

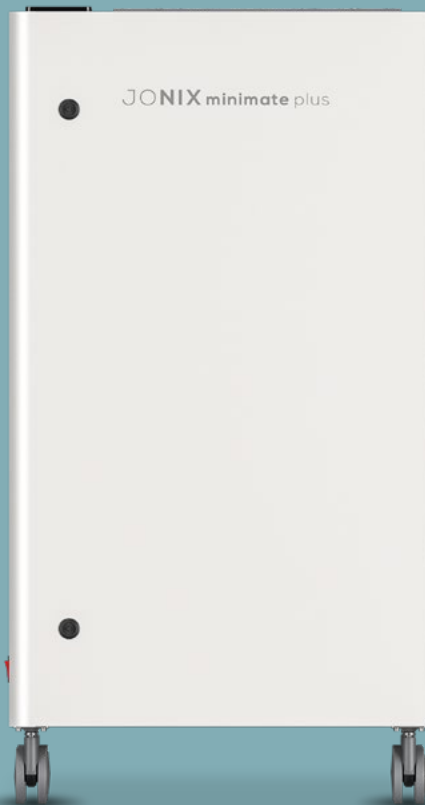
minimate BASIC
minimate PLUS

JONIX

pure living

JONIX minimate NON THERMAL PLASMA TECHNOLOGY

AIR PURIFICATION AND SANITIZATION DEVICES
PATENTED SYSTEM OF INTERNAL COMPONENTS SANITIZATION
WITH ADVANCED COLD PLASMA TECHNOLOGY



JONIX

Tested against Covid-19
by the University of Padua
Bacteria, Moulds,
VOCs and Viruses

up to
-99,9%*
jonixair.com

Effectiveness tested on:



covid-19



V.O.C.



odours



bacteria



mould



virus



multidrug-resistant
bacteria

* We must remind you that the reductions in bacteria-moulds-VOC-viruses may vary from those indicated based on the characteristics of the environment and its use (size, presence density, ventilation, basic hygienic conditions). The virucidal activity was tested using the SARS - coV-2 (Covid-19) strain. All experiments were conducted in a Biosafety Level 3 Laboratory (BSL3).
The use of Jonix devices DOES NOT exclude compliance with the provisions for the prevention and containment of the pandemic.





covid-19



V.O.C.



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bacteria



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virus



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JONIX **minimate** LINE

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

The devices of Jonix **minimate** line are equipped with two filtration stages. The medium filter F7 is preceded by a G2 filter and are combined with the absolute filter H13 (or optionally the H14) which capture up to 99.95% (99.995% H14) of fine airborne dust. Jonix **minimate** basic and Jonix **minimate** plus splus are the only devices on the market that combine absolute filtration with a patented system for the active sanitisation of filters and internal surfaces of the devices. The Jonix **minimate** e device, in the plus version, combines absolute filtration with the use of NTP technology for sanitisation of the outgoing air with a sanitising effect even on the surfaces of the rooms and on their contents.



Absolute filter H13 (or H14 optional):

- Very high final filtration efficiency (HEPA).
- H13-H14 efficiency glass fiber filter material according to the EN1882, in particular:
 - MPPS H13 efficiency: > 99,95%.
 - MPPS H14 efficiency: > 99,995%.

Fine particle filter F7:

- EN 779-2012 fine dust filter.

G2 air inlet prefilter.

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).

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 highly reactive species.

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 **minimate** basic AIR PURIFICATION DEVICE



JONIX **minimate** plus AIR PURIFICATION AND SANITISATION DEVICE



JONIX **minimate** basic | JONIX **minimate** plus

The devices of Jonix **minimate** line (basic and plus versions) are mobile units of filtration and sanitization, with a cold plasma technology for purifying and decontaminating the air. They represent the ideal solution for purifying and decontaminating air in environments at risk such as hospitals, clean rooms, medical consulting rooms, labs, waiting rooms, clinics, quarantines, surgical rooms, environments for producing, packaging, preserving and any other environments where the absolute filtration of dust and the elimination of biological contamination from the air and surfaces are required.

Jonix **minimate** is immediately operational. Simply connect the plug to a power outlet and follow the instructions on the manual or video. The control display is easy and intuitive and the representative icons guide the user in a way that is simple to control all the functions. It is possible to program its operation in time slots, even different for each day of the week. The front opening, practical and safe, allows offers access to the filtering parts and in absolute safety. The upper grille is used to direct the flow in the desired direction. generate harmful residual substances.



The activity of air purification and sanitisation of the internal components of the Jonix **minimate** device is compatible with the presence of persons. No chemicals are used and no harmful residual substances are generated.



covid-19



V.O.C.



odours



bacteria



mould



virus



multiresistant
bacteria

EFFICIENCY

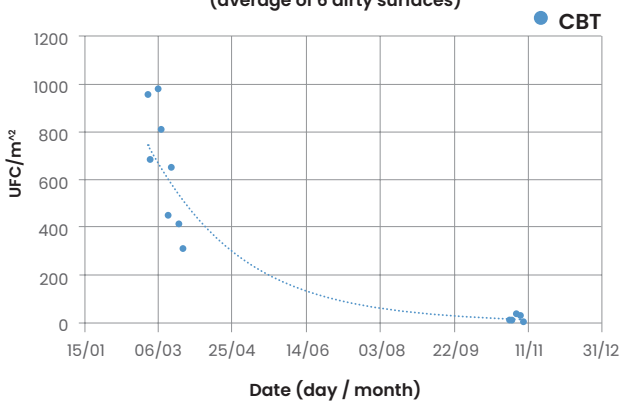
The bio acid and neutralization activity of polluting substances occurs quickly and continuously. The continuous functioning of the device blocks the spreading of bio hazardous agents generated on a continuous basis during the activities.

Jonix **minimate** with NTP technology is efficient on: gram + and - bacteria, yeast and mould, virus, bacterial endotoxines, VOC (volatile organic compound), odours.

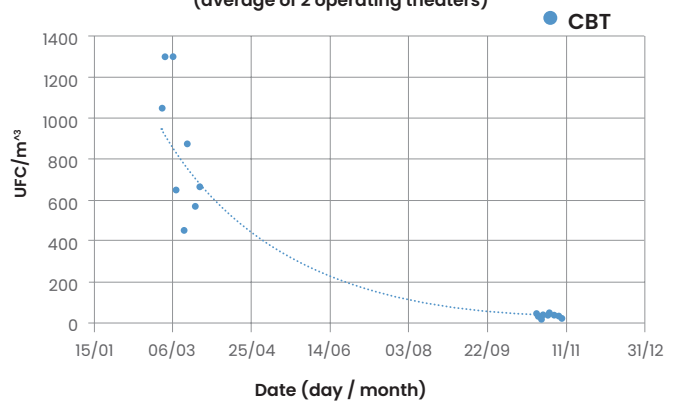
The reactive species generated by NTP technology, including reactive oxygen species, have a high oxidising power and act on various components. They react with the phospholipids and proteins of the cell membrane of microorganisms, opening a passage for the entry of oxidants into the cell. Here the molecules oxidise the proteins and nucleic acids of the DNA, breaking it into small fragments, resulting in death of the microorganism.

Reactive species also react with the pollutants and odours present in the air and oxidise them in various stages until they are decomposed.

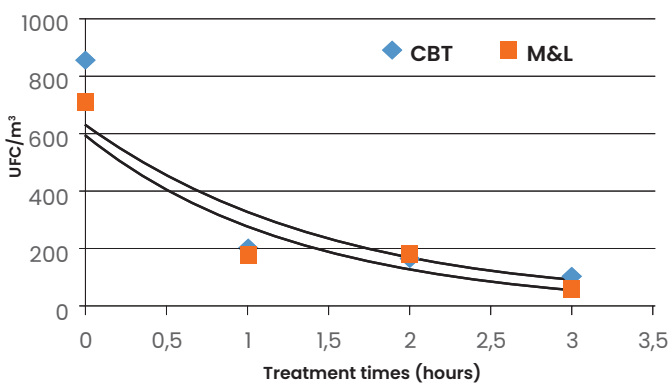
OPERATING THEATERS
Trend of the airborne Total Bacterial Charge (CBT)
(average of 6 dirty surfaces)



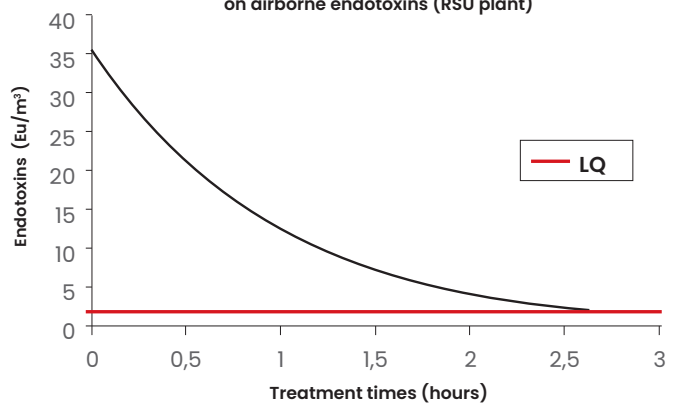
OPERATING THEATERS
Trend of the airborne Total Bacterial Charge (CBT)
(average of 2 operating theaters)



Effects of Jonix minimize treatment
on airborne micro-organisms (RSU plant)



Effects of NTP treatment
on airborne endotoxins (RSU plant)



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, waiting rooms, hospital stays, quarantines, surgical rooms, food processing, packaging and preservation environments.

The device functioning can be operated on a continuous basis or in cycles based on specific needs.

ECOLOGICAL PLANNING

Ecological=no chemical products

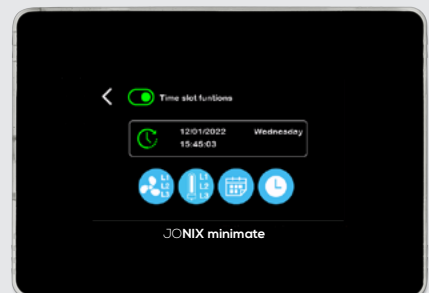
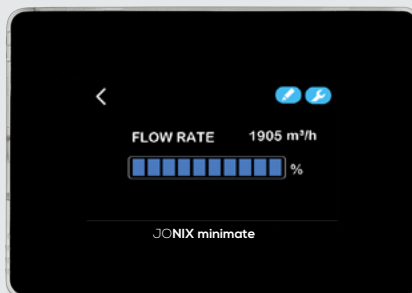
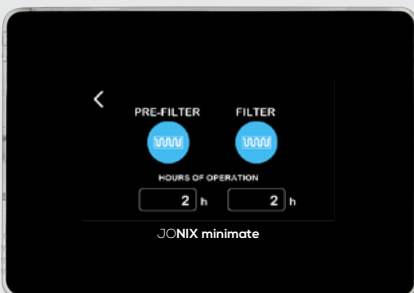
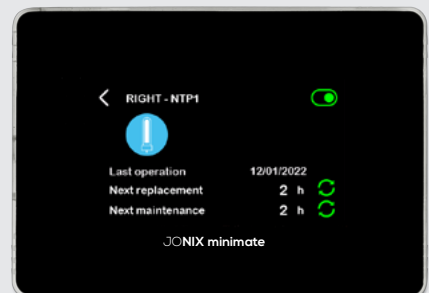
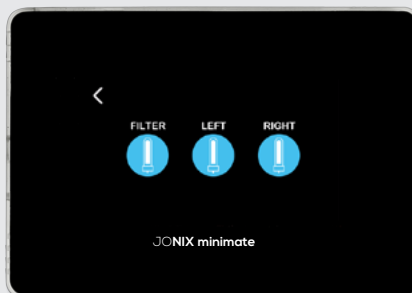
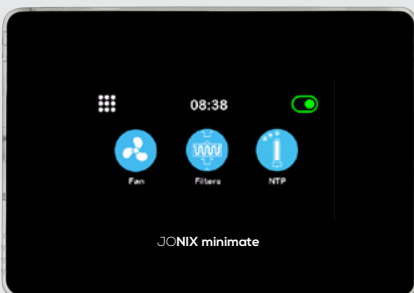
Jonix **minimate** uses no chemical products and produces no residual substances.

It can be used during healthcare and production.

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 **minimate** 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.





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TECHNICAL FEATURES JONIX minimize

Models	minimize basic	minimize plus
The Jonix minimize devices are ideal where the absolute filtration of suspended dust and bacterial decontamination in the air and on surfaces is required.		
Non Thermal Plasma (NTP) Generators	1 type 175 mm (sanitizing internal elements)	4 type 175 mm (air sanitization) + 1 type 175 mm (sanitizing internal elements)
Generators replacement	Every 14000 hours	
Generators Maintenance	Every 7000 hours	
Absolute filter	H13 (or H14 optional)	
Thin particulate filter	F7 – Fine dust filter EN 779-2012 / G2 air inlet prefilter	
Fan	Low-pressure EC brushless centrifugal, plug fan, with electronic control	
Ventilation modes	Upflow	
(*) Flow rate treated air (m ³ /h)	1200	
DP sensors	3	
Display	4.3" touch screen	
Dimensions (mm)	560 x 460 x 1060	
Weight (kg)	68	70
Power supply	230 V / 1 ~ / 50 Hz	
Max power absorption (W)	450	460
Degree of Protection	IP40	

(*): Default settings.



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.





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