

Algal Oxygen Bar

Reduces greenhouse gases with a microalgae photosynthetic oxygen tank



“WOOFAA AOB reduces carbon dioxide and generates oxygen in air directly, 20-time faster than normal plants.”

Hot-pot Challenge



We once hosted a hotpot party at our conference room for over **25 people**, using **2 portable gas cookers**. It is a well-sealed air-conditioned room sized **250 sq. feet** with only a 150 mm vent fan equipped. We have two algal tanks total some **100L algal water** up for the challenge.



The CO₂ level in that kind of room size and activity level, should have shot through 2,000 ppm within 15 minutes and might reach 5,000 toxic level in an hour time. People would have felt suffocated in the meantime (ref: xaser.com), and would walk in and out the room for fresh air. WOOFAA AOB did a good job keeping the CO₂ level below 2,000 ppm throughout the 2 hours session.

Anyone is welcome to come visit our office verifying the figures, or even to replicate the hot-pot challenge.

As seen in [Mingpao <../article/20190121/s00002/1548007809948>](http://www.mingpao.com/article/20190121/s00002/1548007809948), WOOFAA AOB is a green PropTech to improve indoor air quality. It is well received by the professionals.



A booth in **Smart Airport Technovation Conference 2018** hosted by Airport Authority Hong Kong.

In the event we demonstrated how our smart algal tank could react to ambient carbon dioxide level changes as an IoT (internet-of-things) appliance.



A show up in **CLP Smart Elderly Home Experience Day 2019**.

In which we explained the concept of being able to breath better in crowded zones, by adding oxygen in air using microalgae photosynthesis, with a bonus of reducing energy bill by lower demand on air-conditioning (Demand Controlled Ventilation).



More the algal water, more carbon dioxide can be decomposed to become oxygen. Therefore, we developed a cabinet version of the oxygen bar for easy deployment in **office conference room**.

Many busy offices have conference rooms often fully occupied, or even over-crowded, and the native air-conditioning system often fails to cope with the loading too. That is where our AOB can help besides just being an eye-pleasing candy.



It comes in three sizes. Cabinet on right side is the core module CAB500. CAB1000 and CAB1500 have extra cabinet(s) on side(s) with hidden algal water tank hidden in lower cabinet.

Job references:

- Sino Inno Lab of Sino Group
- Sun Hung Kai Properties (Uptown Plaza)
- China Light and Power (Smart Enterprise Showcase Vendor)
- Few more coming soon ...

WFAOB-CAB	
Cabinet size	CAB500: 500*500*2000 mm CAB1000: 1000*500*2000 mm CAB1500: 1500*500*2000 mm
Algal water tank size	CAB500: 70 liters CAB1000: 120 liters CAB1500: 170 liters
Daily (14-hr lighting) photosynthesis rate (Ref: NAMI)	CAB500: 700 g CO ₂ , 140 g O ₂ CAB1000: 1,200 g CO ₂ , 240 g O ₂ CAB1500: 1,700 g CO ₂ , 340 g O ₂
Equivalence to forest tree air cleaning capacity (Ref: ncsu.edu)	CAB500: 11 trees CAB1000: 19 trees CAB1500: 27 trees
Equivalence to plastic straw greenhouse gas emission reduction (Ref: u-shape)	CAB500: 370 pieces / day CAB1000: 630 pieces / day CAB1500: 900 pieces / day
Serving area	CAB500: < 100 sq. feet CAB1000: < 200 sq. feet CAB1500: < 300 sq. feet
Power consumption & carbon emission rate (Ref: CLP 0.51)	CAB500: 0.62 kWh, 320 g / day CAB1000: 1.04 kWh, 530 g / day CAB1500: 1.46 kWh, 750 g / day

Online Advertising Display Panel

The AOB cabinet can serve not only as an air revitalization tool, but also an advertising appliance. The panel can show text, image, video, ppt, pdf content about your own organization, or you make it your money-making tool for your own clients.

WOOFAA's annual rental service has included ads content management over-the-air, which means you can simply dropbox us your ads content, we can update individual ads panel over the Internet, no more the need of insert-usb-drive to each panel for content update.

Work for Any Indoor Space with Random Occupancy



- Metro station
- Underground mall
- Tourist hall
- Public toilet
- Office reception
- Hotel reception
- Wine cellar
- Cigar lounge
- School
- Elderly home
- Sport hall
- ...



About WOOFAA

WOOFAA develops and distributes ambient air quality monitoring and control products. Our solutions embrace applications for household, educational, communal and commercial sectors. Our team is well-versed in latest air purification, smart building, and Internet-of-Things technologies, giving you an effective and energy efficient solution to any of your odor and air quality problem.

Our team graduated from the Hong Kong Science Park Incubation program in 2015 and be a health building accredited professional of the WELL Building Standard from the US Green Building Council. Contact us today to get yourself and your family a better breathing environment.



WOOFAA, a sound of clean air.

Corporate Clientele (partial)

