

JONIX

pure living

CERTIFICATION

SANITISATION EFFECTS OF JONIX DEVICES

JONIX NTP devices use NTP (Non-Thermal Plasma or Cold Plasma) technology to guarantee 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	70BLACKCUBEWOOD
	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.