

**NanoStrike™**  
technology

# The First Line of Protection Against Airborne Viruses and Bacteria

NanoStrike is the unique, patented technology at the core of all Novaerus portable air dis-infection devices. This nanotechnology inactivates all airborne microorganisms on contact providing the first line of protection against viruses and bacteria.

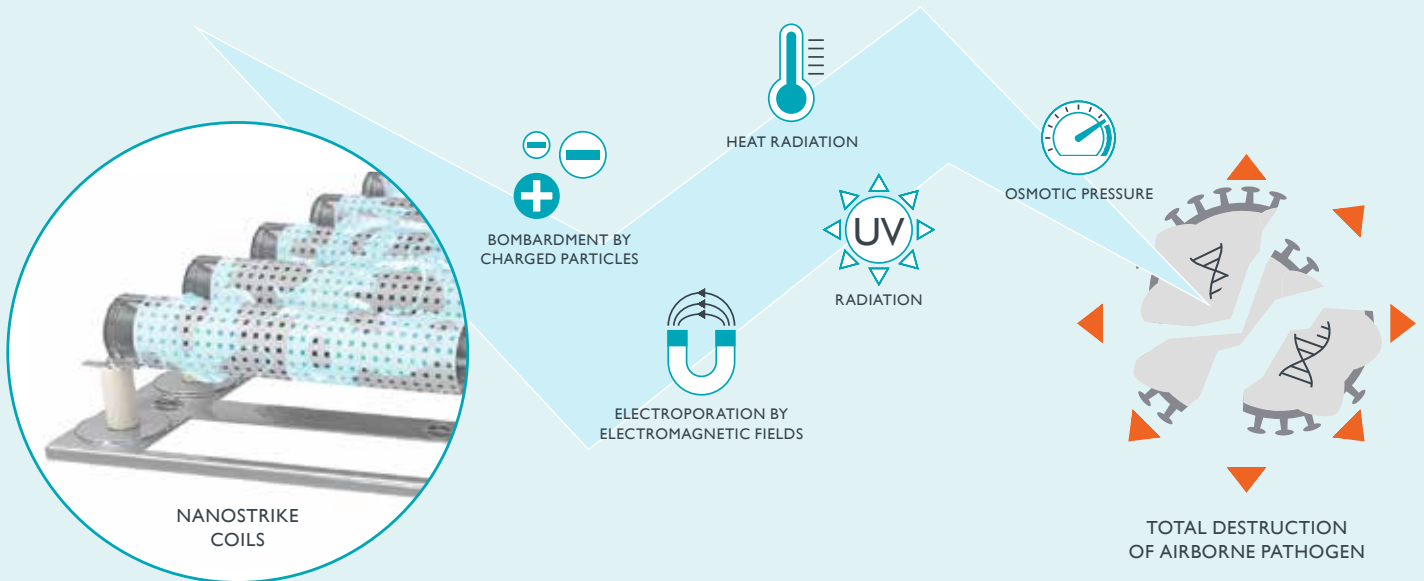
- Patented technology harnessing multiple pathogen inactivation processes in one powerful strike
- Inactivates at the DNA level in a sub-second time frame
- Uniquely bursts the pathogen cell, preventing self-healing
- Multiple pathogen inactivation processes guarantee no future antimicrobial resistance can develop
- Lowest total cost of ownership of any air purification technology
- Powerful but gentle for 24/7 use around the most vulnerable of people

# HOW NANOSTRIKE PROTECTS

## Multiple Inactivation Processes in One Powerful Strike

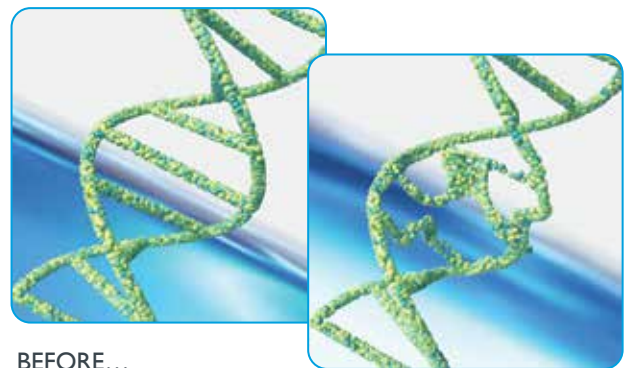
Developed by the WellAir team of scientists and engineers, NanoStrike technology harnesses a range of physical concurrent pathogen inactivation process to safely dis-infect the air. NanoStrike coils provide a powerful strike that works to burst airborne pathogen cells, rapidly inactivating them, ensuring they are no longer a threat of infection.

### Concurrent Processes within NanoStrike




### Inactivates at a DNA Level in a Sub-Second Time Frame

NanoStrike destroys the DNA and protein that make up nanosized viruses, bacteria and fungi. This stops viruses from spreading and bacterial and fungal spores from reproducing.



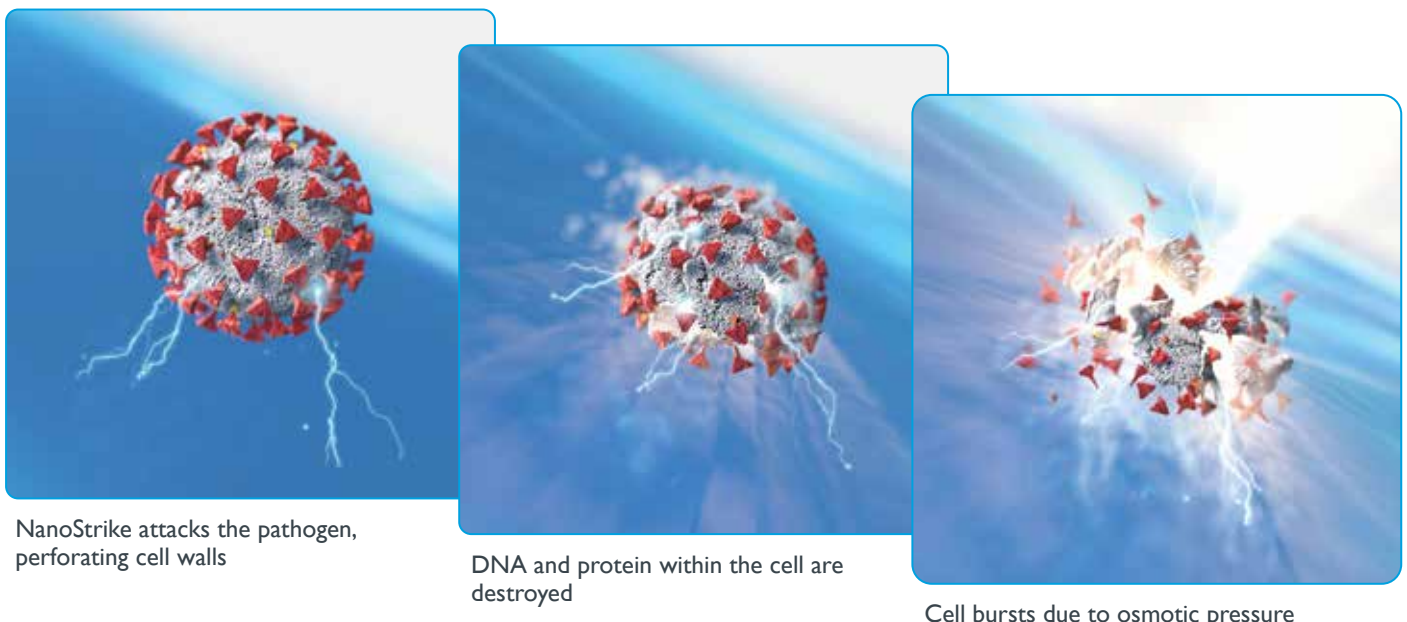
## Technology Comparison: Magnitude of Time to Inactivate Pathogens

Microsecond	Millisecond	Seconds	Minutes	Hours	Days		
		UVGI		UNIPOLAR IONIZATION			
						PCO	
					AUTOCLAVE		
					OZONE		
					CHEMICAL MISTING		

NanoStrike is the only technology that successfully inactivates airborne pathogens in the sub-second time frame.

### Bursts the Pathogen Cell

Unique to NanoStrike is its ability to burst a pathogen cell; other technologies simply inactivate them. NanoStrike concurrently attacks the cell membrane, DNA and protein, causing osmotic pressure which can quickly burst a cell. Once the cell bursts, there is no way for it to self-heal, ensuring it does not become viable as an infectious agent once again.



### No Opportunity for Antimicrobial Resistance

Unlike single process air inactivation technologies, there is no opportunity for Antimicrobial Resistance (AMR) to develop over time. AMR occurs when microorganisms such as bacteria, viruses and fungi evolve to develop a resistance to solutions designed to inactivate them, rendering these solutions ineffective.

## DELIVERING UNIQUE ADVANTAGES



### POWERFUL YET GENTLE

- Powerful enough to inactivate pathogens, gentle enough to use 24/7
- No harmful by-products
- No colonization of bacterial and fungal spores
- No biohazard waste that can lead to secondary level infection



### LEADER IN LOWEST COST OF OWNERSHIP

- Utilises ultra-low energy – requiring less power than a light bulb
- No replacement components
- No maintenance or cleaning required
- No need for expensive PPE to protect service personnel from bio-hazard risks during device servicing
- True plug and play with no installation, calibration or set up costs



### BEST-IN-CLASS OPERATIONAL PERFORMANCE

- Provides consistent “out of box” performance throughout entire operational life
- Can be used in a variety of small to large product form factors without impacting its efficacy
- Quiet operation

## Independently Tested and Proven

NanoStrike has been independently tested and proven effective at inactivating the smallest of airborne viruses, bacteria, mould spores and pollen in dozens of independent laboratory tests.

	<b>VIRUSES</b>	<ul style="list-style-type: none"> <li>• SARS-CoV-2</li> <li>• Influenza A</li> <li>• Phi X 174</li> <li>• Norovirus<sup>1</sup></li> <li>• Measles<sup>2</sup></li> </ul>
	<b>BACTERIA</b>	<ul style="list-style-type: none"> <li>• MRSA</li> <li>• <i>Bacillus subtilis</i></li> <li>• <i>Staphylococcus epidermidis</i></li> <li>• Tuberculosis<sup>3</sup></li> <li>• <i>Escherichia coli</i></li> <li>• <i>C. difficile</i></li> <li>• <i>Bacillus Globigii</i> endospores</li> </ul>
	<b>MOULD SPORES</b>	<ul style="list-style-type: none"> <li>• <i>Aspergillus niger</i></li> </ul>

REDUCING  
 live SARS-CoV-2 virus\*  
 by **99.99%**  
 the virus causing **COVID-19**

1. Tested on MS2 Bacteriophage, a surrogate for Norovirus.
2. Tested on Human parainfluenza type 3 (HPIV3), a surrogate for Measles.
3. Tested on *Mycobacterium smegmatis*, a surrogate for *Mycobacterium tuberculosis*.

\*Utilizing NanoStrike Technology, Novaerus portable devices can help to remove airborne viruses like SARS-CoV-2 which travel in tiny aggregated droplets that can linger for hours before they settle on surfaces.