



Airdog



- A Net Zero Solution
- Air Sterilization & Filtration
- Protect & Improve Health
- Create a Safer Working Environment
- Effective, Efficient & Sustainable



*Validated & Approved by the **NHS** No.1 As per NHS reports*

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Infection Prevention & Control, Air Pollution and Net Zero

Airdog is now recognized by the NHS as unique and revolutionary, a viable solution to address all three areas. It has been validated by the NHS as an efficient method to help prevent the transmission of airborne pathogens and remove pollutants from the air.

Airdog is proven to be very efficient in deactivating all common viruses and bacteria including, Sars-Cov-2, Measles, H.Influenzae, E-Coli, Norovirus, Polio, MRSA, C-diff, Aspergillus and much more.

The World's Most Advanced Air Sterilization & Filtration Technology

With emphasis on health, air pollution, saving energy, recycling and protecting our environment. Airdog's technology is the only Net Zero sustainable air filtration based on a unique electrical design. No recurring expense, inexpensive, washable and reusable.

Not tied to an agreement where you need to purchase replacement filters, can be maintained by in house cleaning staff or by an Airdog service technician.



Airdog is now serving millions of users in over 70 countries.

Improving Indoor Air Quality

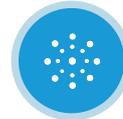
Airdog is certified to remove pollution from the air and to also deactivate all common viruses and bacteria, without the economic or environmental cost of disposable filters. Safe to run continuously in occupied indoor spaces, no harmful by-product or emissions emitted. Due to the active electrostatic attraction filtration Airdog is certified to capture particles down to $0.0145\mu\text{m}$ in size, the very harmful ultrafine particulate matter.



Viruses



Bacteria



Pollutants



Pollen



Odors



Dust

We bring clean air to every Industry



Schools



Hospitals



Offices



Childcare



Laboratories



Gyms



Hospitality



Government Buildings



Retail



Salons



Unique and revolutionary, a viable solution to address the Transmission of Airborne Pathogens, Air Pollution and Net Zero

Unique and Revolutionary...



Certified-Safe

For occupied indoor spaces, no harmful by-product or emissions emitted. Contaminants including bacteria and viruses which are captured within the unit are killed and inactivated eliminating the possibility of secondary pollution or harm.



High-Performance

Different from traditional HEPA passive filtration. Airdog's TPA technology is active filtration, using high voltage to eliminate viruses, bacteria and other harmful airborne contaminants that are drawn in from the surrounding environment.



Eco-Friendly

A washable reusable design, no disposal of used filters helps to save our environment. HEPA filters are made from non-recyclable material and need to be replaced regularly, causing extra burden on our environment.



Cost-Effective

Airdog's washable filtration means no purchasing of replacement filters. This technology alone makes Airdog the most efficient air filtration system on the market and most economical option for clean air.

Effectiveness, Efficiency and Safety verified by:



NHS



Our Products

Airdog X8

Designed to be the ultimate performance air filtration unit the X8 is the largest of the range. With the highest CADR (clean air delivery rate) and CCM (cumulative cleaning mass) this is the World's best portable Air Filtration unit!

Example of the performance: An area 100m² with a ceiling height of 2.5m (250m³) the X8 can deliver 3.2 air changes per hour. Perfect for medical facilities, offices, classrooms, workspaces etc.

Dimensions (H x L x W) 76 x 38 x 38 cm's **Weight:** 19.7kg's



Airdog X5

The first and now middle of the range from Airdog. The X5 using the same technology as the X8 has a proven record as a world leader been installed in over 10,000 medical facilities. Perfect for medical facilities, child care facilities, office spaces etc..

Example of the performance: An area 50m² with a ceiling height of 2.5m (125m³) the X5 can deliver 2.72 air changes per hour.

Dimensions (H x L x W) 65 x 31 x 30 cm's **Weight:** 10.7kg's

Airdog X3

The newest member and smallest of the range the Airdog X3 making medical grade air quality available and affordable for small businesses, offices, childcare facilities, homes etc

Example of the performance: An area 30m² with a ceiling height of 2.5m (75m³) the X3 can deliver 2.70 air changes per hour.

Dimensions (H x L x W) 52 x 26 x 26 cm's **Weight:** 5kg's



Validation of the Airdog X8 Air Scrubber to the Liverpool Biovalidation Protocol by Prof. Tony Fisher and team

Test reports confirm Airdog to be the most efficient air scrubber tested by the NHS. Full reports available on request.

The Chief Scientific Officer's
Lifetime Achievement Awards
for Medical Physics and Clinical Engineering



Professor Anthony Colin Fisher MBE MD PhD

Professor of Physics at the University of Liverpool
Consultant Clinical Scientist in Medical Physics and Clinical Engineering at Liverpool University Hospitals
Non-executive Director at the Academy for Healthcare Science



Validation of the Airdog X8 Air Scrubber to the Liverpool Biovalidation Protocol

Airdog X8

Ref AS0009

Room Chamber 3 used for real-world evaluation
Room size 129.7 m³
Mean Temp 23.7 °C (estimated)
Mean RH 57.0 % (estimated)
Fan Setting 800 m³/hr



INNOVATION AGENCY

06/09/2022

Plate Count 1	Plate Count 2	Time (mins)	Room Count	1 hour trend	
				Exponent	Intercept
8.89E+04	9.07E+04	0	58,221,830	-0.111	6.00E+07
5.93E+04	5.26E+04	6.5	36,275,183		
3.87E+04	2.08E+04	10	19,288,413		
1.86E+04	2.27E+04	15	13,388,428		
1.12E+04	1.12E+04	20	7,261,520		
6.00E+03	4.72E+03	25	3,475,156		
3.20E+03	2.68E+03	30	1,906,149		
1.56E+03	2.04E+03	35	1,167,030		
1.02E+03	9.60E+02	40	641,867		
4.40E+02	5.00E+02	50	304,725		
				Log ₁₀ Reduction	2.89
				minus room	-0.264
				NET Log ₁₀ Reduction	2.63

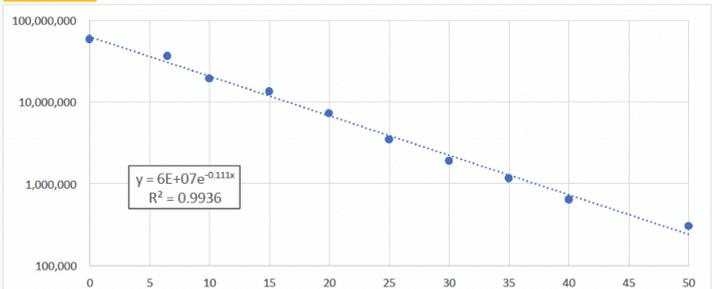
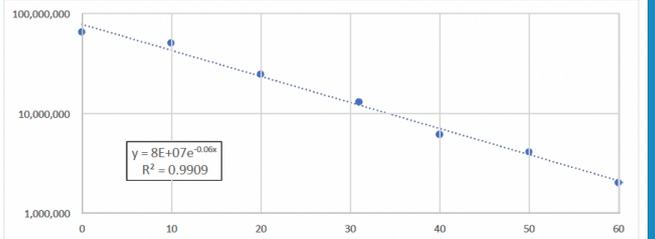
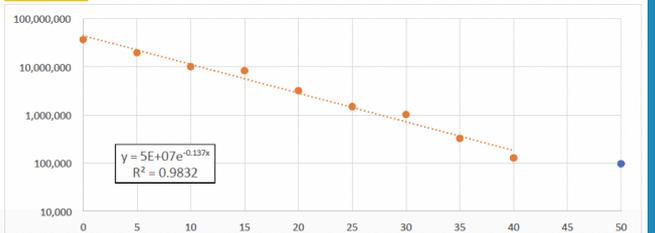


Plate Count 1	Plate Count 2	Time (mins)	Room Count	1 hour trend	
				Exponent	Intercept
1.02E+05	9.63E+04	0	64,283,903	-0.06	8.00E+07
8.52E+04	6.93E+04	10	50,085,038		
4.45E+04	3.07E+04	20	24,377,960		
1.93E+04	2.05E+04	31	12,902,165		
9.07E+03	9.85E+03	40	6,133,391		
5.87E+03	6.80E+03	50	4,107,297		
3.16E+03	3.10E+03	60	2,029,336		
				Calculated 60' count	2.19E+06
				Log ₁₀ Reduction	1.56
				minus room	-0.264
				NET Log ₁₀ Reduction	1.30

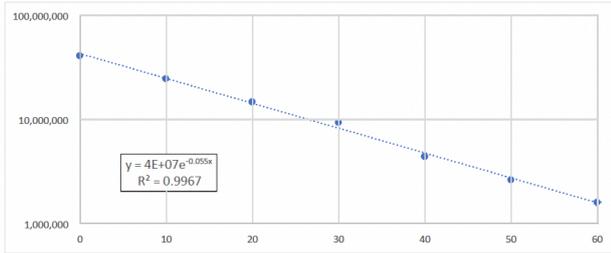


08/09/2022

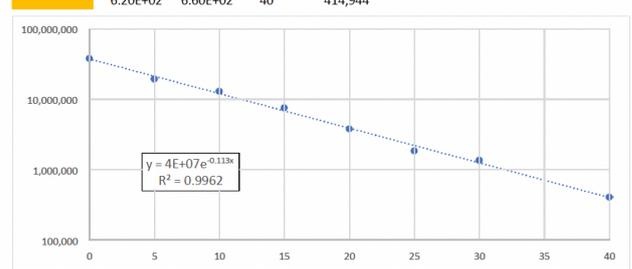
Plate Count 1	Plate Count 2	Time (mins)	Room Count	1 hour trend	
				Exponent	Intercept
5.40E+04	6.13E+04	0	37,377,378	-0.137	5.00E+07
2.85E+04	3.28E+04	5	19,871,928		
1.70E+04	1.44E+04	10	10,179,095		
1.36E+04	1.23E+04	15	8,396,133		
5.60E+03	4.40E+03	20	3,241,750		
2.62E+03	2.04E+03	25	1,510,656		
1.46E+03	1.74E+03	30	1,037,360		
5.40E+02	4.80E+02	35	330,659		
2.20E+02	1.80E+02	40	129,670		
1.80E+02	1.20E+02	50	97,253		
				Log ₁₀ Reduction	3.57
				minus room	-0.264
				NET Log ₁₀ Reduction	3.31



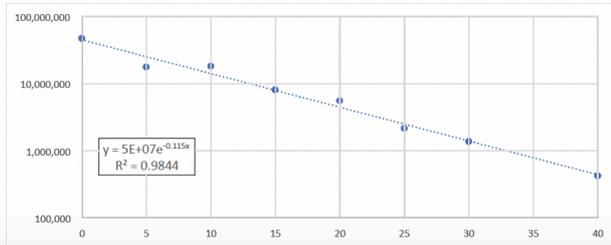
Control (Midtherm 500)	Plate Count 1	Plate Count 2	Time (mins)	Room Count	Exponent	1 hour trend
	6.30E+04	6.42E+04	0	41,235,060	-0.055	
	3.36E+04	4.31E+04	10	24,864,223	4.00E+07	
	2.12E+04	2.48E+04	20	14,912,050	1.48E+06	
	1.25E+04	1.67E+04	30	9,465,910	1.43	
	6.53E+03	7.20E+03	40	4,450,923	-0.264	
	3.28E+03	4.93E+03	50	2,661,477	1.17	
2.50E+03	2.48E+03	60	1,614,392			



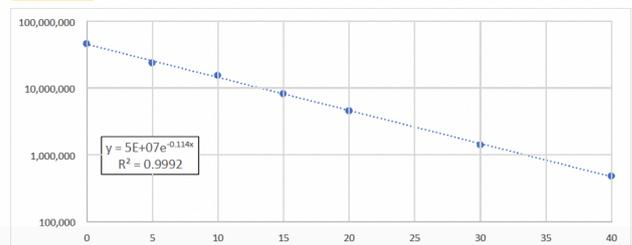
n = 4	Plate Count 1	Plate Count 2	Time (mins)	Room Count	Exponent	1 hour trend
	5.04E+04	6.79E+04	0	38,349,903	-0.113	
	2.92E+04	3.14E+04	5	19,645,005	4.00E+07	
	1.93E+04	2.12E+04	10	13,129,088	4.55E+04	
	1.33E+04	1.03E+04	15	7,650,530	2.94	
	5.73E+03	6.13E+03	20	3,844,716	-0.264	
	2.92E+03	2.88E+03	25	1,880,215	2.68	
1.94E+03	2.32E+03	30	1,380,986			
6.20E+02	6.60E+02	40	414,944			



n = 3	Plate Count 1	Plate Count 2	Time (mins)	Room Count	Exponent	1 hour trend
	8.33E+04	6.35E+04	0	47,588,890	-0.115	
	2.48E+04	2.99E+04	5	17,732,373	5.00E+07	
	2.63E+04	2.99E+04	10	18,218,635	5.04E+04	
	1.03E+04	1.48E+04	15	8,136,793	3.00	
	5.87E+03	1.14E+04	20	5,598,502	-0.264	
	3.76E+03	2.96E+03	25	2,178,456	2.73	
2.02E+03	2.26E+03	30	1,387,469			
7.00E+02	6.20E+02	40	427,911			



n = 5	Plate Count 1	Plate Count 2	Time (mins)	Room Count	Exponent	1 hour trend
	8.15E+04	6.30E+04	0	46,843,288	-0.114	
	4.23E+04	3.21E+04	5	24,118,620	5.00E+07	
	2.35E+04	2.50E+04	10	15,722,488	5.35E+04	
	1.14E+04	1.44E+04	15	8,363,715	2.97	
	7.66E+03	6.67E+03	20	4,645,428	-0.264	
	2.14E+03	2.30E+03	30	1,439,337	2.71	
8.40E+02	6.80E+02	40	492,746			



Results summary (bacterial inactivation curve)

Log₁₀ reduction over an hour in a 129.7 m³ chamber

Unnormalised results

	X8	Control §
n=1	2.63	1.17
n=2	3.31	
n=3	2.73	
n=4	2.68	
n=5	2.71	
Mean	2.81	1.24
SD	0.28	0.09
Performance	9.9	22.5

* Performance measured as duration in seconds to reduce bacterial count in 1m³ by 1 log₁₀ reduction

§ Expected Control bacterial reduction based on previous results (n = 11): 1.07 log₁₀ reductions

Normalised results

	X8	Control ¶
n=1	2.20	1.07
n=2	3.06	
n=3	2.52	
n=4	2.47	
n=5	2.50	
Mean	2.55	1.07
SD	0.31	0.00
Performance	10.9	25.9

* Performance measured as duration in seconds to reduce bacterial count in 1m³ by 1 log₁₀ reduction

¶ X8 results normalised to historical control bacterial reduction values based on previous results (n = 11): 1.070 log₁₀ reductions

Notes

- The results have been normalised to take into account a lower performance of the standard control for bacterial inactivation for particular measurements. Both unnormalised and normalised results have been included for comparison.
- Due to methodological reasons, accurate measurement of bacterial numbers at high log reductions was not possible. For this reason, measurements were performed at 5 minute intervals for some measurements to preserve the quality of the data. Calculation of the bacterial CFU reduction curve was conducted on the accurate measurements only.
- Mean temperature and humidity have been estimated from machine and control values (n = 14).
- A value of 0.264 log₁₀ reductions has been deducted from each result, representing the mean decay in bacterial numbers as measured in the same chamber without any air purification but with air mixing (SD = 0.046, n = 5).





An ecologically sustainable solution which can help your organisation be more efficient while providing healthy clean air in your buildings.

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