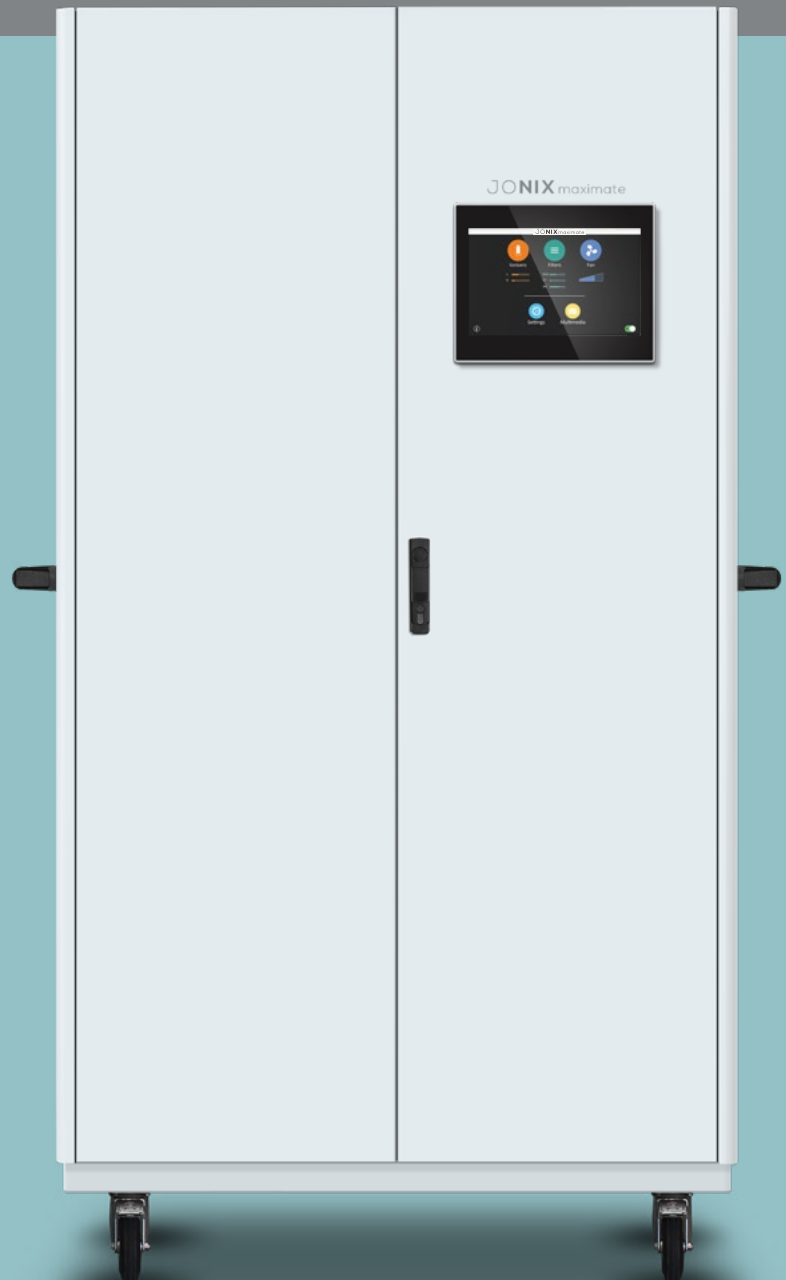


# JONIX

pure living

JONIX maximate NON THERMAL PLASMA TECHNOLOGY  
MOBILE DEVICE FOR INDOOR AIR PURIFICATION AND DECONTAMINATION



## JONIX

Effective against Covid-19  
Test of the University of Padua

**-99,9%**  
Bacteria, Moulds,  
VOC and Virus

Effectiveness tested on:



covid-19



V.O.C.



odours



bacteria



mould



virus



covid-19



V.O.C.



odours



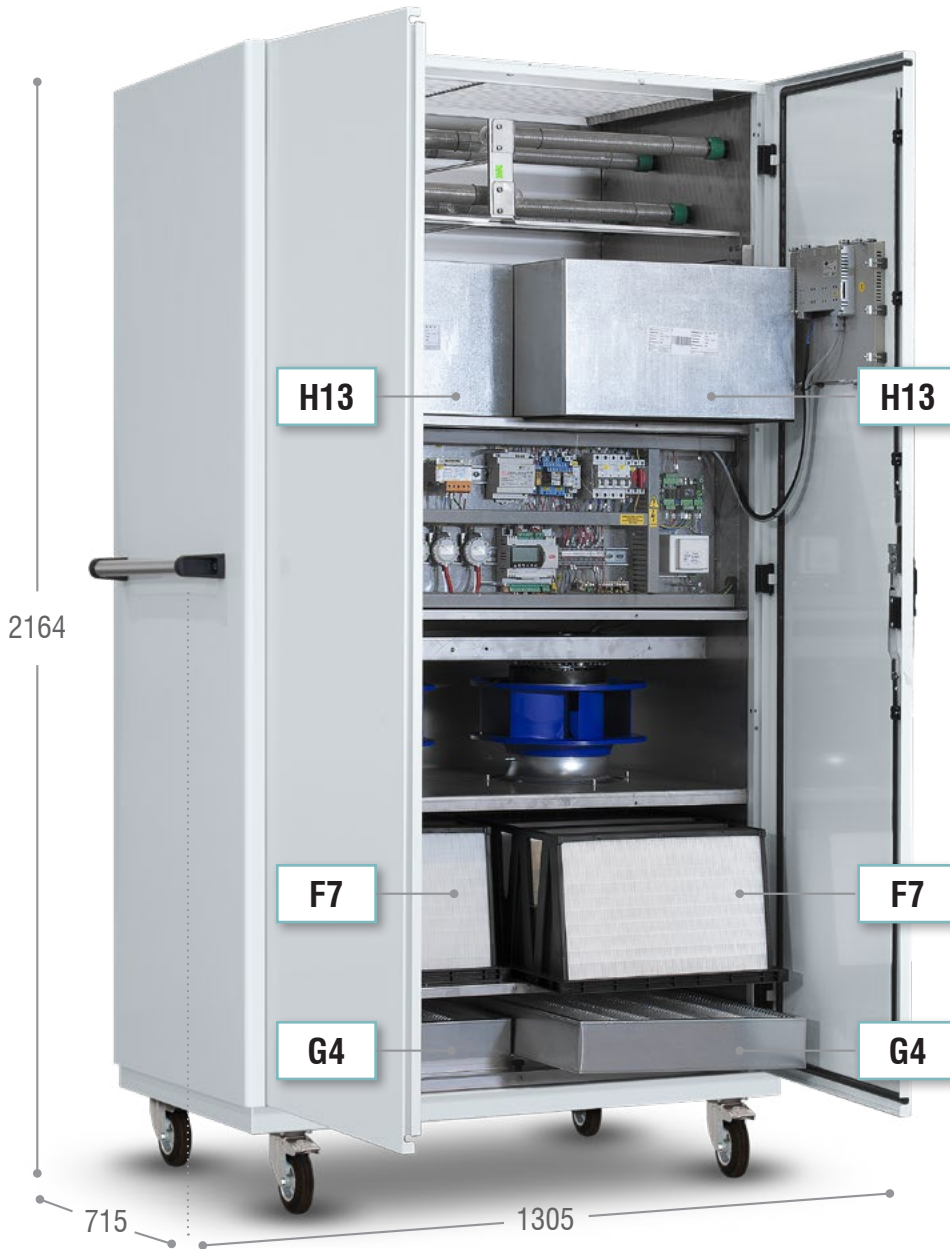
bacteria



mould



virus



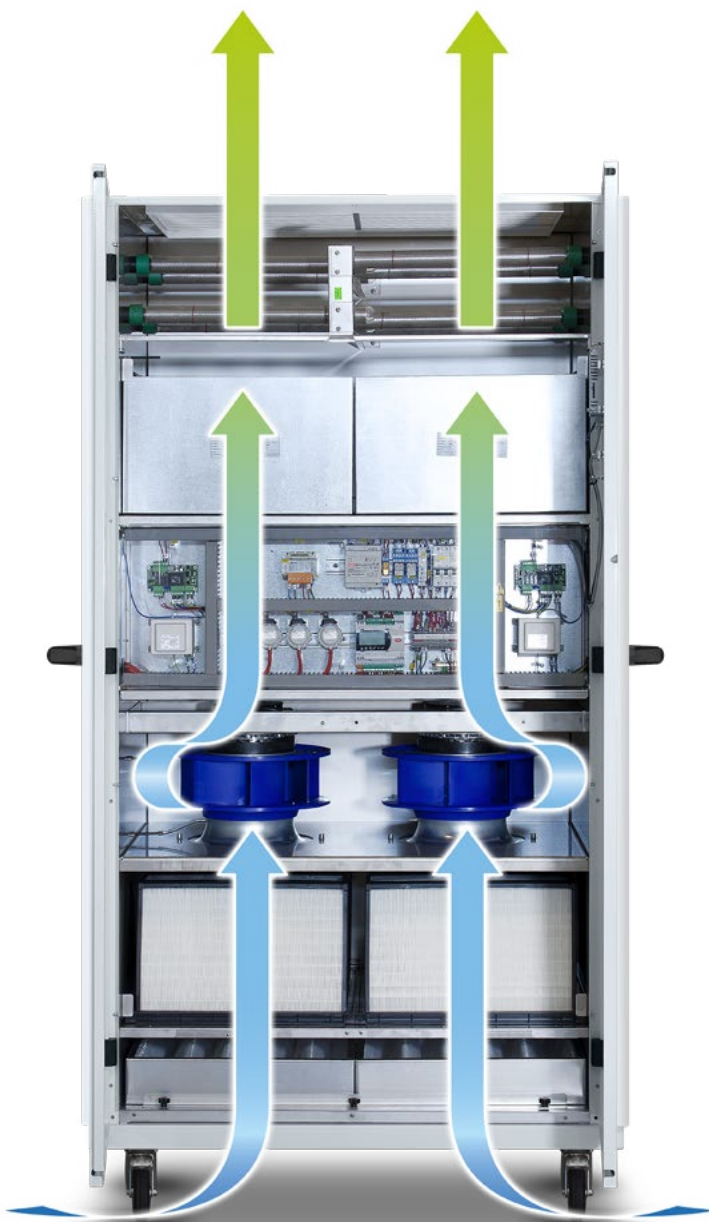
## TECHNOLOGY

JONIX uses the advanced oxidation process to decontaminate air induced by a NON-THERMIC PLASMA. JONIX maximize air sanitization devices with NTP (Non-Thermal Plasma) are used to sanitize and decontaminate both air and surfaces.

## NTP TECHNOLOGY (NON THERMAL-PLASMA)

With the word plasma we mean a blend of ionized gases composed by a large quantity of energized particles, such as ions and electrons, free radicals, ROS, molecules as well as neutral atoms. The ionization of an atom occurs when an electron acquires enough energy to overcome the attractive forces of the atom nucleus. When this result is obtained with processes generating a plasma in which the temperature of the ions and neutral atoms is significantly lower than the temperature of electrons, we are talking about cold plasma and Non-Thermal Plasma (NTP).

The cold plasma is emitting light with wavelengths in both the visible part and the spectrum ultraviolet part. Beside the emission of UV radiations, an important feature of the low-temperature plasma is the presence of strongly reactive high-energy electrons, that generate a number of chemical and physical processes such as oxidation, over-energizing of atoms and molecules, the production of free radicals and other reactive particles. A plasma can be artificially generated supplying a gas with a sufficiently high energy, that means giving a gas energy so as to reorganize the electronic structure of the species (atoms, molecules) and produce over-energized species and ions. One of the most common ways of artificially creating and maintaining a plasma is through a gas electric discharge. NTP JONIX technology makes use of the so called non-thermic discharges with a dielectric barrier method. The potentialities of ionization and the density of charged species generated from the plasma with electrical barrier discharge (DBD) are higher compared to the ones present in the non-thermic plasma generated by other systems.



### JONIX maximate

JONIX maximate is a unit of mobile filtration and sanitization, with a cold plasma technology and it represents the ideal solution for purifying and decontaminating air in environments at risk such as hospitals, clean rooms, medical consulting rooms, labs and any other environments in which it is necessary to constantly eliminate air biological contaminations.

It is immediately operational after installation, requiring no further operations. The advanced control system adjusts ventilation and the generation of cold plasma necessary to sanitize and purify air. It is designed for quick and convenient maintenance as all its components can be accessed from the rear. The sanitizing cabinet can be equipped with a system of sliding grids that enables to connect an external air intake for the installation in environments requiring overpressure. Compact, agile and quiet, the JONIX maximate quickly and effectively meets the requirements of reducing bacterial and particulate load.

### ECOLOGICAL AND COMPATIBLE IN CASE OF PEOPLE'S PRESENCE

No chemical products and zero environmental impact. It makes it possible to reduce volumes of air treated by central plants reducing energy costs of conditioning.



covid-19



V.O.C.



odours



bacteria



mould



virus

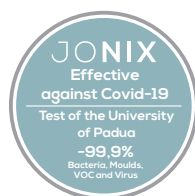
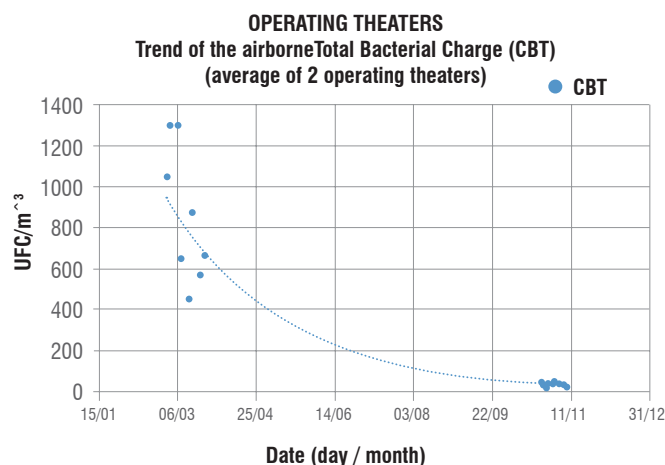
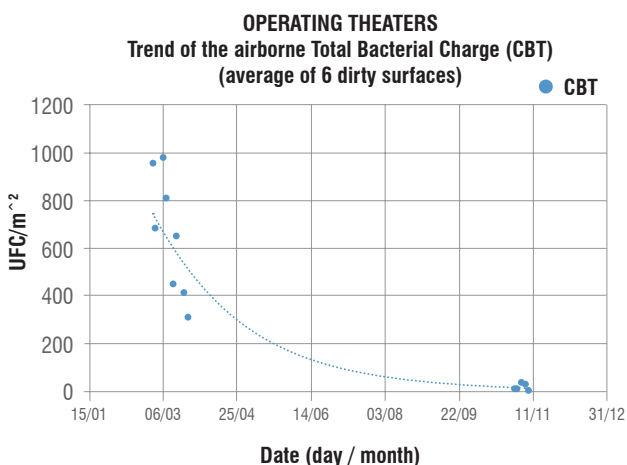
## EFFICIENCY

The bio acid and neutralization activity of polluting substances occurs in a maximum of 60 minutes since switching on. The continuous functioning of the device blocks the spreading of bio hazardous agents generated on a continuous basis during healthcare activities.

The oxidation of microorganisms occurs for the oxidation process of the membrane cell. Reactive particles carrying electric charges, among which the most important ones are the oxygen reactive species (for example atomic oxygen and ozone), which concentrate on the membrane surface causing its destruction.

The device is efficient on: gram + and – bacteria, yeast and mould, virus, bacterial endotoxines, VOC (volatile organic compound), odours.

JONIX maximate removes chemical and organic odors, reactive particles break chemical bonds of odorous substances which then decompose.



Listeria monocytogenes



Staphylococcus aureus



Escherichia coli



Pseudomonas



Aspergillus brasiliensis



Salmonella



Legionella

## APPLICATION SECTORS AND OPERATING CYCLES

The device can be used in crowded spaces, patient rooms, laboratories and consulting / examination rooms, operating theatres. The device functioning can be operated on a continuous basis or in cycles based on specific needs.

Contaminated environment decontamination cycle vol. 2000 m<sup>3</sup> with maximum air flow from 120 minutes.

Contaminated environment decontamination cycle vol. 1000 m<sup>3</sup> with maximum air flow from 60 minutes.

Contaminated environment decontamination cycle vol. 500 m<sup>3</sup> with maximum air flow from 30 minutes.

Sanitization continuous cycle set the air flow 20 times higher to the environment volume.

## ECOLOGICAL PLANNING

### Ecological=no chemical products

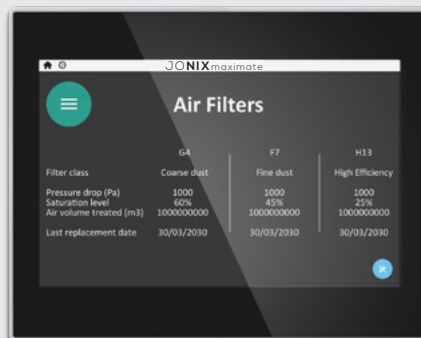
JONIX maximate uses no chemical products and produces no residual substances.

### It can be used during healthcare activities.

Its continuous activity, besides purifying the air, generates a correct air ionization that ensures an environmental comfort for the reduction of stress from work, it encourages proper breathing. In order to protect and promote health in working environments.

## LOGICAL = INTUITIVE

JONIX maximate is simple and intuitive, from the touch screen it is possible to set and control functions, check on the use of perishable components. With the aim of an integrated management of plants control system and functions can be remotely managed.





covid-19



V.O.C.



odours



bacteria



mould



virus

## TECHNICAL FEATURES JONIX maximate

Ionising modules	4 + 4 individually supervised
Ionisers replacement	Every 14000 hours
Ionisers maintenance	Every 7000 hours
Pre filter	G4 – Coarse dust filter EN 779: 2012 The filter is divided into 2 sections, the unit dimensions of each part are: 490 x 592 x 98
Secondary filter	F7 – Fine dust filter. Class EN 779:2012 - ISO 16890. The filter is divided into 2 sections, the unit dimensions of each part are: 490 x 592 x 292
Main filter	H13 – HEPA filter. Class EN 1822 - ISO 29463. The filter is divided into 2 sections, the unit dimensions of each part are: 490 x 592 x 292
Fan	N°4, low-pressure EC brushless centrifugal plug fan with backward-curved blades
Min Air flow (m³/h)	1500
Max Air flow (m³/h)	6000
Air circulation	Upflow
DP sensors	3: one for each filter
Display	7" or 13" touch screen
Dimensions (mm)	1305 x 715 x 2165
Weight (kg)	220
Power supply	230 V / ~1 / 50 Hz
Max power absorption (W)	2800
Full load ampere (A)	15
Noise (dBA)	69 (1500 m³/h) - 89 (6000 m³/h)



### MADE IN ITALY

Designed and created by expert technicians specialized on air purification.



Hallmark for health and living comfort  
in confined spaces  
(UNI EN 16000- UNI EN14 412).



**Reference standards**

**NATIONAL LAWS AND STANDARDS**

**Valid for the following categories: Civil, Industrial, and Healthcare sectors**

Italian Legislative Decree 81/2008 Consolidated Law on Health and Safety in the Workplace of 10th April 2008 (published in the Ordinary Supplement No. 108 of the Official Gazette No. 101 of 30th April 2008; Legislative Decree No. 81 was published on 9th April 2008) • Guidelines issued by the Italian Presidency of the Council of Ministers (Permanent Conference for relations between the State and the Regions), Center for disease control and prevention, General Directorate of Health prevention, Dept. II entitled: "Outline of guidelines for the prevention of indoor risk factors for allergies and asthma in schools" of 18th November 2010 • Guidelines issued by the Italian Presidency of the Council of Ministers (Permanent Conference for relations between the State and the Regions), entitled (Outline of Guidelines for the definition of technical protocols for predictive maintenance on air conditioning systems" of 5th October 2006. • Guidelines issued by the Italian Presidency of the Council of Ministers (Permanent Conference for relations between the State and the Regions), "Operating procedure for the appraisal and management of risks connected to the sanitation of air treatment systems" of 7th February 2013 • Guidelines for preventing and controlling legionellosis O. G. No. 103, of 5th May 2000 (Ministry of Health - Permanent Conference for relations between the State, the Regions and the Independent Provinces of Trento and Bolzano) • Guidelines indicating recommendations on legionellosis for managers of tourist and spa facilities of 13th January 2005 (Permanent Conference for relations between the State, the Regions and the independent provinces of Trento and Bolzano) • Guidelines for preventing and controlling legionellosis of 7th May 2015 (Ministry of Health - Permanent Conference for relations between the State, the Regions and the independent Provinces of Trento and Bolzano) • Guidelines issued by the Italian Presidency of the Council of Ministers (Permanent Conference for Relations between the State and the Regions) entitled "Guidelines for the protection and the promotion of health in confined environments and for the prevention and control of legionellosis" of 27th September 2001.

**REGIONAL LAWS AND STANDARDS**

**Valid for the following categories: Civil, Industrial, and Healthcare sectors**

Region: Liguria, Law No. 24 of 2nd July 2002 • Region: Puglia, Law No. 45 of 23rd December 2008 "Health provisions." • Region: Emilia Romagna -resolution of the Regional Council No. 1115 of 21st July 2008 "Regional guidelines for monitoring and controlling legionellosis". • Region: Molise – Law No. 15 of 13th July 2011 "Regulations for the prevention of the spreading of infectious diseases". • Guidelines for the prevention and control of legionellosis in Lombardy of 28/02/2005, Directorate-General for Health Decree No. 2907.

**Valid for the following categories: Healthcare sector**

Regional law of Lombardy No. 33 of 30th December 2009 - New Regional Consolidated laws on health and Implementing Decree No. 1751 dated 24/02/2009 of the Directorate-General for Health of Lombardy.





covid-19



V.O.C.



odours



bacteria



mould



virus

**JONIX**  
pure living

**JONIX** S.p.A.

Società Benefit

info@jonixair.com

Certified mail: jonixsrl@legalmail.it

web: www.jonixair.com



Registered Office:

Viale Spagna 31/33

35020 Tribano (PD) - Italy

tel +39 049 9588511

fax +39 049 9588522

Operational Headquarters:

Via dell'Artigianato, 1

35020 San Pietro Viminario

(PD) – Italy

Tel +39 0429 760311

Research and Development

Headquarters:

Via Tegulaia 10/b

56121 Pisa - Italy

tel +39 050 985165