





# **INDOOR AIR POLLUTION:**

# **Effects**

Experts say that indoor air pollution can be upto 10 times worse than outdoor air pollution. This is because contained areas enable potential pollutants to build up more than open spaces. Indoor air quality levels are greatly affected by visible and microscopic pollutants such as smoke, dust, animal dander, fungi, pollen, mould spores, etc.

# How does it impact you?

Indoor air pollution is known to greatly impact human health.

- Allergies
- Headaches
- Asthma
- Perpetual colds
- Breathlessness
- Other respiratory complications

Source: 'Indoor Air Pollution in India: Implications on Health and its Control - 2014' published in Indian Journal of Community Medicine

# Kinds of indoor air pollutants



# **Primary Causes**



#### Outdoor air

In cities with poorer air quality, indoor air quality takes a considerable dip.



#### **Cleaning Agents**

Ingredients of daily cleaning agents emit harmful gaseous substances.



#### Stationary

Improper handling of adhesives, copying machines, photography material and print-outs.



#### **Bio contaminants**

Mostly produced from dirty ventilation systems or water-damaged walls, ceilings and carpets.



#### **Furnishings**

Furnishings accumulate dust & other pollutants which can trigger ailments over a period of time.



#### **Pantry**

Cooking inside office pantry or commercial eateries emits harmful gases, often bypassing the e-chimneys and spreading to the rest of the building.

and many more...







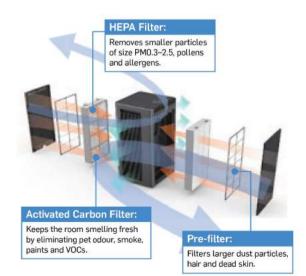
#### CARR A Coverage area: 1250 sq. ft.

# What is Dual Intake Feature?

Dual Intake Feature allows air purifier to intake air from 2 inlets, present on both sides, and discharge purified air from the top. This ensures better coverage and faster purification.

# THE SUREST WAY TO BREATHE PURE CARR A

With Dual Intake feature



#### What's more?

- · Air Quality monitor with digital PM 2.5 indicator
- Temperature and Relative Humidity Display
- Low Power Consumption (80 Watts)
- Auto mode: Detecting indoor air condition, automatically controlling fan power
- Turbo mode: Quick and turbo air purifying
- 5 speeds of fan control
- Convenient to move, pre-fitted with hidden wheels
- Filter replacement cycle alarm: helps monitor the filter's condition

#### **Applications**





### **KLARWIND SERIES**



#### 5-stage filtration

Featuring a High Grade H13 True HEPA Filter that arrests up to 99.95% PM2.5 particles

- 1st stage: Large dust (Pre-filter)
- 2nd stage: Allergens (HEPA filter)
- 3rd stage: Mould (HEPA filter)
- 4th stage: 99.95% of PM2.5 particles (HEPA filter)
- 5th stage: 5 harmful gases (Deodorizing filter)



#### Anti-Virus HEPA Filter

Includes CuS (Copper sulfide) + ZnO (Zinc Oxide) which gives it Anti-Virus\* and Anti-Bacterial\*\* properties



#### Smart Al Cleaning and monitoring

With smart auto mode operation, Klarwind monitors harmful gas levels and PM levels and adjusts its operation speed.



#### Wi-Fi and Alexa control

From changing modes to checking filter life, now do it all easily using Amazon Alexa, or with Wi-Fi control, connect using the Klarwind smartapp (available on both iOS and Android).



#### 18 Speed Fan

Control the speed of purification more precisely, with 18-stage fan speed control function.

#### What's more?

- GAS sensor with color indicator for VOCs
- PM 2.5 monitor with digital display
- Combined colour indicator for PM level and VOCs
- 360 degree airflow
- Low power consumption (39 Watts and 28 Watts)
- Castor wheels
- Sleep mode
- Timer setting

#### **Applications**







#### Klarwind 23S



<sup>\*</sup>Tested with Influenza virus A (H3N2): 99.99% reduction Korea Testing & Research Institute

<sup>\*\*</sup>Tested with Stophylococcus aureus ATCC 6538 & Klebsiella pneumoniae ATCC 4352: 99.9% reduction FITI Testing & Research Institute

## A PROMISE OF CLEANER AIR, EVERYWHERE **SLIM A**

# Anti-Virus HEPA filter HEPA Filter



#### 18-Level Speed Control

Enables flexible fan speed adjustment ranging from gentle breeze to powerful blowing.



#### Aesthetics

Includes CuS (Copper sulfide) which gives it Anti-Virus\* properties

Elegant design with adjustable auto swing, and a touch wheel to adjust fan speed.



#### Ventilation Alarm

Monitors  $CO_2$  levels and updates whenever you need to open your windows to introduce fresh air.



#### **Smart Auto Mode**

Built-in dust and gas sensors diagnose indoor air quality and keep your space pleasant by controlling fan speeds automatically

\*Tested with Influenza virus A (H3N2): 99.99% reduction Korea Testing & Research Institute



#### What's more?

- CO<sub>2</sub> sensor with digital display
- 3 Stage Filtration: Pre filter, Anti-Virus HEPA filter, Active Carbon filter
- Air quality monitor with digital PM 2.5 indicator, PM 10 indicator, and GAS Color indicator for VOCs
- Combined colour indicator for PM level and VOCs
- Sleek remote control for easy operation
- Low power consumption (80 Watts) BLDC motor
- Turbo mode
- Filter replacement cycle alarm
- Safety lock

#### **Applications**









BETTER FILTRATION FOR BIGGER SPACES

PAC A

#### UV LED + PHOTO CATALYST WORK

They ensure effective disinfection, deodorization, and help in killing airborne virus.

UV LED has life of upto 50,000 hours



STEP 2:
Air Sterlization

Photo Catalysis Reaction

UV LED causes photo catalysis via oxidation & reduction reactions

+Photo Catalysis Purification

The purified air comes out after reacted molecular meets harmful matters

Vocs
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Chemical Reaction: UV LED + Photo Catalyst

E. Coli Elimination Rate : ≥ 99.999%

MRSA Elimination Rate : ≥ 99.999%

Influenza Virus Elimination Rate: ≥ 99.995%

sting Facility: The Kitasato Institute, Medical Environment Research Cente



#### What's more?

- · CO, sensor with digital display
- Air quality monitor with digital PM 1 indicator, PM 2.5 indicator, PM 10 indicator, and GAS Color indicator for VOCs
- Combined colour indicator for PM level and VOCs
- Sleek remote control for easy operation
- Turbo mode
- Filter replacement cycle alarm
- Safety lock



PAC A

Coverage area: 4400 sq. ft.

#### 3-stage filtration

Featuring a pre-filter, a high efficiency HEPA filter, and an activated carbon filter to keep dust, allergens, smoke, and more, at bay.



#### **Ventilation Alarm**

Updates whenever you need to open your windows to introduce fresh air.



**Applications** 





#### **Smart Auto Mode**

Built-in dust and gas sensors diagnose indoor air quality and keep your space pleasant by controlling fan speeds automatically.

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	CADR (m³/hr)	Area Covered (sq. ft.)	Product Dimensions WxDxH (cm)	Weight (kg)	Power Consumption (Watts)
CARR A	850	1250	33.5x33.5x60.5	16.5	80
Klarwind 18S	468	700	34.8x34.8x67.3	10.8	28
Klarwind 23S	642	950	34.8×34.8×80.0	12.1	39
Slim A	1600	2400	46.8×40.9×196.5	38	80
PAC A	3000	4400	74.0x46.0x187.7	81	650





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