



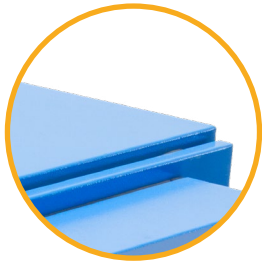
# RYDAIR B SERIES

**Electrostatic Air Cleaner**



# Electrostatic Air Cleaner

## Features of the ESP



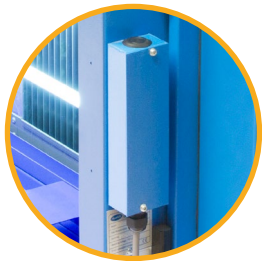
**1.4mm weatherproof powder coated steel** can be installed for outside installation.



**Remote monitor** to indicate status of the electrostatic filter with UV ozone output control.



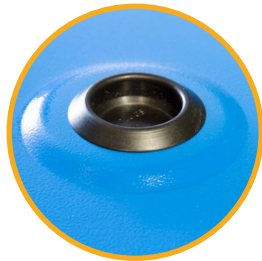
**Electrical safety tested** and certified to AS/NZ560335.1



**Single phase (1 PH, 240V)** cable connection and control.



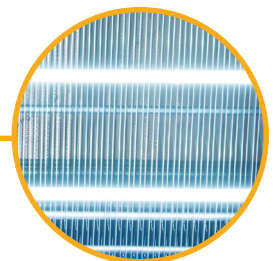
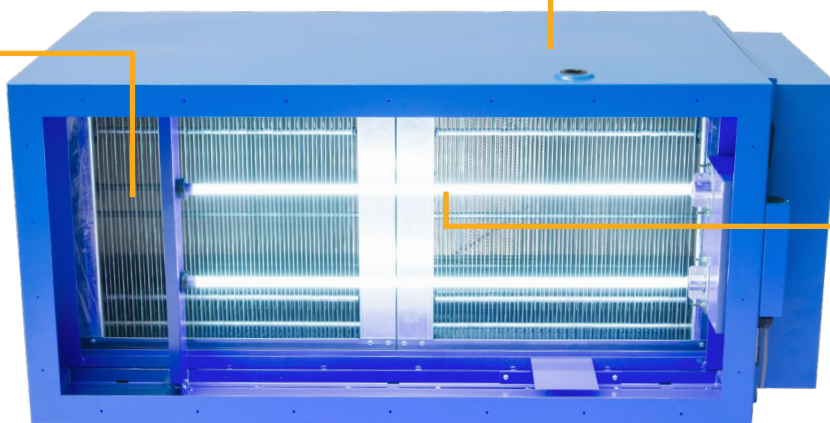
**On and Off switch** and Red and Green LED indicator lights and blue LED indicator lights for UV ozone.



**A drain plug** is located at the top and bottom of the unit. This is used to drain oil from the unit at each service.



**Electrostatic cells** comprises of 61 individual plates for higher efficiency.



**UV ozone injection** to remove and oxidise cooking odours efficiently.

# RY-2500B

## Electrostatic Air Cleaner with UV Ozone



### Specifications

<b>Unit:</b>	H: 540mm, W: 620mm, L: 694mm
<b>Cabinet:</b>	1.4mm/16 Gauge Galvanised Steel
<b>Finishing:</b>	Weatherproof powder coated, Dark blue
<b>Weight:</b>	55 kg
<b>Air Volume:</b>	700 L/s
<b>LED Operating Indicators:</b>	Green LED (ON) Red LED (OFF) Blue (UV Ozone) on unit's panel
<b>Static Pressure Required:</b>	40 Pascal
<b>Power &amp; Voltage:</b>	230 Volts 1PH – 3 pin cord plug, 50 Hz, 0.45 Amps without UV, 1.25 Amps with UV
<b>Ionising Voltage:</b>	High Voltage 12KVdc, Low Voltage 6KVdc
<b>Airflow Direction:</b>	Right to Left or Left or Right
<b>Power Supply:</b>	High frequency solid state and self-regulating
<b>Particle Size:</b>	0.01 microns – 10 microns
<b>Efficiency:</b>	Single pass 95%, Double pass 99.9% ASHRAE Calculated
<b>MERV Ratings:</b>	Meets MERV 15 at velocity of 2.5m/s to 3.8m/s
<b>Pre-Filter:</b>	Stainless Steel mesh, 1x Washable
<b>Electrostatic Cell Size:</b>	H: 472mm, W: 340mm, L: 550mm
<b>Number of Cells / Weight:</b>	1/16.5 kg per cell
<b>Number of Plates:</b>	61
<b>Total Collection Area:</b>	6.07 Sq metres
<b>Installation:</b>	Ceiling Suspended, Wall or frame mounted, Stacked multiple units
<b>No. of Lamps:</b>	1
<b>Lamp Wattage:</b>	65 Watts
<b>Ozone Output:</b>	6 grams/hour
<b>Lamp Life:</b>	13000 Hours
<b>Application:</b>	Odour Control
<b>Certified To:</b>	AS 1668.1 and AS 1668.2, certified to the BCA performance requirements, can be utilised for alternative solution compliance, AHRAE 52.2 2017 -- Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size Australian and New Zealand Electrical certified AS/NZ 60335.1 AS/NZS60335.1:2011+A1, A2, A3 NATA Accredited Laboratory Number: 676

*Without UV optional*



# RY-2500B-V

## Electrostatic Air Cleaner with UV Ozone



*Without UV optional*

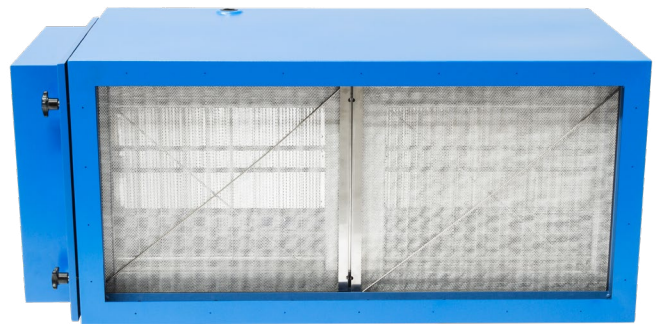
### Specifications

<b>Unit:</b>	H: 485mm, W: 645mm, L: 684mm
<b>Cabinet:</b>	1.4mm/16 Gauge Galvanised Steel
<b>Finishing:</b>	Weatherproof powder coated, Dark blue
<b>Weight:</b>	50 kg
<b>Air Volume:</b>	700 L/s
<b>LED Operating Indicators:</b>	Green LED (ON) Red LED (OFF) Blue (UV Ozone) on unit's panel
<b>Static Pressure Required:</b>	40 Pascal
<b>Power &amp; Voltage:</b>	230 Volts 1PH – 3 pin cord plug, 50 Hz, 0.45 Amps without UV, 1.25 Amps with UV
<b>Ionising Voltage:</b>	High Voltage 12KVdc, Low Voltage 6KVdc
<b>Airflow Direction:</b>	Vertical only
<b>Power Supply:</b>	High frequency solid state and self-regulating
<b>Particle Size:</b>	0.01 microns – 10 microns
<b>Efficiency:</b>	Single pass 95%, Double pass 99.9% ASHRAE Calculated
<b>MERV Ratings:</b>	Meets MERV 15 at velocity of 2.5m/s to 3.8m/s
<b>Pre-Filter:</b>	Stainless Steel mesh, 1x Washable
<b>Electrostatic Cell Size:</b>	H: 472mm, W: 340mm, L: 550mm
<b>Number of Cells / Weight:</b>	1/16.5 kg per cell
<b>Number of Plates:</b>	61
<b>Total Collection Area:</b>	6.07 Sq metres
<b>Installation:</b>	Ceiling Suspended, Wall or frame mounted, Stacked multiple units
<b>No. of Lamps:</b>	1
<b>Lamp Wattage:</b>	65 Watts
<b>Ozone Output:</b>	6 grams/hour
<b>Lamp Life:</b>	13000 Hours
<b>Application:</b>	Odour Control
<b>Certified To:</b>	AS 1668.1 and AS 1668.2, certified to the BCA performance requirements, can be utilised for alternative solution compliance, AHRAE 52.2 2017 -- Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size Australian and New Zealand Electrical certified AS/NZ 60335.1 AS/NZS60335.1:2011+A1, A2, A3 NATA Accredited Laboratory Number: 676



# RY-5000B

## Electrostatic Air Cleaner with UV Ozone



Without UV optional

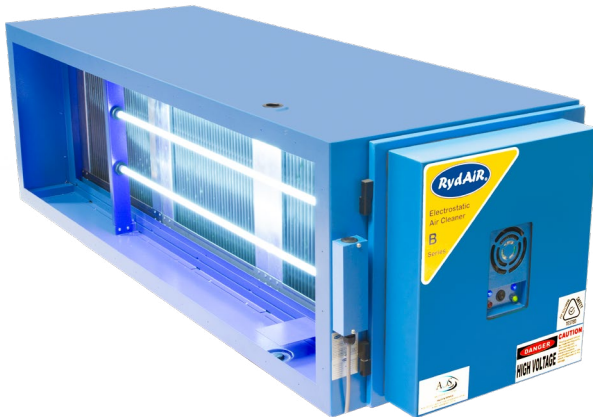
### Specifications

<b>Unit:</b>	H: 540mm, W: 620mm, L: 1243mm
<b>Cabinet:</b>	1.4mm/16 Gauge Galvanised Steel
<b>Finishing:</b>	Weatherproof powder coated, Dark blue
<b>Weight:</b>	90 kg
<b>Air Volume:</b>	1400 L/s
<b>LED Operating Indicators:</b>	Green LED (ON) Red LED (OFF) Blue (UV Ozone) on unit's panel
<b>Static Pressure Required:</b>	40 Pascal
<b>Power &amp; Voltage:</b>	230 Volts 1PH – 3 pin cord plug, 50 Hz, 0.72 Amps without UV, 1.50 Amps with UV
<b>Ionising Voltage:</b>	High Voltage 12KVdc, Low Voltage 6KVdc
<b>Airflow Direction:</b>	Right to Left or Left or Right
<b>Power Supply:</b>	High frequency solid state and self-regulating
<b>Particle Size:</b>	0.01 microns – 10 microns
<b>Efficiency:</b>	Single pass 95%, Double pass 99.9% ASHRAE Calculated
<b>MERV Ratings:</b>	Meets MERV 15 at velocity of 2.5m/s to 3.8m/s
<b>Pre-Filter:</b>	Stainless Steel mesh, 2x Washable
<b>Electrostatic Cell Size:</b>	H: 472mm, W: 340mm, L: 550mm
<b>Number of Cells / Weight:</b>	2/16.5 kg per cell
<b>Number of Plates:</b>	61
<b>Total Collection Area:</b>	12.14 Sq metres
<b>Installation:</b>	Ceiling Suspended, Wall or frame mounted, Stacked multiple units
<b>No. of Lamps:</b>	2
<b>Lamp Wattage:</b>	150 Watts
<b>Ozone Output:</b>	14 grams/hour
<b>Lamp Life:</b>	13000 Hours
<b>Application:</b>	Odour Control
<b>Certified To:</b>	AS 1668.1 and AS 1668.2, certified to the BCA performance requirements, can be utilised for alternative solution compliance, AHRAE 52.2 2017 -- Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size Australian and New Zealand Electrical certified AS/NZ 60335.1 AS/NZS60335.1:2011+A1, A2, A3 NATA Accredited Laboratory Number: 676



# RY-7500B

## Electrostatic Air Cleaner with UV Ozone



Without UV optional

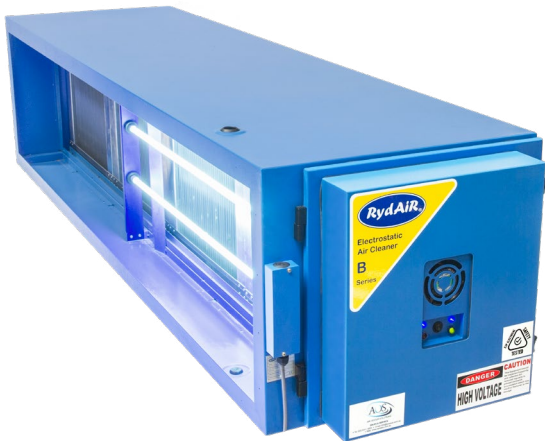
### Specifications

<b>Unit:</b>	H: 540mm, W: 620mm, L: 1790mm
<b>Cabinet:</b>	1.4mm/16 Gauge Galvanised Steel
<b>Finishing:</b>	Weatherproof powder coated, Dark blue
<b>Weight:</b>	122 kg
<b>Air Volume:</b>	2100 L/s
<b>LED Operating Indicators:</b>	Green LED (ON) Red LED (OFF) Blue (UV Ozone) on unit's panel
<b>Static Pressure Required:</b>	40 Pascal
<b>Power &amp; Voltage:</b>	230 Volts 1PH – 3 pin cord plug, 50 Hz, 0.90 Amps without UV, 1.70 Amps with UV
<b>Ionising Voltage:</b>	High Voltage 12KVdc, Low Voltage 6KVdc
<b>Airflow Direction:</b>	Right to Left or Left or Right
<b>Power Supply:</b>	High frequency solid state and self-regulating
<b>Particle Size:</b>	0.01 microns – 10 microns
<b>Efficiency:</b>	Single pass 95%, Double pass 99.9% ASHRAE Calculated
<b>MERV Ratings:</b>	Meets MERV 15 at velocity of 2.5m/s to 3.8m/s
<b>Pre-Filter:</b>	Stainless Steel mesh, 3x Washable
<b>Electrostatic Cell Size:</b>	H: 472mm, W: 340mm, L: 550mm
<b>Number of Cells / Weight:</b>	3/16.5 kg per cell
<b>Number of Plates:</b>	61
<b>Total Collection Area:</b>	18.21 Sq metres
<b>Installation:</b>	Ceiling Suspended, Wall or frame mounted, Stacked multiple units
<b>No. of Lamps:</b>	2
<b>Lamp Wattage:</b>	180 Watts
<b>Ozone Output:</b>	16 grams/hour
<b>Lamp Life:</b>	13000 Hours
<b>Application:</b>	Odour Control
<b>Certified To:</b>	AS 1668.1 and AS 1668.2, certified to the BCA performance requirements, can be utilised for alternative solution compliance, AHRAE 52.2 2017 -- Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size Australian and New Zealand Electrical certified AS/NZ 60335.1 AS/NZS60335.1:2011+A1, A2, A3 NATA Accredited Laboratory Number: 676



# RY-10000B

## Electrostatic Air Cleaner with UV Ozone



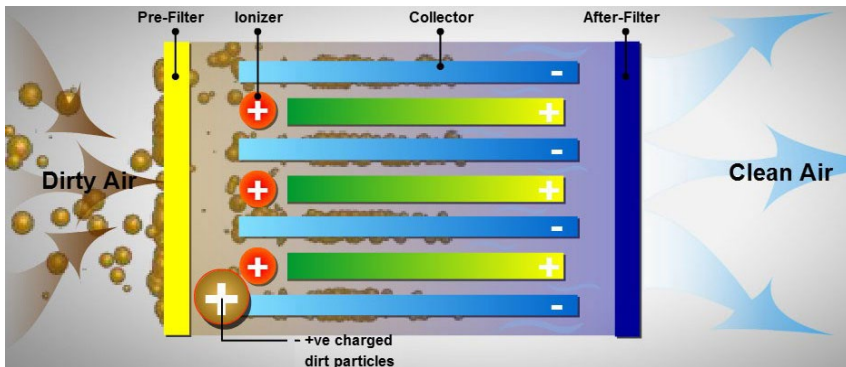
*Without UV optional*

### Specifications

<b>Unit:</b>	H: 540mm, W: 620mm, L: 2338mm
<b>Cabinet:</b>	1.4 mm/16 Gauge Galvanised Steel
<b>Finishing:</b>	Weatherproof powder coated, Dark blue
<b>Weight:</b>	154 kg
<b>Air Volume:</b>	2800 L/s
<b>LED Operating Indicators:</b>	Green LED (ON) Red LED (OFF) Blue (UV Ozone) on unit's panel
<b>Static Pressure Required:</b>	40 Pascal
<b>Power &amp; Voltage:</b>	230 Volts 1PH – 3 pin cord plug, 50 Hz, 0.95 Amps without UV, 1.70 Amps with UV
<b>Ionising Voltage:</b>	High Voltage 12KVdc, Low Voltage 6KVdc
<b>Airflow Direction:</b>	Right to Left or Left or Right
<b>Power Supply:</b>	High frequency solid state and self-regulating
<b>Particle Size:</b>	0.01 microns – 10 microns
<b>Efficiency:</b>	Single pass 95%, Double pass 99.9% ASHRAE Calculated
<b>MERV Ratings:</b>	Meets MERV 15 at velocity of 2.5m/s to 3.8m/s
<b>Pre-Filter:</b>	Stainless Steel mesh, 4x Washable
<b>Electrostatic Cell Size:</b>	H: 472mm, W: 340mm, L: 550mm
<b>Number of Cells / Weight:</b>	4/16.5Kg per cell
<b>Number of Plates:</b>	61
<b>Total Collection Area:</b>	24.28 Sq metres
<b>Installation:</b>	Ceiling Suspended, Wall or frame mounted, Stacked multiple units
<b>No. of Lamps:</b>	2
<b>Lamp Wattage:</b>	180 Watts
<b>Ozone Output:</b>	16 grams/hour
<b>Lamp Life:</b>	13000 Hours
<b>Application:</b>	Odour Control
<b>Certified To:</b>	AS 1668.1 and AS 1668.2, certified to the BCA performance requirements, can be utilised for alternative solution compliance, AHRAE 52.2 2017 -- Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size Australian and New Zealand Electrical certified AS/NZ 60335.1 AS/NZS60335.1:2011+A1, A2, A3 NATA Accredited Laboratory Number: 676



# No more smoke, No more odours.

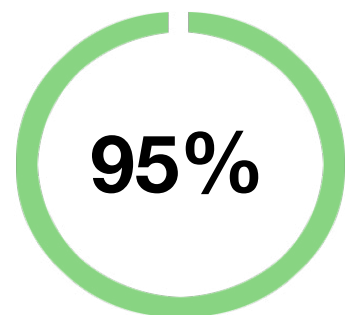


## How Electrostatic Air Cleaners Work

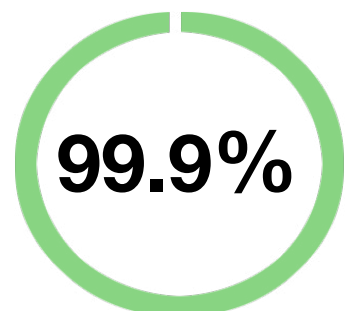
Electrostatic air cleaners use electricity to remove smoke, grease and oil particles in the kitchen ventilation system before discharging the exhaust air into the atmosphere. The larger grease particles are captured by the pre-filter and the smaller particles received a positive charge by the ioniser on the cell. The collection plates with the grease and oil particles receive a positive charge on the electrostatic cell. As the electrostatic cell collects grease and oil over time, it will require a periodic clean and servicing exchange set of pre filters and electrostatic cells are recommended for each ESP unit.

## Electrostatic Air Cleaner Features and Benefits

- 1 Control panel recessed into the unit.
- 2 Built in oil tray.
- 3 Advanced gasket door systems, which stops the leaking of grease.
- 4 Stainless steel rails which makes it easy to slide cells and pre-filters to slide out for maintenance.
- 5 Advanced gasket door systems, which stops the leaking of grease.
- 6 Compression switch on the filters which therefore means no springs on the cells.
- 7 High efficiency, low maintenance and replacement costs and optional UV ozone in all RY series electrostatic air cleaners.
- 8 Heavy duty collection cells durable and long lasting.
- 9 Weatherproof powder coated finish and built from 1.4 mm galvanised steel.



Single pass  
Electrostatic Efficiency



Double pass  
Electrostatic Efficiency



# Workflows

## AS 1668 Solutions



### 1 Street Level Discharge

A street level discharge is required where there is no means of ventilation through a mechanical riser and the only way to discharge the kitchen exhaust air is horizontally on street level, better known as a street level discharge.

### 2 Low Level Discharge

When discharge smoke, grease, odours at a low level, a combination of kitchen exhaust treatment technologies is often employed to achieve the most cost effective outcome. The factors that must be considered include having to be close to the boundaries, windows and air intakes or natural ventilation devices.

### 3 Solid Fuel Kitchen Exhaust Filtration System

This filtration system technique can remove particles through a cooling effect. They are specifically designed for solid fuel applications including wood fire ovens and charcoal applications which utilise solid fuel such as hot coals and woods for cooking.

### 4 Individual Tenancy Filtration System

A tenancy lease agreement would indicate kitchen exhaust filtration system to be installed in the premises as a condition of the lease. Usually duct connection is installed in the tenancy and the owner must maintain and have full responsibility of the kitchen exhaust filtration system issues may arise with residential tenancies which live above the retail precinct. The local council who protect the local residence are becoming less tolerant of offensive smoke and odour from ventilation systems.

### 5 Retrofit Kitchen Exhaust Filtration System

AOS kitchen exhaust filtration system can be retrofitted on site into any existing kitchen exhaust applications. If a restaurant owner has any issues that may arise due to smoke, grease and odours associated during the cooking process.

### 6 Recycled Kitchen Exhaust Filtration System

The AOS Kitchen Exhaust Filtration can utilise a recycled kitchen exhaust system in combination with electrostatic air cleaners, odour control system and carbon filtration.

### 7 Low Velocity High Efficiency Filtration System

AOS low-velocity high-efficiency filtration system allows to utilise the Envirohood and combining electrostatic filtration to achieve clean air discharge.

### 8 Alternative Solution Filtration System

AOS Alternative Solution Filtration System will allow for a performance-based solution to satisfy requirements of AS1668 parts 1 & 2 and BCA performance requirements.

### 9 Plant Room Filtration System

Plant rooms have a large amount of exhaust air distributed through the building. The AOS electrostatic and carbon filtration system can be installed in the plant room to remove smoke and odours from the cooking process. The filtration units are modular in design and can be stacked on top of each other and bolted together. This will increase the kitchen exhaust airflow requirements.



For more AS1688 solutions please visit:  
[www.aosaus.com.au/solutions](http://www.aosaus.com.au/solutions)

# Push your air and odour workflow further with ESP accessories.



### Electrostatic filter

Contains 61 collection plates per electrostatic cell for higher collection efficiency.



### Power pack

Supplies low voltage and high voltage power to the two stages of the electrostatic unit.



### Pre-filter

Stops and collects larger grease particles entering onto the electrostatic cell.



### Rain cover

Protects the electrical components for outdoor installations.



### Remote Monitor

Indicates remote status of the electrostatic filter with UV ozone output control.



### BMS (Building management system)

BMS allows for real time electrostatic filtration status information.

# Configurations and efficiency Electrostatic Air Cleaners

(Front view)



**Single Pass**  
(95% efficiency)



**Double Pass**  
(99.9% efficiency)



**Triple Pass**  
(99.9% efficiency)



**Stacked**  
(95% efficiency)



**Stacked Double Pass**  
(99.9% efficiency)

**Aus / NZ distributors of:**



**Air Odour Solutions Australia**  
32 Chifley St, Smithfield NSW 2164  
**Tel:** 02 9721 0020  
**Email:** [info@aosaus.com.au](mailto:info@aosaus.com.au)

[www.aosaus.com.au](http://www.aosaus.com.au)  
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