



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

Powered by  Biotechnology

ADB 7000- AF | Cold Plasma Generator_Duct Integrated

Overview:

ADB systems activate ambient air using proprietary Modulated Dielectric Barrier Discharge that generates a safe, chemical-free non-thermal (cold) plasma. Highly reactive molecules from the plasma are distributed throughout the space via the existing HVAC system to neutralize microbes (viruses, bacteria & mold) and VOCs in the air and on surfaces. This cold plasma treatment is continuous, controlled, and consistent.

- Each system is process engineered for the space being treated to ensure continuous and proper treatment levels throughout the space.
- ADB 7000- AF unit gets affixed to the existing HVAC duct on supply side
- **Minimum MERV 11 rated HVAC filter is required**

Applications:

Suitable for common area applications - indoor public spaces (commercial/industrial)

- Food/Meat Processing
- Hatcheries
- Horticulture
- Healthcare
- Hospitality
- Casinos
- Restaurants
- Fitness/Locker Rooms
- K12/Higher Education
- Government Buildings
- Offices

Certifications:

- TÜV SÜD: UL 60335-1 - Safety of Household and Similar Electrical Appliances
- All compliance requirements met with ADB 7000 series with DRV 512 driver and WCS wall controller
- Meets UL867 standard
- Meets UL2998 standard for "Zero Ozone" Emissions (≤ 0.005 ppm)
- Meets California Air Resource Board ozone emissions limit - CARB certified
- Certified Halal by Islamic Services of America

Features:

- 24/7 365 continuous and proactive air and surface protection against viruses, bacteria, mold, and other contaminants.
- Provides a comprehensive air quality solution for public spaces, helping establish a new safety benchmark by neutralizing up to 99.99% of viruses (including influenza and norovirus) within minutes and reducing bacteria (including Listeria, Salmonella, E. coli, and Campylobacter) within two hours.
- Integrated Air Flow sensor ensures unit operates only when HVAC airflow is sensed
- Silent operation
- Low power consumption
- No toxic chemicals or irradiation
- Multiple control options available, including BMS integration
- Used for over 20 years and is installed in thousands of locations, worldwide

Construction:

- Cabinet constructed of powder coated aluminum
- Output: 3" PVC reaction chamber on 1AF model. 4" PVC reaction chamber on all other models with 3" PVC reducers included.
- 6' Cord with 120V plug standard. Hardwired & 230V options available.



Ordering Guide:

Series	Capacity (# Power Gen)	Type	Driver	Voltage / Plug	Airflow Control	Controls ⁽¹⁾	Output
ADB 7000	-	AF					-
ADB 7000	1 1 Power Generator	AF HVAC Duct Integrated	ID Internal Driver	Blank 120V / 6' Cord, Type B Plug	MAF Mass Airflow Sensor	Blank None	100 100%
	2 2 Power Generators			NP 120V / 6' Cord, No Plug		X 2.4 GHz XBee Wireless (for use with WCSv2 controller)	90 90%
	4 4 Power Generators			230V 'p' 230V / 6' Cord, 'p' = specify plug type		XLR 900 MHz Long Range XBee Wireless (for use with WCSv2 LR controller)	80 80%
	8 8 Power Generators	AF HVAC Duct Integrated	ED6C External Driver w/ 6' Cables	230V NP 120V / 6' Cord, No Plug		M Modbus RTU	70 70%
						MX 2.4 GHz XBee Wireless (for use with WMS & WMSG controllers)	60 60%
						MXLR 900 MHz Long Range XBee Wireless (for use with WMS LR & WMSG LR controllers)	40 40%

Plug Types ('p'):

D Type D, 230V
E Type E, 230V
F Type F, 230V
G Type G, 230V
H Type H, 230V
I Type I, 230V
J Type J, 230V
K Type K, 230V
L Type L, 230V

Notes

⁽¹⁾ See 'ADB Controls Guide' for control system specifications and list of compatible controllers and accessories (sold separately).

Accessories:

WGE4 Weather Guard Enclosure for exterior mounting of ADB 7000-1 AF, -2 AF, or -4 AF unit.

WGE8 Weather Guard Enclosure for exterior mounting of ADB 7000-8 AF unit.

Specifications:

Model	Operation Frequency	Amps	Max Power	Voltage	Weight	Length	Width	Height	Pipe Size
ADB 7000-1 AF ID	50/60 Hz	0.125A	15W	120V	14 lbs.	24.5"	6.75"	9.85"	3" PVC
ADB 7000-1 AF ED6C	50/60 Hz	0.125A	15W	120V	12 lbs.	24.5"	6.75"	9.85"	3" PVC
ADB 7000-2 AF ID	50/60 Hz	0.16A	19W	120V	21 lbs.	24.5"	7.5"	11.0"	3" PVC
ADB 7000-2 AF ED6C	50/60 Hz	0.16A	19W	120V	18 lbs.	24.5"	7.5"	11.0"	3" PVC
ADB 7000-4 AF ID	50/60 Hz	0.23A	28W	120V	30 lbs.	26.5"	7.0"	19.0"	3" PVC
ADB 7000-4 AF ED6C	50/60 Hz	0.23A	28W	120V	25 lbs.	24.5"	7.0"	16.0"	3" PVC
ADB 7000-8 AF ED6C	50/60 Hz	0.46A	55W	120V	42 lbs.	24.5"	7.0"	25.5"	3" PVC
ADB 7000-1 AF ID 230V	50/60 Hz	0.074A	17W	230V	15.5 lbs.	24.5"	6.75"	9.85"	3" PVC
ADB 7000-1 AF ED6C 230V	50/60 Hz	0.074A	17W	230V	13.5 lbs.	24.5"	6.75"	9.85"	3" PVC
ADB 7000-2 AF ID 230V	50/60 Hz	0.083A	19W	230V	21 lbs.	24.5"	7.5"	11.0"	3" PVC
ADB 7000-2 AF ED6C 230V	50/60 Hz	0.083A	19W	230V	18 lbs.	24.5"	7.5"	11.0"	3" PVC
ADB 7000-4 AF ID 230V	50/60 Hz	0.12A	28W	230V	30 lbs.	26.5"	7.0"	19.0"	3" PVC
ADB 7000-4 AF ED6C 230V	50/60 Hz	0.12A	28W	230V	25 lbs.	24.5"	7.0"	16.0"	3" PVC
ADB 7000-8 AF ED6C 230V	50/60 Hz	0.24A	55W	230V	42 lbs.	24.5"	7.0"	25.5"	3" PVC

External Driver on ADB 7000-x AF ED6C units weighs an additional 6 lbs, not included in the weights above.



Performance Capacity:

Commercial Applications / Biosecurity:

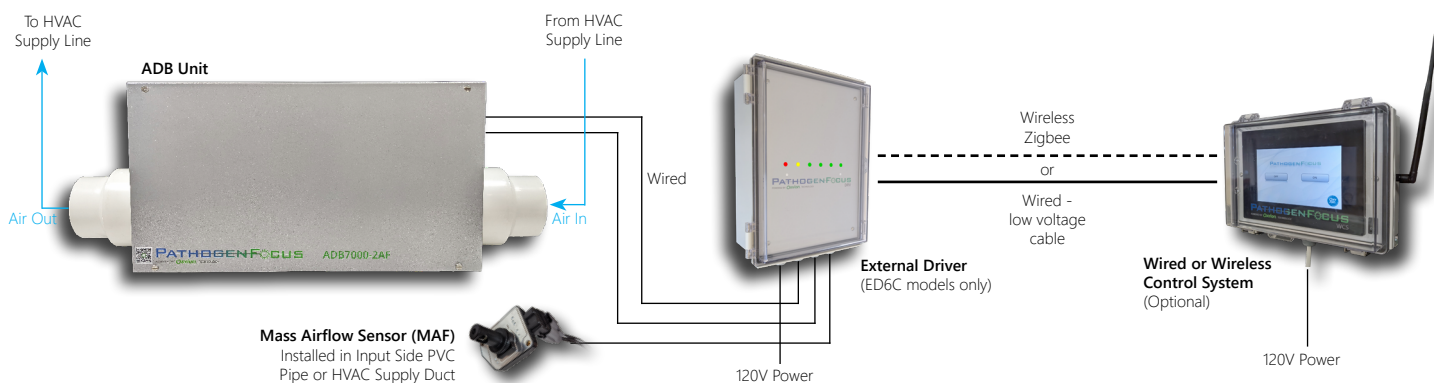
Model	Output	HVAC CFM
ADB 7000-8 AF	100%	14,400 to 16,000
	90%	12,800 to 14,400
	80%	11,200 to 12,800
	70%	9,600 to 11,200
	60%	6,400 to 9,600
	40%	4,800 to 6,400
ADB 7000-4 AF	100%	8,550 to 9,500
	90%	7,600 to 8,550
	80%	6,650 to 7,600
	70%	5,700 to 6,650
	60%	3,800 to 5,700
	40%	2,850 to 3,800
ADB 7000-2 AF	100%	6,480 to 7,200
	90%	5,760 to 6,480
	80%	5,040 to 5,760
	70%	4,320 to 5,040
	60%	2,880 to 4,320
	40%	2,160 to 2,880
ADB 7000-1 AF	100%	2,340 to 2,600
	90%	2,080 to 2,340
	80%	1,820 to 2,080
	70%	1,560 to 1,820
	60%	1,040 to 1,560
	40%	780 to 1,040

Industrial Processes:

Model	Output	Volume (ft³)
ADB 7000-8 AF	100%	45,000 to 50,000
	90%	40,000 to 45,000
	80%	35,000 to 40,000
	70%	30,000 to 35,000
	60%	20,000 to 30,000
	40%	15,000 to 20,000
ADB 7000-4 AF	100%	22,050 to 24,500
	90%	19,600 to 22,050
	80%	17,150 to 19,600
	70%	14,700 to 17,150
	60%	9,800 to 14,700
	40%	7,350 to 9,800
ADB 7000-2 AF	100%	11,070 to 12,300
	90%	9,840 to 11,070
	80%	8,610 to 9,840
	70%	7,380 to 8,610
	60%	4,920 to 7,380
	40%	3,690 to 4,920
ADB 7000-1 AF	100%	5,310 to 5,900
	90%	4,720 to 5,310
	80%	4,130 to 4,720
	70%	3,540 to 4,130
	60%	2,360 to 3,540
	40%	1,770 to 2,360

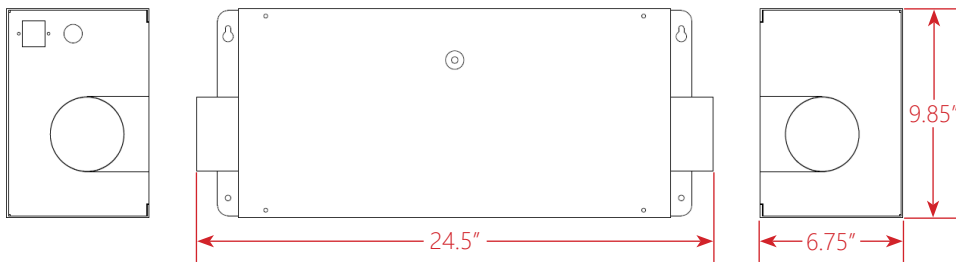
Performance capacity is just a guideline. ADB system design is application specific and depends on many factors, including existing bio load of the environment as well as what you are trying to achieve (improved air quality, odor elimination, food safety, increased shelf life of perishables, increased crop yield, etc.). Specific industrial processes (i.e. food processing or food safety, indoor farming) and/or certain air/surface quality issues may require up to 5 times the treatment concentration to achieve desired results. **Please contact your PathogenFocus representative for proper ADB system design.**

ADB System Diagram:

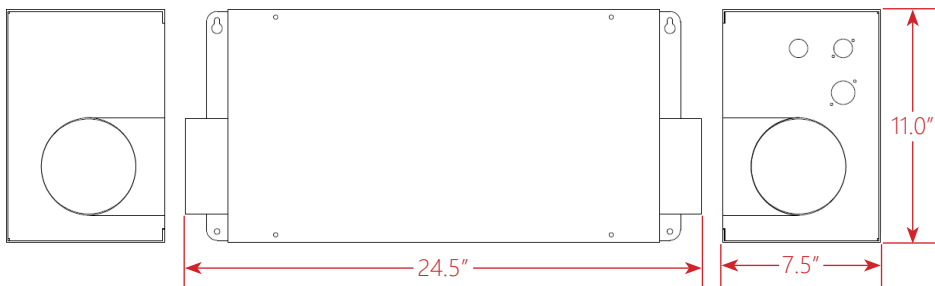


Schematics:

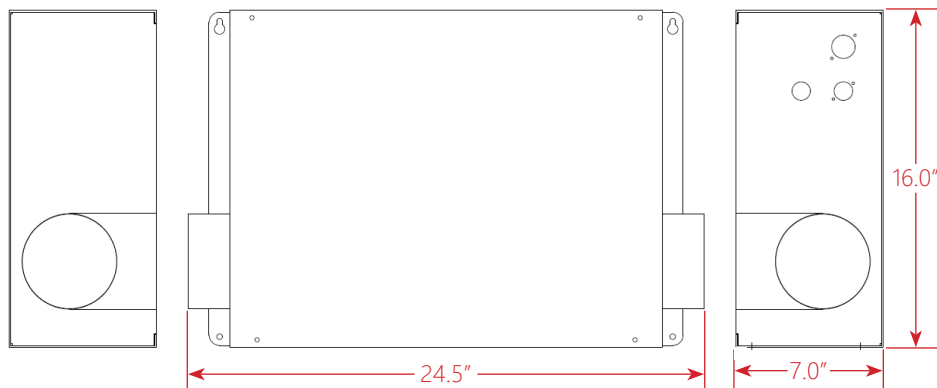
ADB 7000-1 AF (ID & ED)



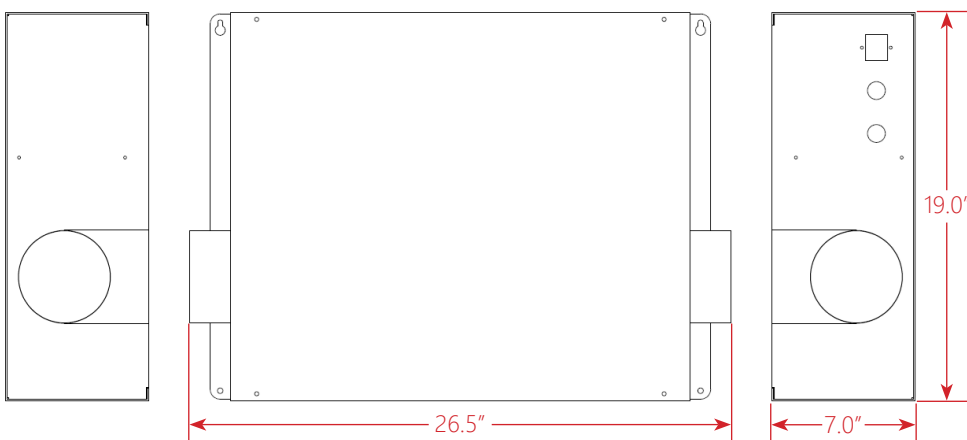
ADB 7000-2 AF (ID & ED)



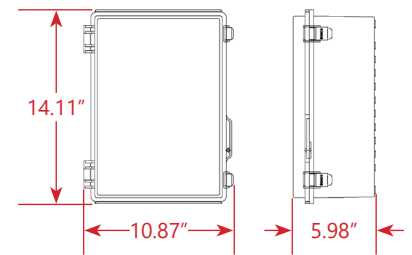
ADB 7000-4 AF (ED)



ADB 7000-4 AF (ID)

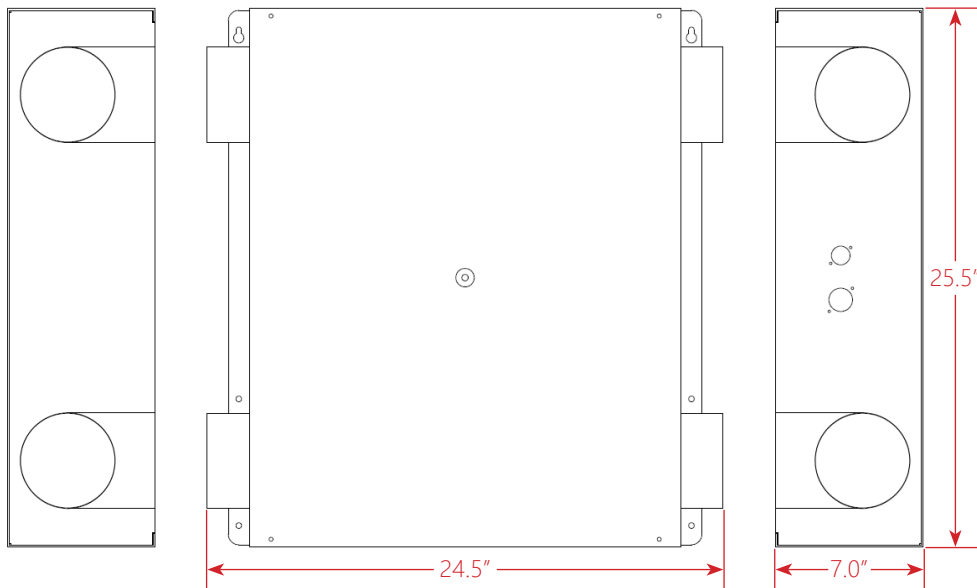


ED6C (External Driver):

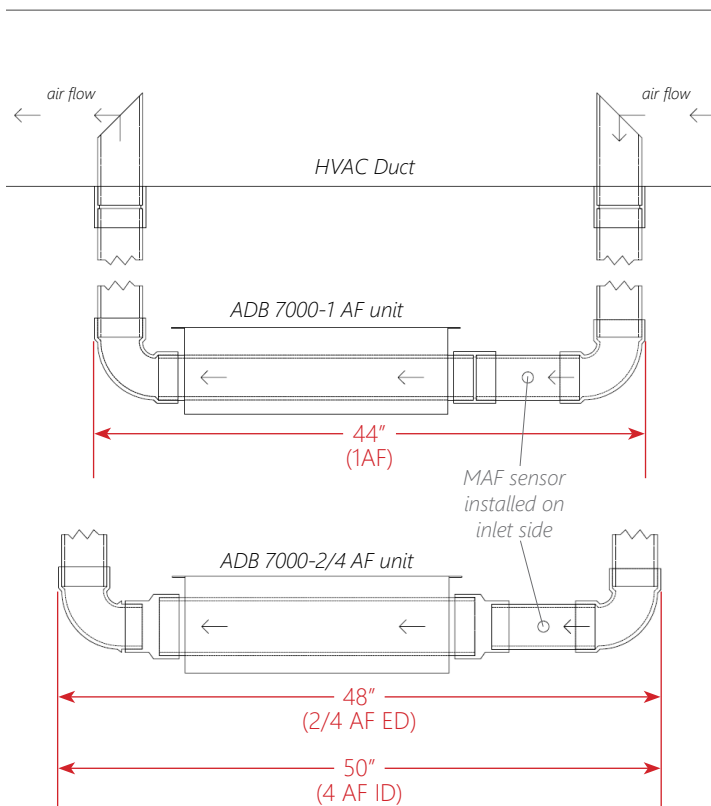


Schematics:

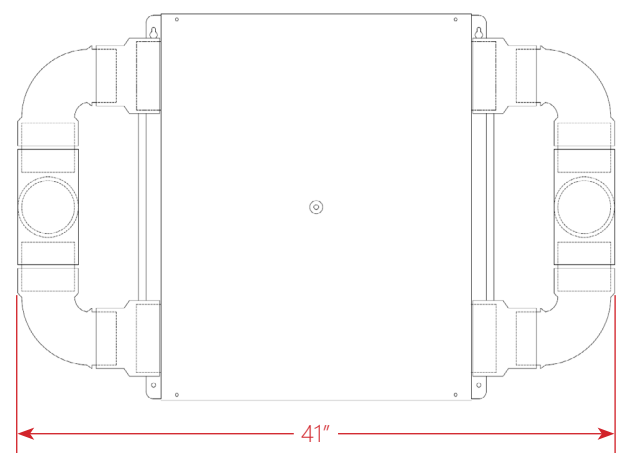
ADB 7000-8 AF (ED)



ADB 7000-1/2/4 AF with PVC Piping



ADB 7000-8 AF with PVC Piping



User Guide

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Guidelines For User Safety And Equipment

Protection symbols are used to highlight information relating to the user's personal safety and protection of the equipment throughout this guide. Do not operate the equipment without prior consulting with a representative.

When any of the following symbols appear, the associated information must be read carefully and understood fully. Operate the system through its controller.

Warnings



WARNING

The identified danger can cause physical and property damage



DANGER

The identified danger can cause severe physical and property damage. This symbol relates specifically to electrical danger.

Under no circumstances will the manufacturer be liable or responsible for any consequential damage that may arise as a result of the installation or use of this equipment. All examples and diagrams shown in this guide are intended to aid understanding. They do not guarantee operation. The manufacturer accepts no responsibility for the actual use of this equipment based on these examples.

Due to the great variety of possible applications for this equipment, the user must assess the suitability of this product for specific applications.

Equipment described herein is recommended based on the room temperature, type of process, the air circulation of the room, and overall size of the room. The user of this product further acknowledges that in order for the equipment to achieve optimal results, there must be sufficient air circulation, a somewhat enclosed treated area, and when applicable, proper ventilation in the packaging of stored/palletized product(s).

