

# TORnEX

INDOOR AIR QUALITY SOLUTION



## ELECTRONIC AIR CLEANER for commercial building

lobby



office



## TORNEX IAQ SOLUTION

house



Shopping mall



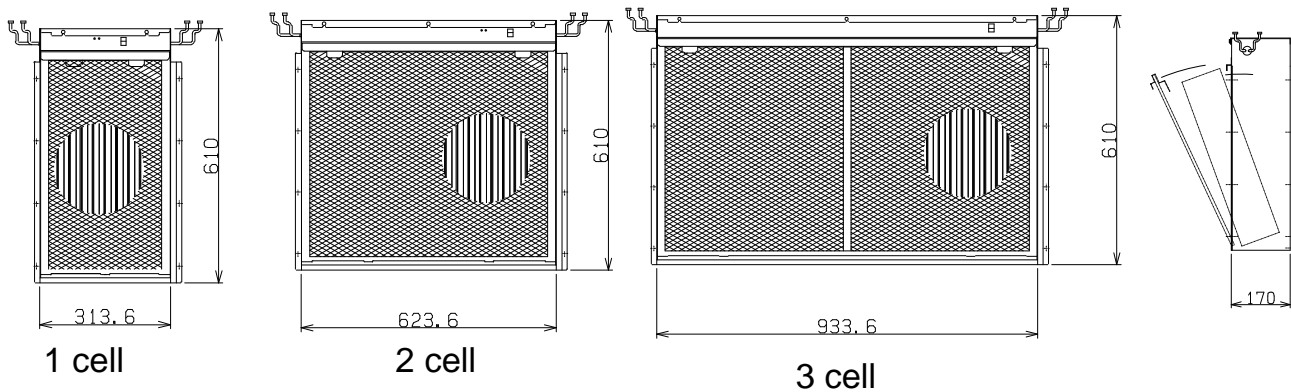
Restaurant



## Products:



## Dimensions:



## Specifications:

	EPBAH31 (1 cell)	EPBAH32 (2 cell)	EPBAH33 (3 cell)
<b>Electrical Rating:</b>			
Voltage and Frequency	200-240V, 50/60Hz		
Electrical consumption	18 W	26 W	34 W
Current draw	0.1 A	0.14A	0.18 A
Ionizer voltage	DC 7450 V		
Collector voltage	DC 4100 V		
<b>Temperature Rating:</b>			
Operating Ambient	4-50°C		
Temperature of Airflow	4-50°C		
Maximum Cell Washing Temperature	60°C		
<b>Weight:</b>			
Electric Cell (each)	4.4kg		
Installed Weight (each cell quantity included)	10.2kg	17kg	23.8kg
<b>Rating air volume:</b>	1000 cfm (1700m <sup>3</sup> /h)	2000 cfm (3400m <sup>3</sup> /h)	3000 cfm (5100m <sup>3</sup> /h)
<b>Capacity, Efficiency, Pressure Drop :</b>	Refer to each graph (only EPBAH33 is shown at next right page in this brochure)		

## Features:

### Energy Saving

- Low pressure drop.

### Safety

- Interlocking System.
- CE Marking.
- Ozone level below limits .



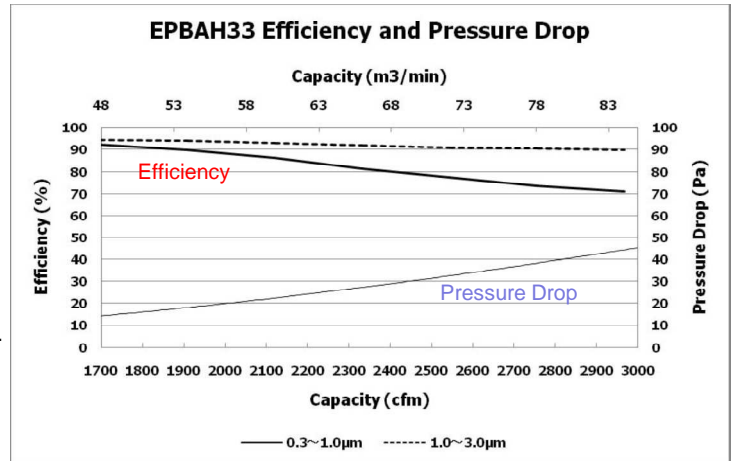
### High Functionality

- May be connected to a building management system.
- Interface unit as an option can monitor each Air cleaning unit conditions.

### Corrosion Resistance

- Galvanized cabinet protects against rust.

## Performance:



EPBAH33 Efficiency and Pressure Drop (ASHRAE 52.2-2007)

## Advantages of TORNEX ESP:

### Energy saving !

Compared with conventional Electronic Air Cleaner for commercial use, Tornex achieve much **lower power consumption**.

### Cost saving !

#### -Initial Cost-

Unlike other brands, **three-cells in one bank (EPBAH33)** is available.

Only one power pack can supply power to three cells in one bank although conventional type are only two-cell type or one-cell type available.

Thus, the total quantity of power pack required can be reduced by employing three-cell in one bank (EPBAH33).

In the end, total cost of Electronic Air Filters can be reduced.

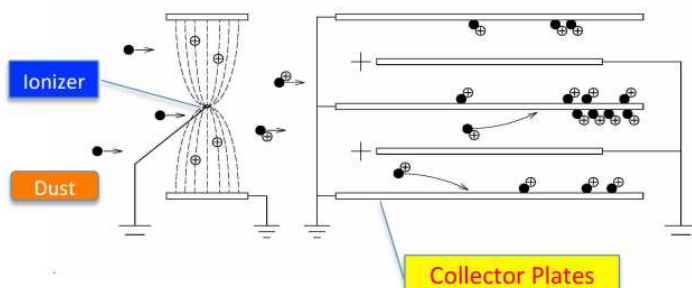
#### -Running Cost-

Obviously, cost saving thanks to **low power consumption**

ASHRAE 52.2 CLASSIFICATION	Particle size range (micron)		
	3.0 to 10.0	1.0 to 3.0	0.3 to 1.0
MERV 13	> 90%	> 90%	No Requirement
MERV 14	> 90%	> 90%	≥ 75%
MERV 15	> 90%	> 90%	≥ 85%
Tornex Electronic Air Cleaner (EAC)			
Tested per ASHRAE 52.2	Particle size range (micron)		
	3.0 to 10.0	1.0 to 3.0	0.3 to 1.0
Report number:2011A072	97.7%	93.9%	77.4%

## How TORNEX ESP works?

### Two Stage



#### First Stage

Dust particles are electrically charged(+) in the ionizer section.

#### Second Stage

Charged plate(+) repel charged dust particles(+) to the opposite plate(-). The attracting force is called Coulombic force. The dust particles are retained on the plate by Van der Waals force (Dust will not be free even without power supply to the EAC).





## About TORNEX:

Tornex Inc are a company established in Japan in 1963. Since 1988, the company's efforts have been primarily directed in the area of air filtration for Indoor Air Quality

## Products and Reference:

### 【Commercial Buildings- EAC for AHU】



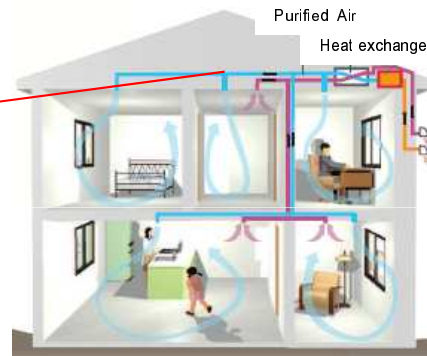
MALAYSIA: KLIA2



### Malaysia's Green Building Index (GBI)

EE5 : Advanced EE performance (up to 15 points)  
IE1 : Innovation point (1 point)

### 【Residential House- Intake Out Air Cleaner for heat exchange system】



### 【Smoking Area Solution – EAC for tobacco smoke control】



CHINA: Beijing international airport T3

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