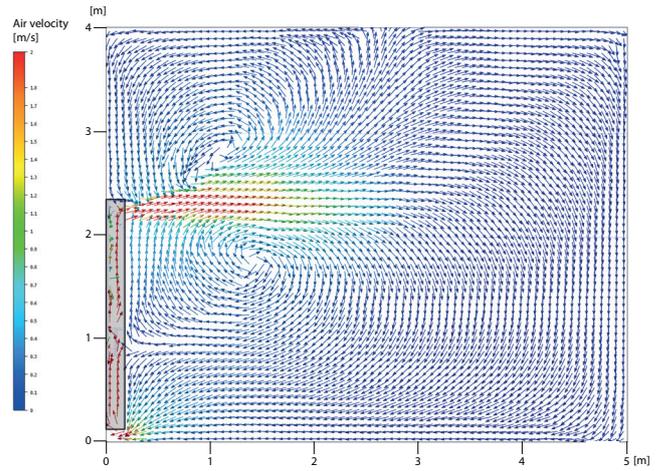


Figure 2
UV-C FiltAir-S

Types

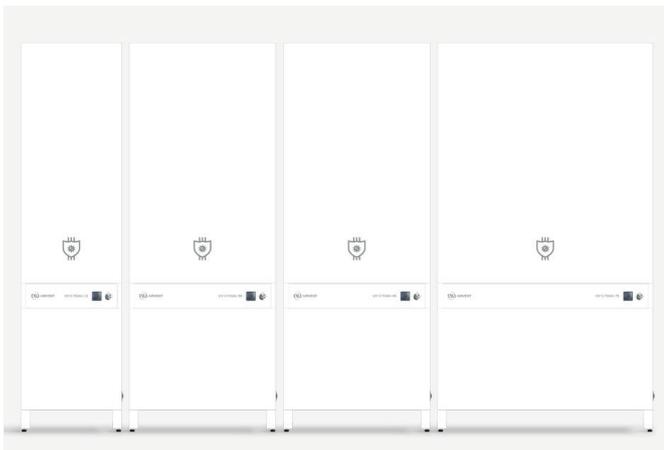


Figure 3
UV-C FiltAir Series

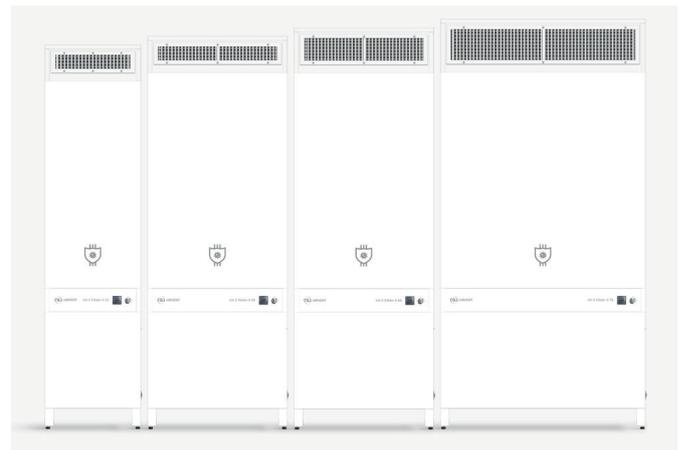


Figure 4
UV-C FiltAir-S Series

Specification

Ordering code:	UVC-FA	-XX	-XXX
Product acronym:	UVC-FA		
Size:		15	
		30	
		45	
		75	
Color:	white (RAL 9003)	-	
	anthracite (RAL 7016)	-	ANT
Example:	UVC-FA-75-ANT		

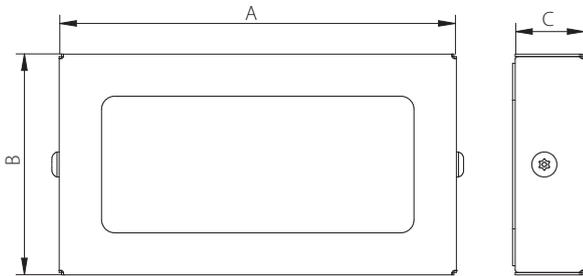
Specification

Ordering code:	UVC-FA	-XX	-X	-XXX
Product acronym:	UVC-FA		-S	
Size:		15		
		30		
		45		
		75		
Color:		white (RAL 9003)	-	
		anthracite (RAL 7016)	-	ANT
Example:	UVC-FA-75-S-ANT			

Optional accessories

Protective cover (for speed regulator)

The cover plate prevents unauthorized access to the speed controller and operating hours counter of the unit.



Dimensions

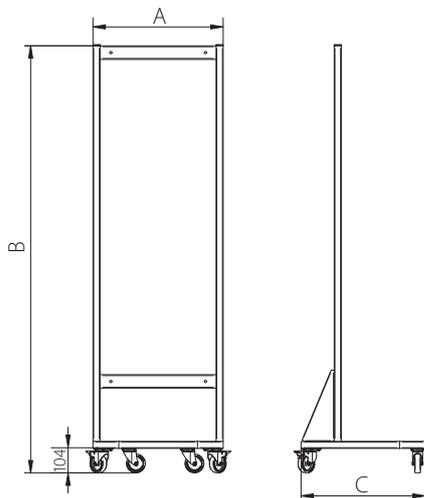
UV-C FiltAir	Protective cover				
	Product acronym	A [mm]	B [mm]	C [mm]	Weight [kg]
15	UVC-FA-LOCK	100	84	26	0,23
30		150	84	26	0,31
45					
75					

Specification

Ordering code:	UVC-FA-LOCK	-XX	-XXX
Product acronym:	UVC-FA-LOCK		
Size:	UV-C FiltAir 15	15	
	UV-C FiltAir 30/45/75	-	
Color:	white (RAL 9003)	-	
	anthracite (RAL 7016)		ANT
Example: UVC-FA-LOCK-15-ANT			

Mobile frame

When mounted on the mobile frame, the air sterilizer becomes movable, so that it can be placed at the desired spot in the room for efficient sterilization.



Dimensions

UV-C FiltAir	Mobile frame				
	Product acronym	A [mm]	B [mm]	C [mm]	Weight [kg]
15	UVC-FA-MOBIL	550	1818	525	14
30		810	1818	525	16
45		810	1818	575	16,2
75		1190	1818	625	18,8

Specification

Ordering code:	UVC-FA-MOBIL	-XX	-XXX
Product acronym:	UVC-FA-MOBIL		
Size:		15	
		30	
		45	
		75	
Color:	white (RAL 9003)	-	
	anthracite (RAL 7016)		ANT
Example: UVC-FA-MOBIL-75-ANT			

Mobile frame versions



Figure 5
UV-C FiltAir-S 15
UVC-FA-MOBIL-15-ANT



Figure 6
UV-C FiltAir-S 30
UVC-FA-MOBIL-30-ANT



Figure 7
UV-C FiltAir-S 45
UVC-FA-MOBIL-45-ANT

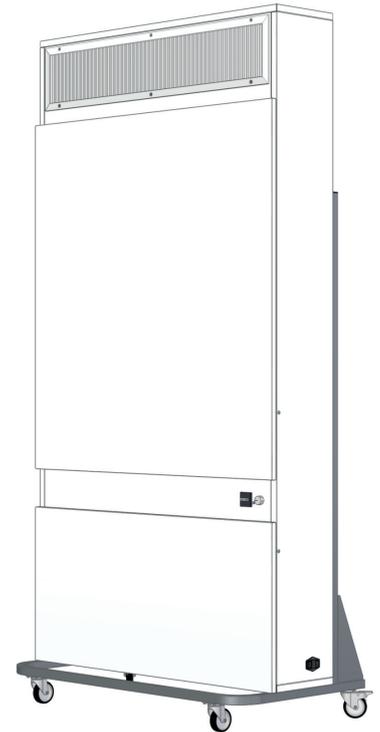
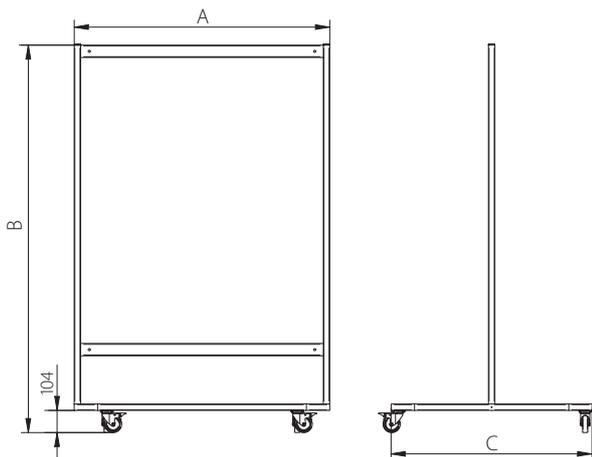


Figure 8
UV-C FiltAir-S 75
UVC-FA-MOBIL-75-ANT

Double mobile frame

The double mobile frame allows the simultaneous use of two units. Its use is justified in cases where the size of the room to be sterilized requires a larger capacity. Equipment must be ordered with an air deflector.



Dimensions

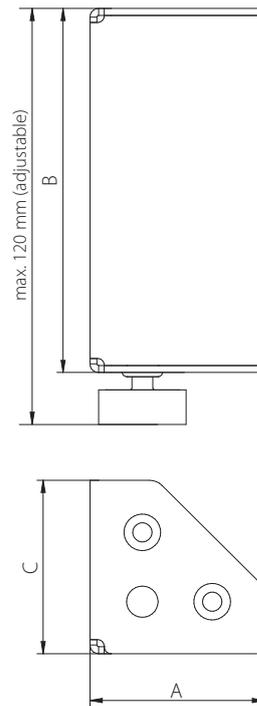
UV-C FiltAir	Double mobile frame				
	Product acronym	A [mm]	B [mm]	C [mm]	Weight [kg]
45	UVC-FA-MOBIL2	810	1818	840	16,9
75		1190	1818	936	19,5

Specification

Ordering code:	UVC-FA-MOBIL2	-XX	-XXX
Product acronym:	UVC-FA-MOBIL2		
Size:		45	75
Color:	white (RAL 9003)	-	
	anthracite (RAL 7016)		ANT
Example: UVC-FA-MOBIL2-75-ANT			

Mounting feet (4 pcs/set, for weight-support only)

Optional accessory for weight-support only, as the unit must be mounted on the wall in all cases. Its use is justified in case of plasterboard or other light wall structure.



Dimensions

UV-C FiltAir	Mounting feet				
	Product acronym	A [mm]	B [mm]	C [mm]	Weight [kg]
15	UVC-FA-FMOUNT	50	105	50	0,25
30					
45					
75					

Specification

Ordering code:	UVC-FA-FMOUNT	-XXX
Product acronym:	UVC-FA-FMOUNT	
Color:	white (RAL 9003)	-
	anthracite (RAL 7016)	ANT
Example: UVC-FA-FMOUNT-ANT		

Timer

The digital timer - equipped with 230V plug - may be used when programmed operation is required. With it, programmed switching on or off is possible.

Available modes: weekly, daily, set to timer, and random.

WxHxL (mm): 76x102x54

Technical characteristics

UV-C FiltAir	Timer				
	Product acronym	Supply voltage	IP	Max. nom. power [W]	Operating temp. [°C]
15	TMR-230V	230 V 50 Hz	IP20	1800	0-40
30					
45					
75					



Specification

Ordering code:	TMR-230V
Product acronym:	TMR-230V
Example: TMR-230V	

Spare parts

UV-C fluorescent lamp

UV-C FiltAir	UV-C fluorescent lamp		
	Product acronym*	pc/unit	replace/year**
15	UVC-LAMP-30W-AV	2	1
30		4	1
45		4	1
75		6	1

* The order code applies to 1 fluorescent lamp. Please note the needed quantity when ordering.

** The service life of UV-C fluorescent lamps is 8000 hours and the replacement of one time per year is valid at continuous operation. The fluorescent lamps must be replaced every 8000 operating hours!

Note: THE LENGTH OF THE FLUORESCENT LAMP DIFFERS FROM THE STANDARD COMMERCIALY AVAILABLE TYPES.

Specification

Ordering code:	UVC-LAMP-30W-AV
Product acronym:	UVC-LAMP-30W-AV
Example:	UVC-LAMP-30W-AV

Filters

UV-C FiltAir	Panelfilter with metal frame			
	Product acronym*	Size (mm)	pc/unit	replace/year**
15	UVC-FA-FILT	502x502x22	1	2
30		502x756x22	1	2
45			1	2
75		502x502x22	2	2

Specification

Ordering code:	UVC-FA-FILT	-XX
Product acronym:	UVC-FA-FILT	
Size (per unit):	UV-C FiltAir 15	15
	UV-C FiltAir 30	-
	UV-C FiltAir 45	-
	UV-C FiltAir 75	15
Example:	UVC-FA-FILT-15	

UV-C FiltAir	Activated carbon filter material			
	Product acronym*	Size (mm)	pc/unit***	replace/year
15	UVC-FA-CARB	504x185	2	1
30		764x185	2	1
45		764x235	2	1
75		1144x285	2	1

* The order code is for 1 filter. Please note the needed quantity when ordering.

** The need to replace the panel filters depends on the degree of soiling, max. every 6 months.

*** For proper operation of the equipment must be used in 2 layers!

Ordering code:	UVC-FA-CARB	-XX
Product acronym:	UVC-FA-CARB	
Size:		15
		30
		45
		75
Example:	UVC-FA-CARB-15	