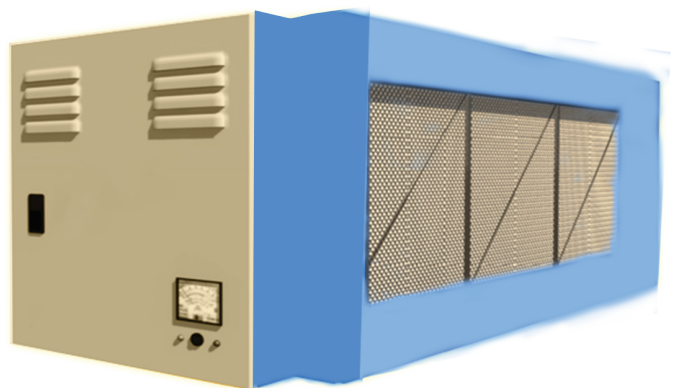




KITCHEN EXHAUST AIR Treatment System **XCT** Series



STAYING AHEAD

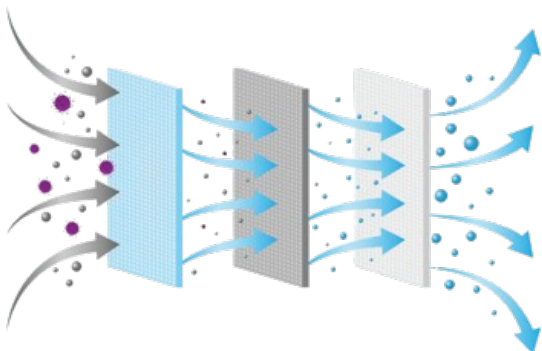
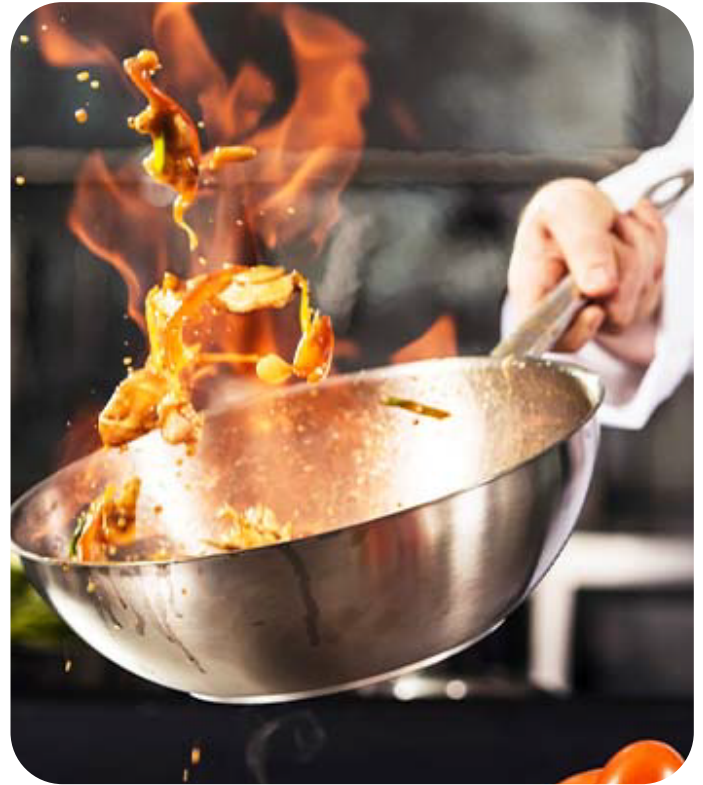
In today's dynamic world, the demand for dining out has surged significantly. While this trend brings increased business to restaurants, it also amplifies kitchen hazards. With higher cooking production, restaurants exhaust more smoke, grease, and odors into the environment. This can lead to air quality concerns from nearby residents and structural risks such as grease buildup that can damage rooftops.

To help restaurants stay ahead, Xfonica Connect Technologies introduces its Kitchen Air Purification Systems. These advanced systems leverage electrostatic precipitation technology to effectively eliminate smoke, grease, mist, and other airborne particles, providing cleaner and safer exhaust.

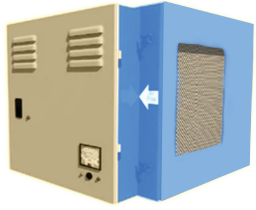


WORKING PRINCIPLE

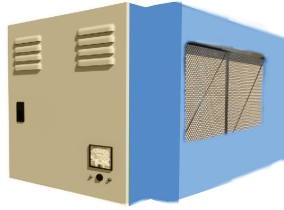
The Electrostatic Precipitators in our systems consist of two critical components: the charging section and the collecting section. In the charging section, airborne particles such as smoke, grease, and mist pass through ionizer wires, where they are given a positive electrical charge. These charged particles then move to the collecting section, where they encounter negatively charged aluminum plates. The electrostatic attraction ensures these contaminants are captured and removed, delivering clean air back into the environment.



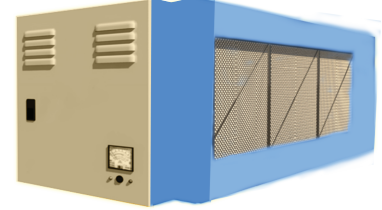
Specification



XCT-X1



XCT-X2



XCT-X3

Unit (H x W x L)	565 x 703 x 473	565 x 1165 x 473	565 x 1667 x 473
Cabinet	1.6mm Electro Galvanized Steel / CRC		
Finishing	3 mil Powder Coated/PU Paint		
Unit Weight	40 kg.	70 kg.	120 kg
Ionizer/Collector Cell Weight	1 x 14 kg.	2 x 14 kg.	3 x 14 kg.
Air Volume @ 95% DOP Eff.	1540	2830	4230
Air Volume @ 90% DOP Eff	1980	3640	5440
Air Flow	Left to Right, Right to Left		
Static Pressure Drop	50-75 Pa		
Features	Short circuit, arc protection and auto power restore for Power Pack		
Efficiency	90-95%		
Particle Size	Collects particles as small as 0.01 microns		
Control	Auto cut-off switch when door is opened. Indicator lights for fault. Optional BMS Contact.		
No. of Cells	1	2	3
Operating Voltage	220± 10% VAC, 50 Hz		
Output Voltage	12.5-13.0 KVDC Ionizer, 6.0-6.5 KVDC Collector		
Power Consumption	40W	80W	120W
Power Supply	PWM with Status LED	PWM with Status LED	PWM with Status LED
Pre Filter	Perforated Plate/Metal Mesh-1 No.	Perforated Plate/Metal Mesh-2 No.	Perforated Plate/Metal Mesh-3 No.
After Filter (Optional)	Perforated Plate/Metal Mesh-1 No.	Perforated Plate/Metal Mesh-2 No.	Perforated Plate/Metal Mesh-3 No.
Installation	Ceiling suspended, wall or floor/frame mounted		

OPTIONAL ACCESSORIES

- 1) Double-pass electronic module.
- 2) Fans and Motors
- 3) Fan Exhaust Pipe
- 4) Inlet/Outlet Cone
- 5) Outdoor Canopy
- 6) Fan Flexible Connection
- 7) Carbon after filter for odor control
- 8) Ceiling Suspension Kit
- 9) Exhaust Air Piping/Ducting

FEATURES & BENEFITS

Unmatched Air Cleaning Efficiency

Achieve up to 95% efficiency in a single pass and 99% with a double-pass configuration, ensuring exceptional removal of airborne contaminants and pollutants.

Low Pressure Drop

Experience minimal pressure drop compared to traditional media and cartridge filters, resulting in significant energy savings for your fan systems without compromising performance.

Comprehensive Smoke and Odor Control

Effectively capture both solid and liquid particulates while neutralizing odors and gaseous pollutants, delivering cleaner and fresher exhaust air.

Hassle-Free Installation

Our system is designed for quick and straightforward setup. Simply connect the ductwork, electrical components, and plumbing, and the unit is ready to operate—no field assembly required.

Modular Sectional Design

The modular, stackable design allows seamless customization to meet your specific kitchen ventilation needs, providing flexibility for any setup.

Easy Service and Maintenance

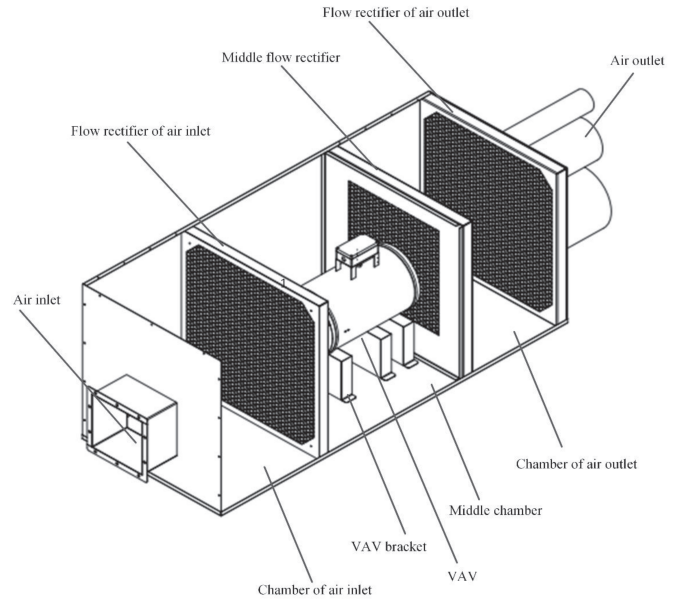
Service the unit effortlessly from either side using hinged access panels. No tools are needed, enabling quick and convenient filter maintenance and cleaning.

Heavy-Duty Cell Construction

Built for durability and efficiency, our permanent cell design eliminates replacement costs. Wider spacing between plates ensures easier cleaning and superior dust retention, maintaining long-term reliability.

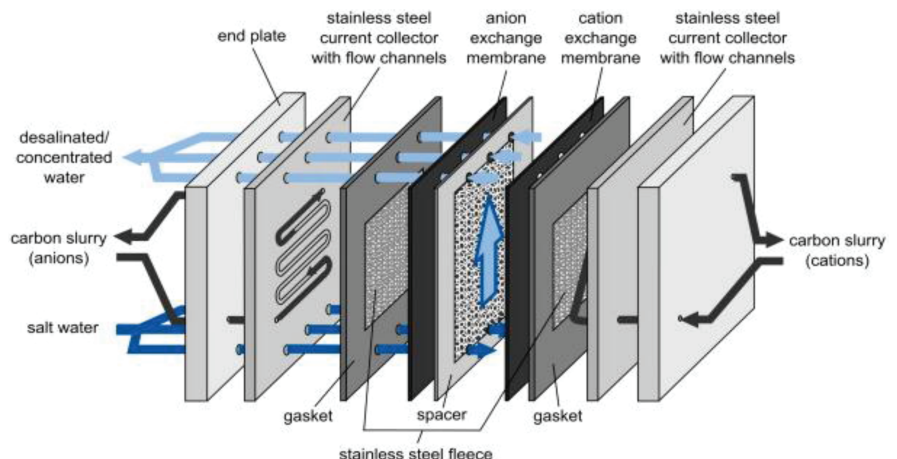
Advanced Power Supply Technology

Equipped with a robust Solid-State PWM-based power system, our units maintain a stable electrical field even at higher amperages for optimal performance.



UNIT MEASUREMENT

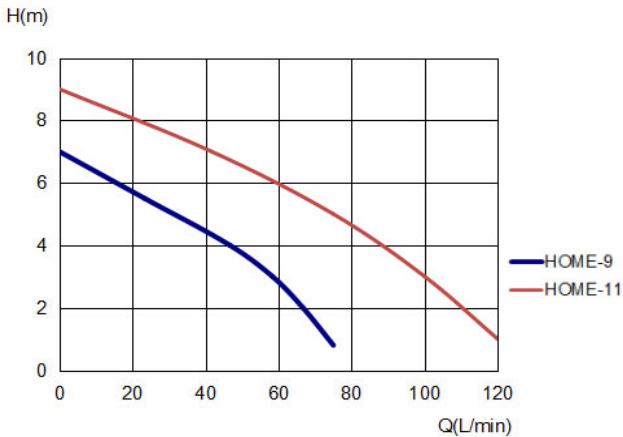
CROSS SECTION VIEW



CAPACITY v/s EFFICIENCY v/s PRESSURE DROP DATA

Particulate Efficiency V/s Capacity Data V/s Pressure Drop Data

DOP Eff	%	98%	97%	94%	90%	84%
ASHRAE EFF.		97%	96%	92%	87%	80%
KET-1	cmh	1683	2248	2807	3366	3931
	cfm	990	1322	1651	1980	2312
KET-2	cmh	1683	2248	2807	3366	3931
	cfm	990	1322	1651	1980	2312
KET-3	cmh	4622	6173	7709	9244	10795
	cfm	2719	3631	4534	5438	6350
Face Velocity (fpm)	m/s	1.50	2.00	2.50	3.00	3.50
	m/s	295	394	492	590	689
Cell Only		4	6	7	12	18
Pressure Drop						
Cell+Pre & After Mesh Filter		15	31	50	72	110
Cell+Pre & After Perforated Filter		23	38	60	87	130



AIR VELOCITY METRES PER SECOND (VOLUME OF AIR FLOW M/S PER SQM OF FACE AREA)

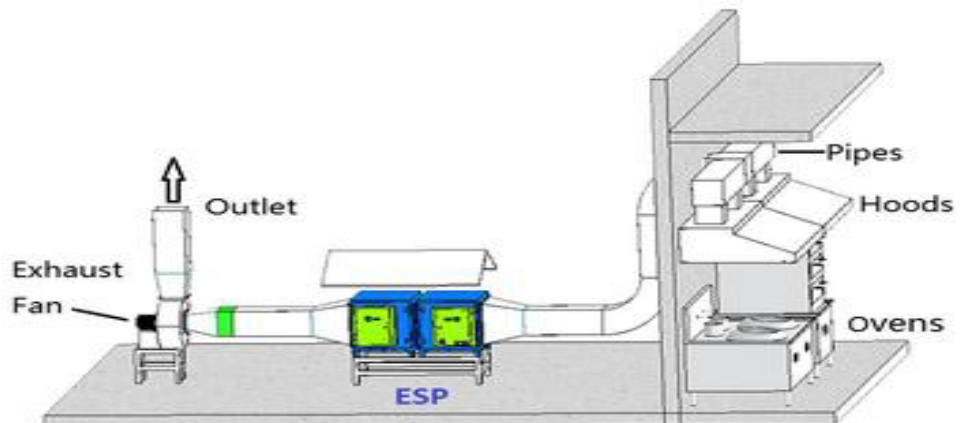
Efficiency - Curves 1 and 2

1. DOP Dioctyphthalate Aerosol Using Penetration Meter
2. ASHRAE Standard 52-72 dust spot Test Method Atmospheric Air

Pressure Drop Access Unit - Curves 3, 4 and 5

3. Cell with 40% been open perforated plate front and rear ESPA
4. Cell with metal mesh filter front and rear
5. Cell only

TYPICAL INSTALLATION



WHY CHOOSE "Xfonica Connect Technologies"?

For more than 5 years, we've been the industry leader in air quality technology - a proven track record that speaks for itself.

A Trusted Industry Leader

With over a decade of expertise, Xfonica Connect Technologies has established itself as a pioneer in advanced air quality solutions. Our proven track record reflects a strong commitment to delivering innovative and reliable products to meet the evolving needs of our customers.

Dedication to Excellence

We maintain the highest standards by continuously measuring our quality against stringent benchmarks. Through proactive improvement initiatives, we anticipate challenges and deliver effective, forward-thinking solutions tailored to our clients' requirements.

Customer-Centric Approach

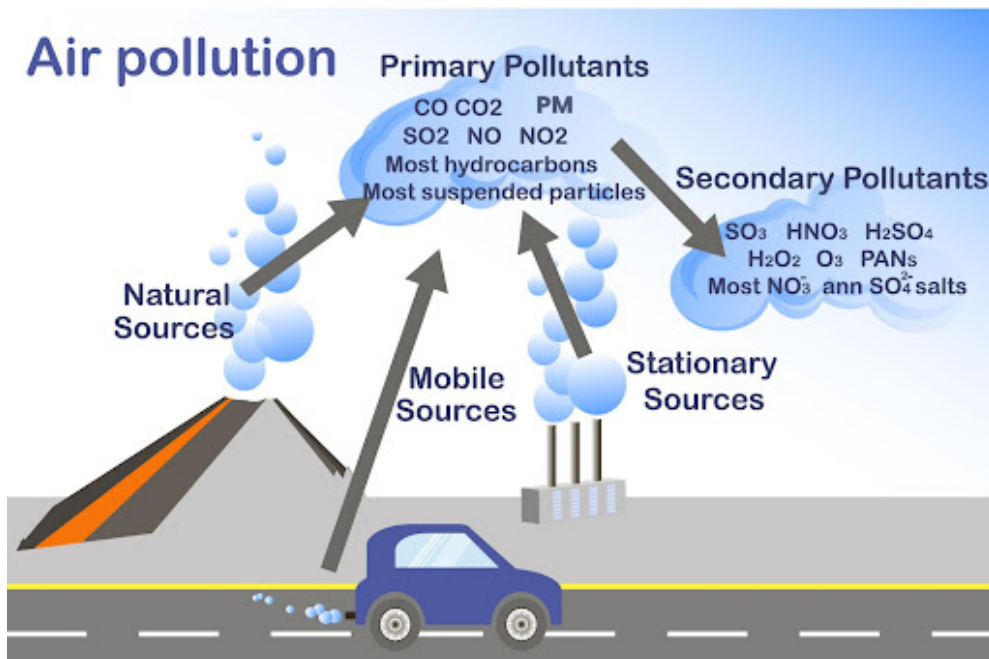
At Xfonica, our customers are at the heart of everything we do. By exceeding expectations with our professionalism, attitude, and service, we foster long-lasting relationships built on trust, performance, and exceptional support.

Unmatched Customer Support

Our commitment to unparalleled service ensures that every customer receives personalized assistance. From installation to ongoing maintenance, we are with you every step of the way to guarantee satisfaction and peace of mind.

Innovative Technological Expertise

As a technology-driven company, Xfonica continually invests in research, design, and manufacturing to remain at the forefront of the industry. This dedication to innovation allows us to offer cutting-edge solutions that redefine air purification and efficiency.



**RANGE OF
POLLUTANTS**



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