

Ozone Ionic Air Purifiers









Made in Australia



Ozone and Ionic Air Purifiers

Eco Smart Duct Mounted Air Purifiers can be ideally used for central air conditioned spaces. Duct Mounted Ozone and Ionic Air Purifiers are very efficient and economic too.

Leading Edge Technology

Undoubtedly, Commercial Ozone Air Purifier is the most effective solution of any known technology. This removes smoke, germs and maintain ion balance, Remove unnecessary odors and improves Indoor Air quality. Hence, these products transform smoky and smelly areas into a comfortable clean and fresh environment. These high quality products are used in the places such as residences, offices, shops, schools and hospitality industry.

In an air condition building, Ozone installer can simply connect the Purifier to the air conditioning system, and this is called "duct dosing method." This is a very effective way of distributing purified air into the air conditioned space.

Extensive technical back-up and a well-trained Ozone installer will guide you to select the best method. Ozone Air Purifiers are normally mounted in ducting or in the ceiling space of the building.

Functions of Ozone and Ions

Ozone

It has been shown in the recent international study that when Ozone and ions integrate together, it creates effective Air Purification. Unfortunately, products have come to market, either Ozone or Ion Purifiers at low prices.

Ozone layer is very important for all the living beings on this earth as it protects everyone from the harmful UV rays. Ozone (O3) is made up of three oxygen molecules. Its natural purifying capability removes bad odors and by with the help of microbes, oxidization occurs by a protein restructuring process.

Since these reactions are cyclic, automatically converts to oxygen (O2). The fresh smell that we experience after a thunderstorm is a result of Ozone. [Places like forests, waterfalls and sea have high ozone levels up to 0.1 ppm.]

Ions

lons are combination of oxygen and air. These charged particles tie airborne dust and smoke, and then they attract electrically to each other and become heavier and fall on the ground. Negative ions, balance the ions in nature and thereby improve health and well-being.

Fresh country air contains 3,000 per cm3 level of ions, near waterfalls have 1,000 per cm3 of ions and an old office or a house has below 100 per cm3 of air.

Healthy outdoor environments have the same amount of ozone and ions created by Commercial Air Purifiers. Hence, using this product, everyone can breathe fresh and clean air which brings you joy and good health.



Advantages

- Eliminate airborne dusts and smoke particles.
- Restore ion balance of nature desired for natural health and well-being.
- Deodorizes cigarette food odors, smoke, body odors and all other unnecessary odors
- Controls microbes s like bacteria, viruses and molds.

Specification - Compressor Models	C1	C2	C2	C2	C2
Oxidant output, (mg/hr) - air feedstock	250	1000	2000	3000	4000
Ion output, max (per cm3 at 1m)	2,000,000	10,000,000	15,000,000	20,000,000	25,000,000
Weight, normal (kg)	2.2	6.5	13	19.5	26
Dimensions, as standard - Width W (mm)	184	220	395	570	745
- Length L (mm)	140	215	215	215	215
- Height H (mm)	102	170	170	170	170
Standard Voltage and Frequency (Hz)	220 x 50	220 x 50	220 x 50	220 x 50	220 x 50
Integral mounting holes	yes	yes	yes	yes	yes
Potted encapsulated body	yes	yes	yes	yes	yes
Certified: no electromagnetic interference	yes	yes	yes	yes	yes
Electrically insulated	yes	yes	yes	yes	yes
Compressor included	yes	yes	yes	yes	yes
Power (Watts)	35	120	240	360	480
Non Compressor Models		E2	2E2	3E2	4E2
Power (Watts)	-	100	200	300	400
Oxidant output, (mg/hr) - air feed	-	1000	2000	3000	4000
Oxidant output, (mg/hr) - oxygenator accessories - oxygen feed	-	3000	6000	9000	12000
Oxygenator Models		AX4	AX8	2AX8	2AX8
Oxygen flow rate (I/min)		4	8	12	16
Oxygen Purity (%)		94	94	94	94
Power (watts)		350	400	600	800
Includes compressor and receiver tank		yes	yes	yes	yes
Dew point pressure at outlet		-70 C	-70 C	-70 C	-70 C

We help you to choose the products for your specific application. For sizing and application, please contact Eco smart International.



Innovative Electronics

Ozone science (for odours + microbes)

1.

The air contains pure oxygen molecules

2.

3.

Ozone is formed by the Plasma emitters (enriched oxygen)

The third oxygen atom attaches to a pollutant to oxidise it to a harmless molecule

Leaving pure oxygen again

4.

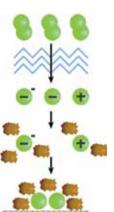
Ion science (for airborne dust/smoke + ion balance)

1.

2.

3.

4.



The air contains pure oxygen and nitrogen molecules

lons are formed by the lon emitter (in a 2:1 ratio). They are charged compounds

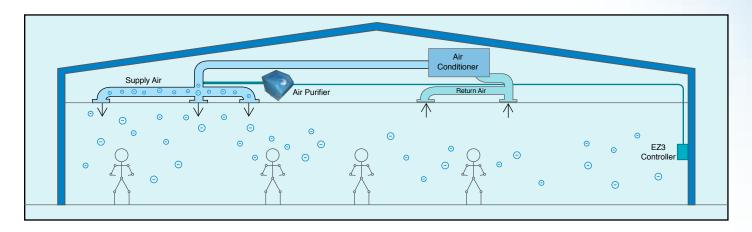
Dust and particles are attached to the charge

The heavy particles drop from the air and can lose their charge



Ozone and Ionic Air Purifiers

For Air Conditioned Buildings Spaces for Duct, Ceiling or Wall Mounted Applications



Air Purifier - Model C2

Model C2 includes its own inbuilt mini-air compressor. Simply plug in the electric cable and oxidants will be released and distributed into your duct or space.

The unit can be mounted on the wall or ceiling. Alternatively it can be connected to an air conditioning duct as shown above, either located outside the duct as shown or located inside the duct.

The C2 creates 1000 mg/hr of ozone and 10,000,000 ions (per cm3 at 1m).

The potted design ensures long life and safe operation. The power is only 100 watts.



Air Purifier - Model C1

Model C1 is a smaller unit for light commercial applications. Like its larger "brother' it can be mounted on the wall or ceiling. Alternatively it can be connected to air conditioner ducting.

The C1 includes a mini internal compressor and inbuilt mounting lugs.

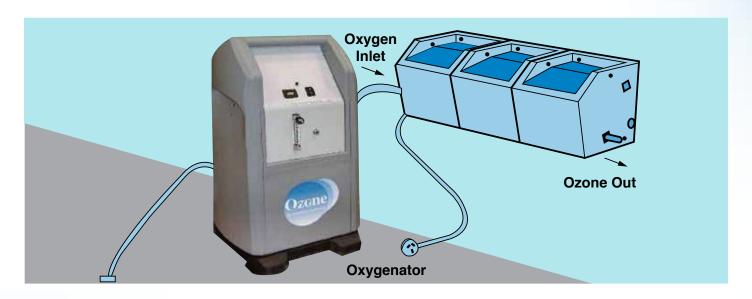
It produces 250 mg/hr of ozone and 2,000,000 ions (per cm3 at 1m). The power is only 35 watts.





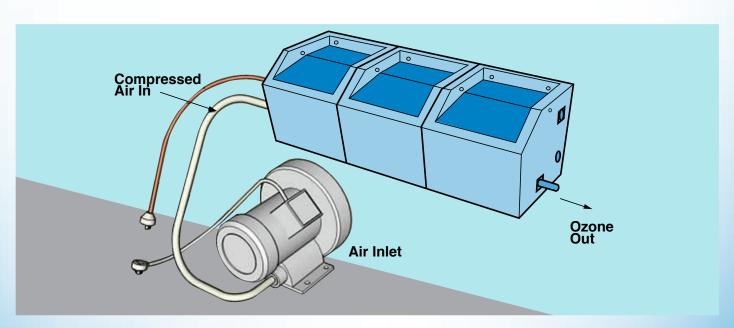
Air Purifier - Model E2, Ideal for large systems

Model E2 is designed to be connected to an external air movement device, such as an oxygenator (models AX4 & AX8) or side channel blower (model CS2) or similar device by others. This is ideal for large systems with multiple E2 products and results in a long life robust solution.



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EZ3 Controller

The EZ3 Controller acts like a thermostat and automatically turns our Ozone Ionic Air Purifier on and off to maintain a constant ozone level. The package includes a measuring instrument with indicator light, adjustable set-point, control station and low voltage cable.

Simply plug the Purifier into the control station, which in turn plugs into the mains power. The whole system then automatically reacts to the varying pollutant load in your premises.

The Problems with the outdated technologies

Particulate Filters (eg HEPA) - clog up quickly
- clog up quickly

- don't kill microbes but breed them

- don't affect odours or ion balance

Gas Filters (eg Carbon) - clog up quickly
- clog up quickly

- then let all gases through

- don't kill microbes, but breed them

• Electrostatic Precipitators - clog up quickly (eg in 1 week)

- then let all pollutants through

- don't affect odours or ion balance

• Ozone only (no ions) - no effect on dust or ion balance

Ionisers (no ozone)
no effect on odours or microbes

Useful Conversions

1m = 1000mm = 3.38 feet

1kg = 1000g = 2.20 pounds

1Pa = 0.102mm water = 0.004 inches water

1L/s = 3.60m3/hr = 2.12cfm

1kW = 1000W = 1.34hp

Ozone: 1ppm (by volume) = 2 mg/m3 = 2000 mg/m3

(at 1 atmosphere and 25oC)



Indoor Air Purification Solutions







Economic Portable Air Purifiers Portable Ozone De-Odourizers

Ceiling Mounted Air Purifiers

Duct Mounted Air Purifiers

Hospital Air Purifiers

Plasma Ionic Air Purifiers

Electrostatic Smoke Cleaners

Ecologic Kitchen Air Filtration

Odour Neutralization Systems

Ventilation and Extraction

Media Based Air Filters

Ozone Air Purification

UVC Air Sterilization

Industrial Dust Collectors

HEPA, Carbon & Fine Filters

The air inside our homes / facilities are up to 100 times more polluted than outside air, based on EPA recent studies! Having a clean air in current era in which industrialization dominates the environment is hard to achieve. Eco Smart had come up with Ecologically Economic Solutions to make the Indoor Air Quality (IAQ) safe to breathe. Every human being deserves to inhale clean indoor air, in their homes, working places, bars, hotels, etc. as it increases our resourcefulness.



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