YOU ARE IN A SANITISED ENVIRONMENT WITH JONIX.

Here you can breathe with serenity and **safety**: Jonix devices eliminate up to 99.9% of viruses, bacteria, organic pollutants and volatile composts from the air.

Jonix utilises cold plasma technology, the most effective and safe at eliminating and taking down microorganisms present in the air of closed spaces.

Jonix devices are certified, they do not utilise chemical substances or disinfecting substances: the air, activated and ionised by cold plasma generators, exerts the most effective and healthy decontaminating effect.

Enjoy sanitised and pure air: you are safe with Jonix!



JO**NIX** srl

support@jonixair.com

























CERTIFICATION

SANITISATION EFFECTS OF JONIX DEVICES

JONIX NTP devices use NTP (Non-Thermal Plasma or Cold Plasma) technology to quarantee the effects of environmental cleaning and disinfection.

Non-thermal plasma (NTP - Non Thermal Plasma) produces various reactive species which collectively are named ROS (Reactive Oxygen Species) and this is what grants Jonix systems their sanitisation power. On the basis of what is known about cold plasma, it is possible to hypothesise that the sanitisation processes occur through direct interaction with the plasma (on the surface of the operator) and the contaminant and by interaction with the species produced by the passage of air into the plasma, which are then removed in the stream of gas. Jonix devices, if properly used according to technical specifications, allow the reduction of bacteria, moulds and viruses both in the ambient air and on surfaces. In the devices of the MATE family (MiniMate, Mate, MaxiMate), the presence of air filters increases the sanitising efficiency of the machines.

> The following performance certification is referred to these devices. The devices can remain active even with human activity.

PRODUCT	PRODUCT DESCRIPTION	CODE	
MAXIMATE	MAXIMATE 13" 13 INCH DISPLAY	70MAXIMATE	
	MAXIMATE 7" 7 INCH DISPLAY	70MAXIMATE7	
MATE	MATE13"	JX70000008	
	MATE 7"	70MATEWHITE7	
MINIMATE	MINIMATE	70WHMINIMATE4	
CUBE	CUBEWOOD BOX WHITE	70WHITECUBEWOOD	
	CUBEWOOD BOX BLACK	70BLACKCUBEW00D	
	CUBE PAPER PACK WHITE	70WHITECUBE	
	CUBE PAPER PACK BLACK	70BLACKCUBE	
STEEL	STEEL 1C	70MICF1C	
	STEEL 2C	70MICF2C	
	STEEL 4C	70MICF4C	
	STEEL 2F	70MICF2F	
	STEEL 4F	70MICF4F	
DUCT	MIC 2C	70MIC2C	
	MIC 4C	70MIC4C	
	MIC 2F	70MIC2F	
	MIC 4F	70MIC4F	
INSIDE	MODULO FANCOIL 1C	70MIFC1C	
	MODULO JONIX VMC	70MICVMC2C	

STUDIES AND EXPERIMENTAL TESTS: CONCLUSIONS

Studies, both on a laboratory scale and in field tests, demonstrate the consistency with what is expected on the basis of the scientific literature on the subject, that is the effectiveness from a medical point of view of the indoor air treatments for sanitisation purposes carried out with Jonix devices based on cold plasma ionisation and environmental pressure.

The effects can be suitably divided and then described using the matrix as a basis: the air that is forced into the ionisation chamber undergoes the direct effect of plasma. All chemical and biological species are oxidised according to a series of processes, the end result of which is the elimination of aerial species transported as viruses and bacteria as well as inorganic pollutants such as VOCs. The most persistent oxidising species, produced via NTP, move away from the device and produce sanitising effects in the air and on exposed surfaces. In the latter case, only biological sanitising effects were researched, as these were the only ones subject to interest for their intended uses, finding much acknowledgment thanks also to the effectiveness found on microorganisms tested in culture, that is in favourable conditions for growth. Since this system operates in a gas phase, it is also possible to claim that the sanitising power can be fully exploited since the gaseous medium is uniformly distributed throughout the volume and therefore operates on all surfaces, including those that are interstitial, porous and in fabrics.

All experimental tests and field tests confirm that these devices can remain active even with human activity.















CERTIFICATIONS



CE MARKING Products compliant with European directives

EU directive, of a product regulated in the European Union, which declares, by means of a declaration of conformity or performance for construction products, that the product meets the safety requirements of the directives or applicable community regulations.



TÜV PROFICERT Quality certification of devices

TÜV PROFICERT certifies the quality of the production processes of Jonix devices through on-site audits, where the following are examined: company management, employee qualifications, customer satisfaction, internal inspection of company processes and the exact explanations of all the procedures.

These products are validated and continuously monitored. The TÜV logo, for Jonix devices, certifies the truthfulness of the data and performances declared in the scientific dossiers and in the product catalogues.



ONGREENING AND PRODUCTMAP The platform for Green Building

Ongreening® is an independent digital platform dedicated to the green construction industry that supports the widespread of the best sustainable procedures that make green buildings accessible to all. This includes the innovative database known as ProductMAP®, which allows the selection of materials and building products based on performance and sustainability criteria and provides the compliance of products, materials and building components with the major green building rating systems such as LEED, WELL, BREEAM, BRE Home Quality Mark, Estidama and HK BEAM Plus.

Jonix air purification devices help meet the assessment requirements to ecological buildings like: Leed®, Breeam®, Estidama®, HK Beam®, Well®.



BIO-SAFE The Bio-Safe® Certification is a hallmark for health and well-being in the interior of confined places.

Jonix devices have been tested according to the patented Bio-Safe® protocol which verified and certified their ability to reduce contaminants through laboratory analysis with a test chamber (UNI EN 16000) capable of verifying their potential emissions and through environmental surveys (UNI EN 14412) capable of restoring the level of air purification achieved by them within the premises of use.

The specific process of analysis and control are undertaken in each of the following cases has led to these products obtaining the Bio-Safe® Validation Seal: hallmark for health and well-being in the interior of confined places.

BIBLIOGRAPHY

- Inactivation of airborne viruses using a packed bed non-thermal plasma reactor Tian Xia, Abby Kleinheksel, Eric M. Lee, Zhong Qiao, Krista R. Wigginton and Herek L. Clack. - Journal of Physics D: Applied Physic, 2019, 52.25: 255201.
- Non-thermal plasmas (NTPs) for inactivation of viruses in abiotic environment Puligundla Pradeep and Mok Chulkyoon - Department of Food Science and Biotechnology, Gachon University, Seongnam 13120, KOREA mokck@gachon.ac.kr.
- Protocollo di prova per la valutazione dell'efficacia di riduzione di microrganismi intenzionalmente inoculati in piastre utilizzando il dispositivo Jonix Mate con tecnologia non thermal plasma (Test protocol for the evaluation of the effectiveness of the reduction of microorganisms intentionally inoculated in plates using the Jonix Mate device with non-thermal plasma technology) - University of Udine - Department of Agri-Food, Environmental and Animal Sciences, University of Udine, via Sondrio 2/a, 33100 Udine - Year 2016.
- Effetti sanitizzanti del dispositivo MATE nelle sale operatorie ospedaliere (Sanitising effects of MATE devices in operating rooms) - Laboratori ARCHA S.r.l. - Year 2017.
- Sperimentazione per la verifica della CAPACITÀ SANITIZZANTE dei dispositivi Fotocatalitici vs Condensatori Jonix NTP (Experimentation for the confirmation of the SANITISING CAPACITY of Photocatalytic devices vs Jonix NTP Condensers) -Laboratori ARCHA S.r.l. - Year 2017
- Studio del potere sanificante di un dispositivo Jonix applicato ad un fan coil commerciale NTP (Research on the sanitising power of Jonix devices applied to a commercial NTP fan coil) - Laboratori ARCHA S.r.I. - Year 2017

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