



**B-FRESH**  
Air Purifier

**FOUR SEASONS**<sup>®</sup>  
is a registered trademark of  
Doğu İklimlendirme A.Ş.

# Venues Breathe with DOGU HVAC Systems!

DOGU HVAC founded in 1999, and ever since has been manufacturing energy and cost efficient products as Air Handling Units, Air Distribution & Management & Movement Systems [HVAC Components] and constantly enhancing to provide an integrated solution for well-being. DOGU HVAC's core business products which are subsumed under 4 major groups as Air Handling Units, Heat/Energy Recovery Units, Air Distribution & Management Products and Kitchen Ventilation Equipment are all produced under the compliance with EU standarts. Particularly AHU and HRU-ER units are entitled under the "FOUR SEASONS" brand name for domestic and foreign markets. DOGU HVAC's, headquarter in Izmir/Turkey, operates in a large-sized plant spread over 2 factories, in total area of 45.000 sqm in which 25.000 sqm indoor space that enables DOGU HVAC manufactures 140 various type of products. Additionally, DOGU HVAC has a powerful sales network with 4 sales offices located in İstanbul, Ankara, Antalya and Adana in Turkey as well as authorized dealers in many other countries for sales and after sales operations. DOGU HVAC has been exporting to more than 50 countries.

Thanks to our "Customer Satisfaction", "Zero-Defect Policy" motto and reinforced by complete certified products, more than 250 employees. DOGU HVAC R&D center developed exclusive products, such as Double Skin Make-Up Kitchen Hood, Recirculated Laminar Airflow Unit, Single Piece Square Ceiling Diffuser and Ecology Units, for the first time have brought to the sector. DOGU HVAC R&D has the ability to make customized production which can meet the requirement of the customers by means of special software such as "ANSYS FLUENT". DOGU HVAC guaranteed its quality of management by having advantages of ISO 9001, ISO 14001, ISO 18001 certifications. Air Handling Units have EUROVENT, TUV Hygiene [in accordance with DIN1946-4, VDI 6022-1, DIN EN 13053 standarts], CE, TSEK, GOST-R certifications; Fire Dampers have EN 1366-2 and EN 13501-3 CE certifications; Smoke Control Dampers have EN 1366-10 and 12101-8 CE certifications; Kitchen Ventilation Products have TSEK, CE and GOST-R quality certifications.



## B-FRESH (AC FAN)

- ☛ Maximum performance in one unit with 2000 m<sup>3</sup>/h air flow.
- ☛ With its special interior insulation and silencer, the sound levels are within comfort conditions even at maximum flow rate. The sound pressure at the lowest speed is only 35.9 dB.
- ☛ It destroys viruses, bacteria and molds with a D99 dose of Ozone free UVC lamp.
- ☛ Its specially designed diffuser mixes the filtered air with the ambient air quickly and effectively.
- ☛ It can be easily used in areas up to 400 m<sup>2</sup> such as lobby, meeting room, office, gym, classroom, kindergarten, market, mosque, public building, hairdresser's.
- ☛ It has the opportunity to operate at the desired flow rate thanks to its 5-stage speed switch.



### B-FRESH (EC FAN)

- € 4 different models between 550-2000 m<sup>3</sup>/h.
- € 33.9 dB sound level at minimum speed thanks to 30 mm rock wool insulation.
- € High efficiency low noise EC fans.
- € It can be used in areas up to 270 m<sup>2</sup> such as lobby, meeting room, office, gym, classroom, nursery, market, mosque, public building, hairdresser's.
- € Adjustable 5 level fan speed.
- € Optional D99 dose ozone-free UV-C lamp.



## B-FRESH (AC FAN) TECHNICAL SPECIFICATIONS

	B-FRESH 20-AC
Flow Rate Range (Min-Max)	800-2000 m <sup>3</sup> /h
Filters	ISO ePM1 (F7) Filter + UV Lamp + H13 Hepa Filter
Min-Max Fan Power	195-515 W
Operating Voltage	230V~1 50 Hz
Sound Level in Min-Max Operation (from 1 meter away)	35,9 dB[A]-54,8 dB[A] (from 1 m away)
Sizes (LxWxH)	775 mm x 735 mm x 1680 mm
Unit's Weight	105 kg
Recommended Use	160 m <sup>2</sup> -400 m <sup>2</sup>
UV-C Lamp Life	10.800 hours
Control	Plug & Play

## B-FRESH (EC FAN) TECHNICAL SPECIFICATIONS

	B-FRESH 05-EC	B-FRESH 08-EC	B-FRESH 12-EC	B-FRESH 20-EC
Flow Rate Range (Min-Max)	110-550 m <sup>3</sup> /h	160-800 m <sup>3</sup> /h	240-1200 m <sup>3</sup> /h	400-2000 m <sup>3</sup> /h
Filters	ISO ePM1 (F7) Filter + H14 Hepa Filter	ISO ePM1 (F7) Filter + H14 Hepa Filter	ISO ePM1 (F7) Filter + H14 Hepa Filter	ISO ePM1 (F7) Filter + H14 Hepa Filter
Min-Max Fan Power	25-142 W	38-220 W	45-275 W	68-430 W
Operating Voltage	230V~1 50 Hz	230V~1 50 Hz	230V~1 50 Hz	230V~1 50 Hz
Sound Level in Min-Max Operation (from 1 meter away)	34,1 dB[A]-51,4 dB[A]	33,9 dB[A]-52 dB[A]	34,2 dB[A]-51,9 dB[A]	34,9 dB[A]-51,9 dB[A]
Sizes (LxWxH)	480mm x 577 mm x 1114 mm	550mm x 657 mm x 1249 mm	650mm x 657 mm x 1249 mm	780mm x 657mm x 1449 mm
Unit's Weight	55 kg	60 kg	70 kg	75 kg
Recommended Use	15 m <sup>2</sup> -80 m <sup>2</sup>	21 m <sup>2</sup> -120 m <sup>2</sup>	32 m <sup>2</sup> -200 m <sup>2</sup>	55 m <sup>2</sup> -270 m <sup>2</sup>
Control	Plug & Play	Plug & Play	Plug & Play	Plug & Play

## OPERATION

### A. FILTRATION WITH HEPA FILTER

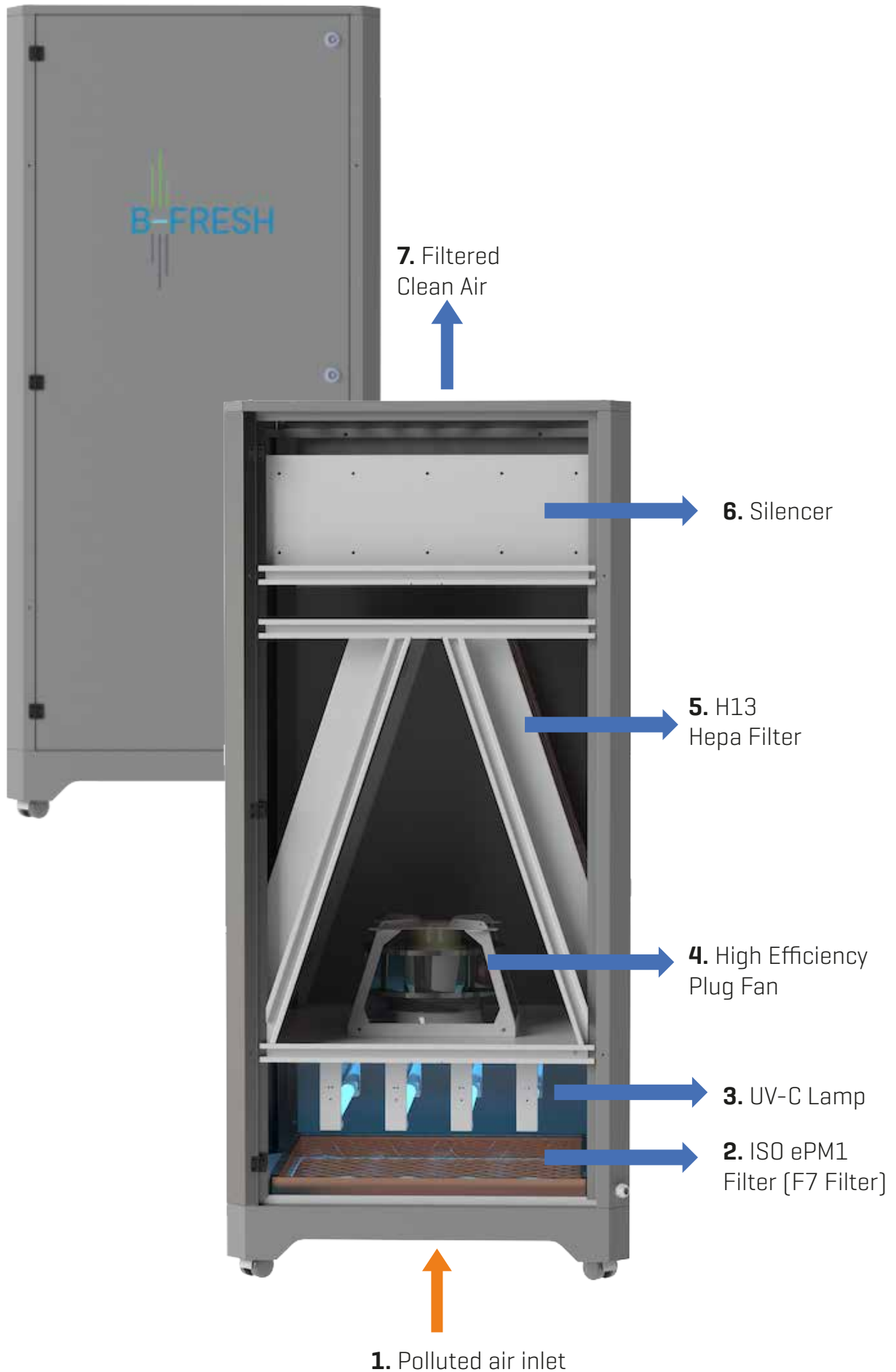
In the air, there are pollutants such as industrial wastes, bacteria, spores - molds, respirable particles, pollen, various smoke-gases and viruses that cause a worldwide pandemic. The COVID-19 pandemic has made air filtration more important than ever. These particles, 1 m and smaller in size, are among the pollutants that pose a higher risk to human health. Viruses range in size from 0.02 to 0.4 microns, Coronavirus in the range of 0.08 to 0.16 microns.

HEPA (High Efficiency Particulate Arresting) filters are capable of holding particles up to 0.10 microns up to 85% to 99.995 depending on efficiency types. In this way, the use of HEPA filters is one of the most effective methods in combating coronavirus in indoor ventilation systems. In the filtration system using a HEPA filter, a H13 class filter passes 50 of every 100 thousand particles through the system. ISO ePM1 Filter (F7 Filter) in accordance with EN 16890 standard is used to prevent the HEPA filters from getting dirty quickly. In this way, operating costs have been reduced.

### B. DISINFECTION WITH UV-C LAMP

In the "Air Purifying Unit" produced by DOĞU HVAC, UV-C lamps with a wavelength of 254 nm that do not produce ozone are used. In this way, viruses, bacteria, mold and fungi in the air sucked from the space are destroyed.

B-FRESH (AC FAN)



## 1. Polluted Air Inlet

It is the section where the unit intake the polluted air from the room.

## 2. ISO ePM1 FILTER (F7 FILTER)

It provides filtration before UV-C lamp and H13 filter by keeping particles of 0.3-1 micron in the air. Filter life it lasts about 6 months, depending on usage. It is recommended to be changed every 6 months for a cleaner place.

## 3. UV-C LAMP

Thanks to the UV-C lamp used in the unit, microorganisms in the air are inactivated at a rate of 0.99 (log 2). Its lifespan is 10,800 hours. It should be replaced at the end of this period for effective use. If used 12 hours a day, the lamps work efficiently for about 3 years.

## 4. HIGH EFFICIENCY AC PLUG FAN

Thanks to the silent and 5-stage controllable fans, you can filtration with the most suitable air flow rate for your needs.

## 5. H13 HEPA FILTER

Thanks to the H13 class leakproof hepa filter, harmful organisms in the air (0.1-0.3  $\mu\text{m}$  size, which the F7 filter cannot hold) are cleaned by 99.95%. Filter life is 1 year. Its annual replacement is essential for a particle-free space.

## 6. SILENCER

Thanks to the silencer positioned close to the supply side inside the unit, the unit operates at a low noise level even at 100% fan speed.

## 7. FILTERED CLEAN AIR SUPPLY

Thanks to the highly effective swirl diffuser in the supply section of the unit, the effective area of the fresh air is increased.

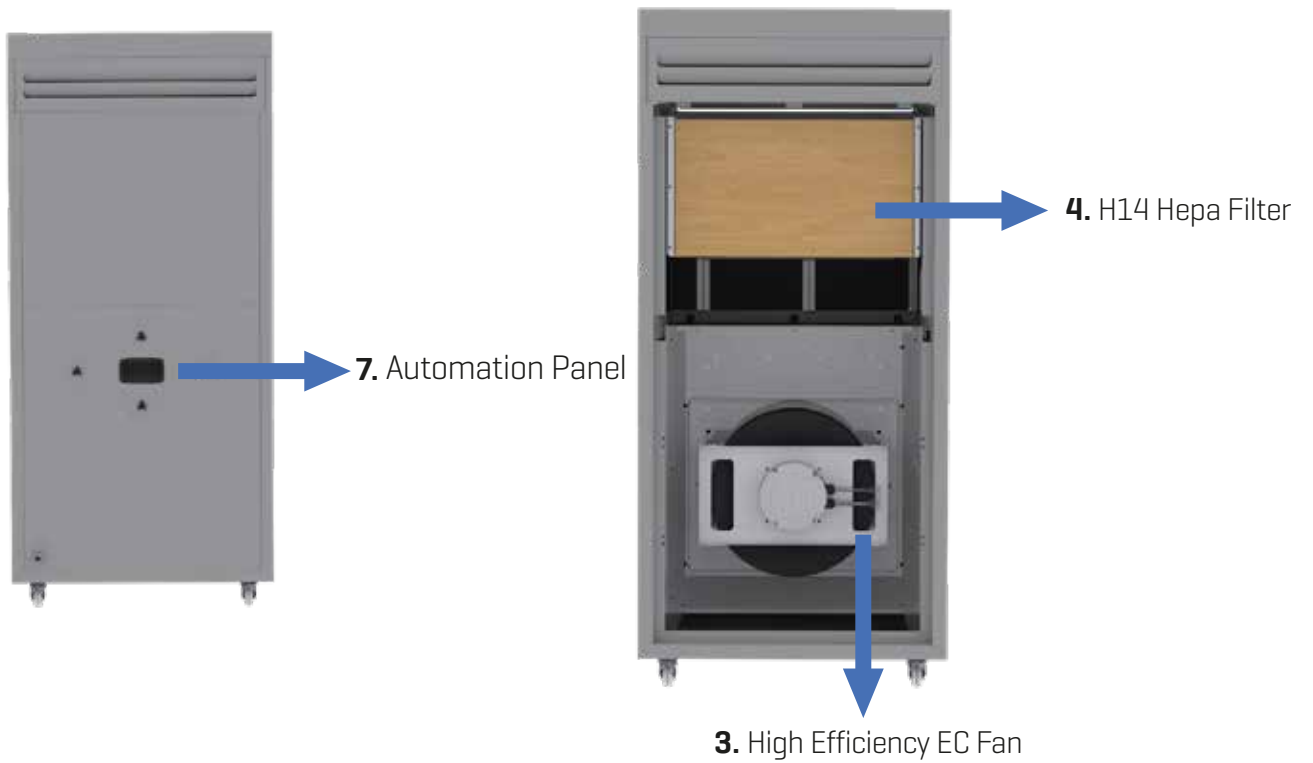
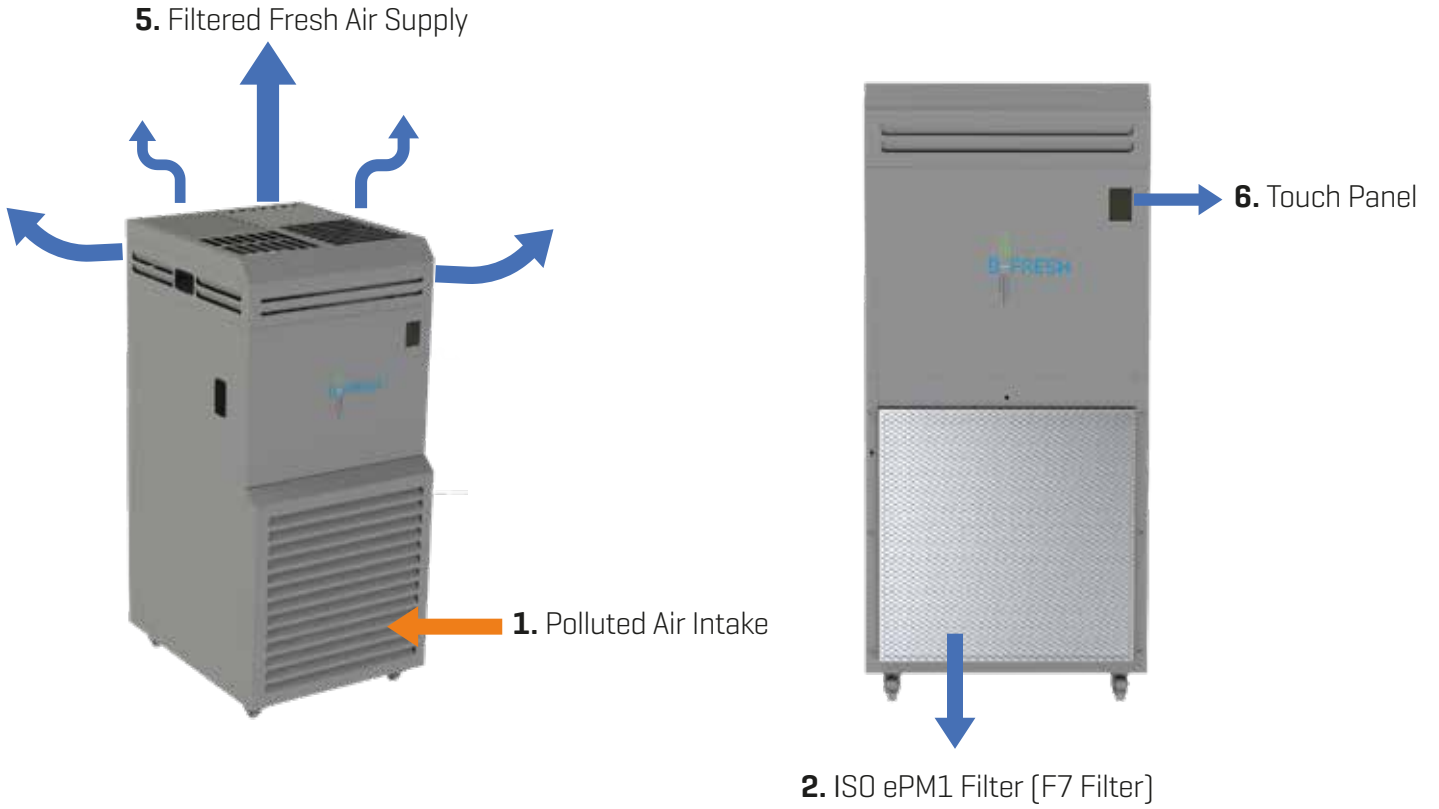
## 8. FAN SPEED CONTROL

The unit, which has a user-friendly simple control system, performs the ON/OFF function after the unit is plugged in with the fan speed switch on it, and the fan speed can be controlled in order to obtain the air flow rate required by the space.

## 9. UV-C LAMP ON-OFF

Depending on the need, the UV-C lamp can be activated with the On / Off button, but when the fan is off, the UV-C lamp must also be off. Thanks to the door switch on the service door of the unit, the power of the unit is cut off when the intervention door is opened. By this means users are prevented from contact with UV-C. Thanks to its 230V energy supply, the unit is suitable for plug-and-play use. Thanks to the movable wheels under the device, it can be positioned anywhere.

**B-FRESH (EC FAN)**





### 1. Polluted Air Intake

It is the section where the unit intake the polluted air from the room.

### 2. ISO ePM1 FILTER (F7 FILTER)

It provides filtration before UV-C lamp and H13 filter by keeping particles of 0.3-1 micron in the air. Filter life it lasts about 6 months, depending on usage. It is recommended to be changed every 6 months for a cleaner place.

### 3. HIGH EFFICIENCY EC PLUG FAN

Thanks to the silent and 5-stage controllable fans, you can filtration with the most suitable air flow rate for your needs.

### 4. H14 HEPA FILTER

Thanks to the H14 class leakproof hepa filter, harmful organisms in the air (0.1-0.3  $\mu\text{m}$  size, which the F7 filter cannot hold) are cleaned by 99.95%. Filter life is 1 year. Its annual replacement is essential for a particle-free space.

### 5. FILTERED CLEAN AIR SUPPLY

It is the section where the unit supply the filtered air into the space.

### 6. AUTOMATION PANEL AND TOUCH PANEL

The unit, which has a user-friendly control system, can be controlled fully automatically thanks to the panel on it.

- 5 stage fan speed control
- Filter contamination alarm
- Ability to read flow rate, temperature and humidity from the touch screen
- Entering the desired flow rate value from the screen with the fixed flow feature
- CO2 control
- Weekly programming

## B-FRESH, REFRESHING THE AIR OF EVERY ENVIRONMENT

B-FRESH Air Purifier, thanks to its HEPA filters, can be used in interior spaces such as lobby, meeting room, office, gym, classroom, nursery, market, mosque, public building, hairdresser's and it cleans harmful particles and organisms such as bacteria, viruses, pollen, spores and molds up to 99.99% and maximizes air quality. Thanks to its special internal insulation and its silencer, it works silently even at the highest fan speed. With the UV-C Lamp which is ozone-free, it destroys viruses, bacteria and molds and it provides hygiene and disinfection in spaces.



## USAGE AREAS

- House
- Malls
- Markets
- Schools and classrooms
- Offices
- Kindergartens
- Bereaved care homes
- Public buildings
- Mosques
- Waiting rooms
- Gym
- Hotel rooms
- Meeting halls
- Examination rooms
- Hairdressers
- Beauty salons
- Restaurants and cafes
- Hospitals and pharmacies



### OFFICE

B-FRESH positively affects the health and performance of your teammates by increasing the indoor air quality in office buildings that do not have windows due to their structure. B-FRESH positively affects the health and performance of your teammates by increasing the indoor air quality in office buildings that do not have windows due to their structure.



### SCHOOL

B-FRESH improves the air quality by keeping the pollutants formed in the classroom environment. While it ensures the health of the teachers and students who breathe easily, it also eliminates the focusing problems caused by the polluted air.



### RESTAURANT

B-FRESH effectively reduces the number of aerosols in the air and the residence time and density of suspended matter clouds in restaurants. This greatly reduces the risk of infection for guests and staff.



### HOUSE

B-FRESH cleans the indoor air so that the air we breathe, which is important not only for asthma patients or those with respiratory diseases, but also for everyone, is beneficial not harmful to us.



### HOTEL

In addition to the air quality of the region we choose, the clean air quality should be good in the indoor environments where we will spend time. B-FRESH offers a comfortable and healthy holiday experience to the guests by cleaning the indoor air of the hotels.



### CONSULTING ROOM

B-FRESH, located in the waiting rooms of the consulting room, cleans the pollutants in the air that negatively affect the health of the patients, and allows you and your patients to breathe comfortably.

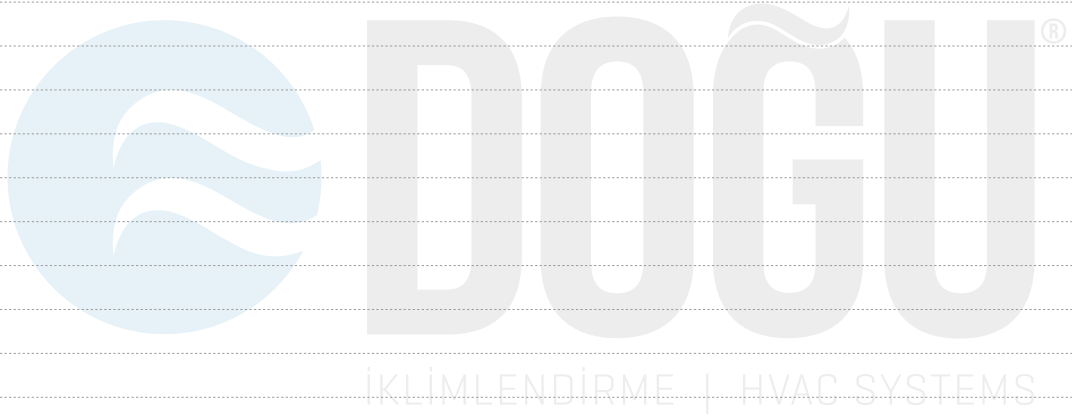








## NOTES





FOUR SEASONS  
CA

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sabyrum



**We make the difference with  
140 different types of products.**



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