

## INDOOR AIR QUALITY



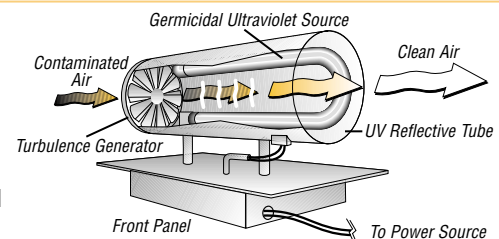
The Totaline® UVC (Germicidal) Air Purifiers are designed to work with the ventilation system to reduce airborne contaminants such as legionella, molds, bacteria and viruses. They recreate the effects of sunlight by naturally decomposing, destroying and purifying contaminants. Totaline® Air Purifiers are available in 5 models to suit both residential and commercial needs.

### Features:

- Produces no ozone, gases or fumes
- Patented technology, unique “J” shaped lamp
- Easy installation
- Multiple installation options permit remote mounting or bypass mounting
- Test button and inspection port
- Commercial in-duct model works only when the HVAC blower is functioning
- Low power consumption and no increase with duct system resistance
- No maintenance (excluding bulb change) or cleaning required
- NRTL/C, CSA certified
- 3 year residential product warranty

### A Scientifically Proven Process

The sun destroys contaminants and purifies our outdoor air; Totaline® Air Purifiers work much in the same way for indoor air. Totaline Air Purifiers use a scientifically proven process which mimics the process our sun uses to destroy contaminants in our atmosphere. UV wave lengths attack the micro-organism on a molecular level, actually scrambling the DNA of the cell. These changes result in incorrect codes being transmitted from the modified DNA, which in turn inhibits its reproduction. These changes in the cell are what lead to the destruction of the micro-organism.





# UVC Germicidal Lamp AIR PURIFIER

## Why Use A UVC Germicidal Air Purifier?

### WHAT CAUSES INDOOR AIR PROBLEMS?

Indoor pollution sources that release VOC's (Volatile Organic Compounds) or particulates into the air are the primary cause of indoor air quality problems in homes and offices. Inadequate ventilation can increase indoor pollutant levels by not bringing in enough outdoor air to dilute the emissions from indoor sources and by not carrying indoor air pollutants out of the home. High temperature and humidity levels can also increase concentration of some pollutants.

### HOW IS AN AIR PURIFIER DIFFERENT FROM AN AIR FILTER?

A purifier will not trap particles. What particles go into a Totaline Germicidal Air purifier come out of the purifier. What is important is that the particles that come out of a Totaline Germicidal Air Purifier are DEAD. Bacteria and viruses are sterilized as well as biological odors.

### WHAT IS THE DIFFERENCE BETWEEN A TOTALINE GERMICIDAL AIR PURIFIER AND AN AIR FILTER?

An air filter is designed to collect particulates from the air. Airborne living organisms such as bacteria and viruses pass through the filter much like sand would pass through a tennis racket. In contrast, a Totaline Germicidal Air Purifier uses germicidal UV-C light to destroy the contaminants on a molecular level.

### HOW DOES ULTRAVIOLET LIGHT KILL BIOLOGICAL CONTAMINANTS

Ultraviolet light has four principal wave lengths: UV-A, UV-B, **UV-C** and UV-V. Totaline Germicidal Air Purifiers use a patented "J" Lamp, which produces UV-C light. UV-C is short-wave radiation; the UV-C light penetrates the cell's membrane destroying the cell's DNA. This wave length's primary uses are for the destruction of bacteria and other micro-organisms that pass through the aluminum chamber.

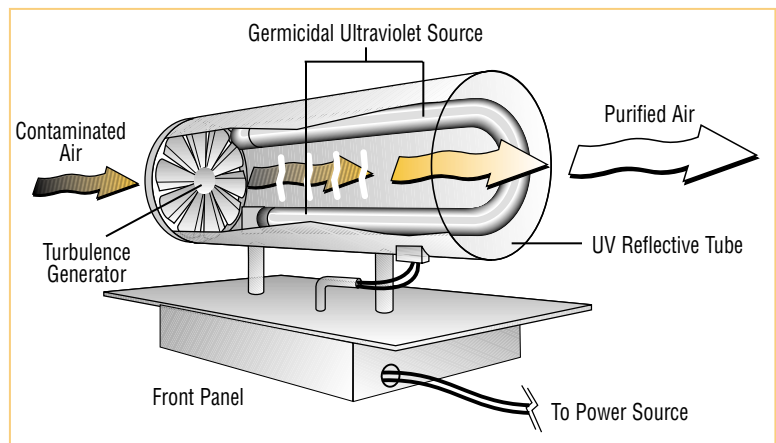
UV-C attacks the micro-organism on a molecular level, actually changing the DNA of the cell. These changes result in incorrect codes being transmitted from the modified DNA, which lead to the destruction of the micro-organism.

### IS A TOTALINE GERMICIDAL AIR PURIFIER EFFECTIVE IN TREATING MOLD?

Mold feeds off bacteria in order to grow. The Totaline Germicidal Air Purifier destroys airborne bacteria, which means mold has fewer sources of food. Without a source of food, mold will quickly be destroyed.

### IS THE TOTALINE GERMICIDAL AIR PURIFIER SAFE?

The Totaline Germicidal Air Purifier is CSA and NRTL/C certified. There are two factors relating to safety - exposure to UV rays are damaging to the eyes and direct exposure will destroy plastic.





# UVC Germicidal Lamp AIR PURIFIER

### WHAT MAINTENANCE IS REQUIRED?

Besides the changing of the lamp every three years (residential units) and 12,000 hours (commercial units), very little maintenance is required for a Totaline Germicidal Air Purifier.

### HOW MUCH ELECTRICITY DOES A TOTALINE GERMICIDAL AIR PURIFIER CONSUME?

Electrical consumption varies according to models. They range from 25 watts - 85 watts.

### DO I NEED A FILTER AS WELL AS AN AIR PURIFIER?

A Totaline Germicidal Air Purifier kills germs and bacteria, but it does not dispose of the particulates, which are airborne. This requires a quality particulate filter. A filter is not a purifier and a purifier is not a filter; both are required for complete IAQ protection.

### WHAT ARE THE APPLICATIONS AND USES FOR TOTALINE GERMICIDAL AIR PURIFIERS?

A Totaline Air Purifier will destroy biological contaminants such as airborne bacteria, viruses, mold, mildew. Totaline Purifiers are used in homes, doctors and dentists offices, hospitals, veterinary clinics, office buildings, health clubs, day care centers, laboratories, classrooms, old age homes, hotels, smoking rooms, bars and restaurants, mausoleums and funeral parlors.

### IS A TOTALINE GERMICIDAL AIR PURIFIER DIFFICULT TO INSTALL?

There are several Totaline models, from portable units, which only have to be plugged in to induct units, which require limited installation.

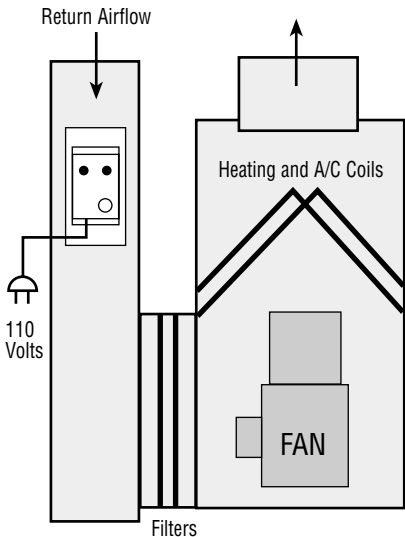
### DOES A TOTALINE GERMICIDAL AIR PURIFIER HAVE TO RUN 24 HOURS A DAY?

Induct models are designed to run 24 hours a day. That is not to say that they will. The portable unit can be used all day or can be used when the need arises.

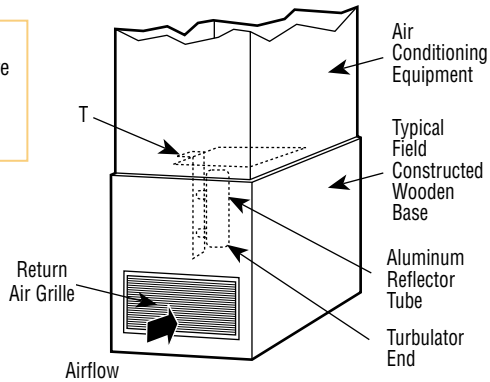
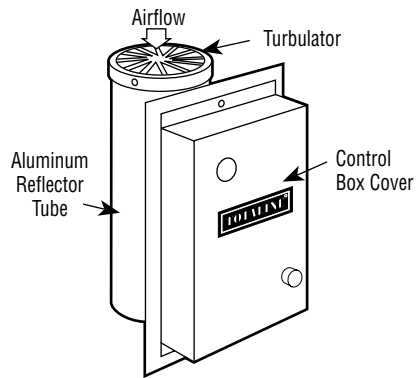
### WHAT IS THE TOTALINE WARRANTY?

Totaline residential purifiers are warranted for 3 years on parts including the lamp. Totaline commercial purifiers are warranted for one year on parts and 12,000 hours on the lamp.

### TOTALINE IN-DUCT INSTALLATION



Placing the Totaline Germicidal Ultraviolet Air Purifier before the filter ensures that both the filter and coil are showered with purified air. The process effectively sterilizes the filter and helps keep the coil clean as an added benefit to purifying the air in your home.



**REMOTE INSTALLATION:** The accessory Remote Installation Kit is used to install the control box remotely from the UV lamp duct assembly. The purifier will be separated into two sections: the control box and the aluminum reflector tube. The aluminum reflector tube is located in the return air system. Please refer to installation instructions.

# Totaline® UVC Germicidal Air Purifiers

MODEL	P103-R1500G	P103-R3500G	P103-CT200G	P103-PT100G	P103-CMT100G
Application	Residential	Residential / Light Commercial	Commercial	Portable	Commercial Ceiling Tile
Purifying Capacity	1500 sq. ft.	3500 sq. ft.	2000 cfm	800 sq. ft.	500 sq. ft.
Outside Dimensions	9.5 x 8 in. (241 x 203mm)	12 x 8 in. (305 x 203mm)	20 x 9 in. (508 x 228mm)	3.75 x 11.75 x 18.625 in. (95 x 298 x 475mm)	24 x 24 x 9 in. (610 x 610 x 229mm)
Plenum Opening Requirements	8x6 in. (203x152mm)	11x6 in. (269x152mm)	18x7 in. (457x178mm)	-NA-	-NA-
Weight	4.4 lbs. (2 Kg)	12 lbs. (5.5 Kg)	15 lbs. (6.8 Kg)	13 lbs. (5.9 Kg)	28 lbs. (13 Kg)
Power Requirements	120V 15 Watts	120V 25 Watts	120V 45 Watts	120V 85 Watts	120V 26 Watts
Hard Wire	YES	YES	Optional	-NA-	YES
Germicidal UV Single Zone Lamp	YES	YES	YES	YES	YES
Lamp Diameter	19 mm	19 mm	19 mm	19 mm	19 mm
Proprietary UV J Lamp Dimensions	6.5 in. (165mm)	10.5 in. (267mm)	16 in. (406mm)	6.5 in. (165mm)	6.5 in. (165mm)
Lamp Arc Length	10.5 in. (267mm)	17.7 in. (450mm)	31.2 in. (793mm)	10.5 in. (267mm)	10.5 in. (267mm)
<b>Air Exposure Time To UV Lamp - Per Pass:</b>					
in milliseconds @ 500 ft. per minute	180	240	400	-NA-	-NA-
On High Speed	-NA-	-NA-	-NA-	25 milliseconds	-NA-
On Low Speed	-NA-	-NA-	-NA-	116 milliseconds	160 milliseconds
UV Intensity Inside Aluminum Tube / Housing	7456 Microwatts per / cm <sup>2</sup>	12176 Microwatts per / cm <sup>2</sup>	9497 Microwatts per / cm <sup>2</sup>	7380 Microwatts per / cm <sup>2</sup>	7270 Microwatts per / cm <sup>2</sup>
Fan Speed	-NA-	-NA-	-NA-	40/150 cfm variable	71 cfm
Noise Level @ 5 ft.	-NA-	-NA-	-NA-	High 60dBA, Low 49 dBA	Less Than 49 dBA
Aluminum UV Reflector	5 x 7.875 in. Tube (127 x 200mm)	5 x 12 in. Tube (127 x 305mm)	7 x 19 in. Tube (178 x 483mm)	2.5 x 8.5 x 9 in. Box (63.5 x 215.9 x 228.6mm)	21 x 7 x 9 in. Box (533 x 178 x 229mm)
Inlet/Outlet Filter	-NA-	-NA-	-NA-	Aluminum Mesh	14 x 8 Polypropylene 14 x 8 Activated Carbon
Construction	Steel / Powder Coat Paint	Steel / Powder Coat Paint	Steel / Powder Coat Paint	Steel / Powder Coat Paint	Steel / Powder Coat Paint
Certification	NRTL/C, CSA	NRTL/C, CSA	NRTL/C, CSA	NRTL/C, CSA	NRTL/C, CSA
Options	Remote Installation Kit	Remote Installation Kit	Remote Installation Kit	Stand	
Residential Warranty: 3-Year including UV Lamp & Parts	YES	YES	-NA-	YES	-NA-
Commercial Warranty: 12,000 hrs. on UV Lamp 1-Year on Parts	-NA-	-NA-	YES	-NA-	YES

## Replacement Parts & Accessories

Part Number	Item Description	Part Number	Item Description
P103-GERMLAMP004	Germicidal "J" Lamp for P103-PT100G, P103-CMT100G, P103-R1500G	P103-SPDCNTL-001	Speed Control for P103-PT100G
P103-GERMLAMP005	Germicidal "J" Lamp for P103-R3500G	P103-VACUSTSW001	Vacuum Starting Switch for P103-CT200G
P103-GERMLAMP006	Germicidal "J" Lamp for P103-CT200CG	P103-REMINSKT001	Remote Installation Kit
P103-BALLAST-001	Ballast for P103-R3500G	P103-TUBESTND001	Tubular Stand for P103-PT100G
P103-BALLAST-002	Ballast for P103-CT200G	SAN-C002	Turbulator
P103-BALLAST-003	Ballast for P103-PT100G, P103-CMT100G, P103-R1500G		

