



Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat. #: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Quantity: \_\_\_\_\_

Powered by  Biotechnology

## ADB 7000-AF | Air Disinfection Biosecurity Unit

### Features:

- 24/7 365 continuous and proactive air and surface disinfection
- Integrated Air Flow sensor ensures unit operates only when HVAC airflow is sensed
- Provides a comprehensive disinfection solution for use in public spaces to achieve a new air quality safety threshold by neutralizing up to 99.99% of viruses (influenza, norovirus, etc.) within minutes and bacteria (listeria, salmonella, E. coli, campylobacter, etc.) within 2 hours.
- Silent operation
- Low power consumption
- No toxic chemicals or irradiation
- Used for over 20 years and is installed in thousands of locations, worldwide

### 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 ( $\leq 0.005$  ppm)
- Meets California Air Resource Board ozone emissions limit - CARB certified
- Certified Halal by Islamic Services of America

### 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

### Details:

- 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 sanitizing cold plasma treatment is continuous, controlled, and consistent.
- Each system is process engineered for the space being treated to ensure continuous and proper treatment level throughout the space
- Unit is affixed to the existing HVAC duct on supply side
- **For the HVAC system, a filter with a minimum MERV rating of 11 is required**

### Applications:

- Suitable for common area applications - indoor/public spaces
- Government Buildings
  - Hospitality
  - Healthcare
  - Fitness/Locker Rooms
  - Food/Meat Processing
  - K12/Higher Education
  - Offices
  - Meeting Room/Break Rooms
  - Industrial/Commercial
  - Restaurants
  - Retail
  - Casinos
  - Horticulture



**Ordering Guide:**

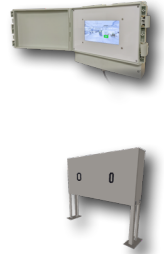
Series	Capacity	Driver	Airflow Sensor	Duty Cycle
ADB 7000				
ADB 7000	<b>1AF</b> 1 Power Generator	<b>ID</b> Internal Driver	<b>Blank</b> None <sup>(1)</sup>	<b>100</b> 100%
	<b>2AF</b> 2 Power Generators	<b>ED6C</b> External Driver w/ 6' Cables	<b>MAF</b> Mass Airflow Sensor <sup>(2)</sup>	<b>90</b> 90%
	<b>4AF</b> 4 Power Generators	<b>ED6C</b> External Driver w/ 6' Cables		<b>80</b> 80%
	<b>8AF</b> 8 Power Generators			<b>70</b> 70%
				<b>60</b> 60%
				<b>40</b> 40%

**Notes:**

- <sup>(1)</sup> ADB unit must be connected to HVAC fan to ensure fan turns on while ADB unit is in operation. Failure to do so may damage ADB reaction chamber, reducing treatment levels.
- <sup>(2)</sup> HVAC fan should run 24/7 for optimal performance. At a minimum, the fan should run continuously during operational hours.

**Accessories:**

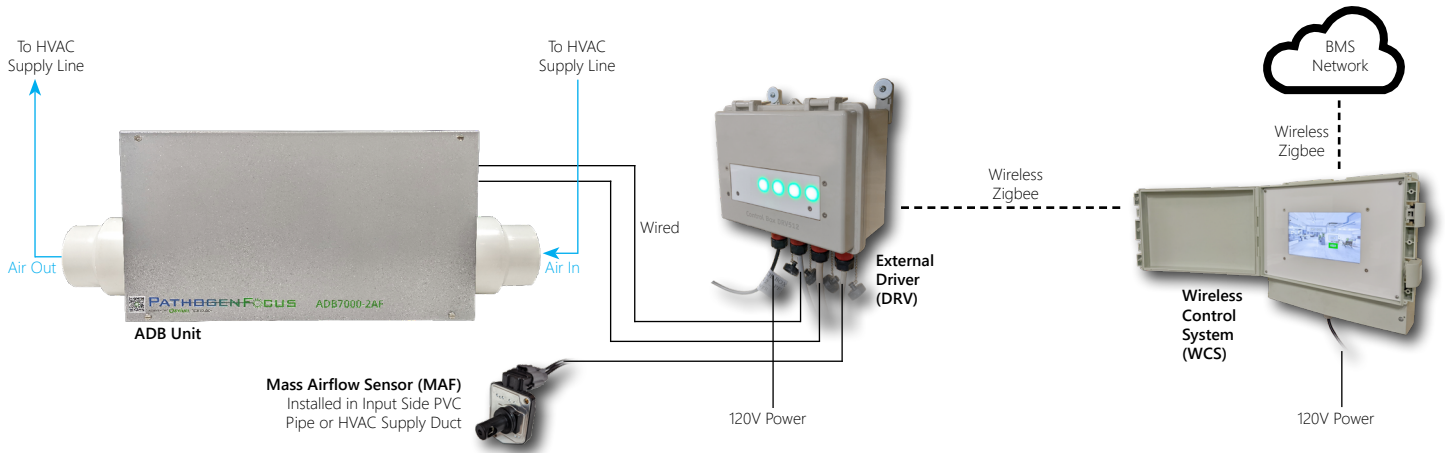
- WCS** Wireless Control System with touch screen interface and networking capabilities. (1) WCS can control up to (20) ADB 7000 units, depending on range
- WGE** Weather Guard Enclosure for exterior mounting of ADB 7000 unit



**Specifications:**

Model	Operation Frequency	Amps	Max Power	Voltage	Weight	Length	Width	Height	Pipe Size
ADB 7000-1AF	50/60 Hz	0.125A	15W	120V	20 lbs.	19"	5.6"	9"	3" PVC
ADB 7000-2AF	50/60 Hz	0.16A	19W	120V	27 lbs.	22.5"	7"	11"	3" PVC
ADB 7000-4AF	50/60 Hz	0.23A	28W	120V	40 lbs.	22.5"	7"	16"	3" PVC
ADB 7000-8AF	50/60 Hz	0.46A	55W	120V	52 lbs.	22.5"	7"	24.5"	3" PVC

**ADB System Diagram:**



## Performance Capacity:

### Commercial Applications / Biosecurity:

Model	Duty Cycle	HVAC CFM
ADB 7000-8AF	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 7000-4AF	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 7000-2AF	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 7000-1AF	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	Duty Cycle	Volume (ft <sup>3</sup> )
ADB 7000-8AF	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 7000-4AF	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 7000-2AF	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 7000-1AF	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.**



## User Guide

No part of this document may be used for any purpose other than the purposes specifically indicated herein nor may it be reproduced or transmitted in any form or by any means, electronic, or mechanical, including photocopying and/or recording for any purpose without permission from the manufacturer.

This information appearing in this document is for general purposes only. The manufacturer makes no warranty of any kind with regard to the information appearing in this document including, but not limited to, implied warranties of merchantability and/or fitness for particular use or purpose. The manufacturer assumes no responsibility for the results, direct and/or indirect, of any misuse of the information appearing in this document nor for any use of the manufacturer product offering referred to herein in any manner deviating from the recommendations made in this document. The manufacturer assumes no responsibility for the use of any parts, components, or other ancillary appliances including circuitry other than as recommended hereunder or other than that embodied in the product.

## 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).

