Frequently Asked Questions

Sterile Sweep® UVC/UVV

1. **What is the "inactivation" zone of the UV light?**
   Our UVC lamps are designed for a 26 inch irradiation zone - 13 inches upstream and 13 inches downstream. This is based on RTI lab UVC tests and ASHRAE standards of a 2 feet irradiation zone at a minimum of 1,500 microwatts. Refer to the intensity factor chart and ASHRAE standard.

2. **Where is it best to be installed?**
   It depends on the application. For coil surface irradiation only, then evidently in the coil. For airborne viruses and bacteria inactivation, it should be installed in the return side so that these pathogens are inactivated before they ever reach the coil or the breathing space. There are installation applications where a return location is not practical, however there is room on the supply. Although not ideal, a supply side installation in this case is better than no install at all and the UVC lamp will still be effective.

3. **Can it be installed directly on the coil?**
   Yes! Our 24V Economy Remote is not designed for the return airborne inactivation, but it is great for this coil application and our 180 microwatt remotes are exceptional for this application as well.

RM2-16/5
120/240 volt 16" lamp 180 microwatts dual remote UVC/UVV unit with remote 5" oxidation lamp

4. **What's the intensity?**
   UVC manufacturer standards take microwatt readings at one meter from the lamp so that they can rate one lamp against another with the same constant. This way there is no variable with readings taken at different distances.

   At one meter away our lamps have these microwatt intensities:
   - 180 MW - 16" lamp
   - 150 MW - 12" lamp

FM2-16/5
120/240 volt16" lamp 180 microwatts UVC unit with 5" oxidation lamp

   Intensity willl increase as you get closer to the lamp. Refer to the lamp intensity factor chart.

5 . **Other than the microwatt output, what else determines the lamp's effectiveness?**
   Although the entire UV spectrum is capable of inactivating microorganisms, UVC energy (wavelengths of 200-280 nm) provides the most germicidal effect. UVA (wavelengths of 315-400 nm) and UVB (wavelengths of 280-315 nm) take much more time and need to be closer to the microorganism than with UVC to inactivate it. UVC's peak range is 254 nanometers. Also, a lamp's microwatt intensity increases as you get closer to the lamp, which increases its inactivation of viruses and germs. Refer to our lamp intensity chart as compared to ASHRAE standards and RTI lab results for our compliance to these standards.

6 . **Does it produce any ozone?**
Our UVC light does not produce ozone. For ozone production used for gas phase and odor control you would need to use our 5 inch UVV lamp.

7. **Do the UVC replacement bulbs for the RM and FM units come in different sizes?**
Yes. 7", 12", and 16"

8. **Do you need a transformer with it?**
No. The unit auto-regulates the voltage and can accept ranges 110-240 Volts AC.

9. **What is the warranty?**
Lifetime warranty on the ballast. Two year warranty on the lamp.

LIFETIME WARRANTY

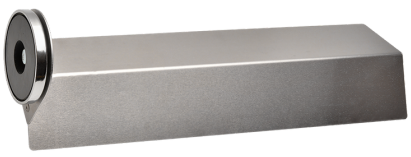
10. **In a package unit, can the UV light be exposed to elements?**
It can be used internally inside a package unit, but it can't be exposed to elements.

11. **Can UVC energy be damaging to certain coatings and surfaces?**
Yes. Most plastics, wire coatings, flex duct, some plastic drain pans, and pleated filters can be damaged with exposure to UV light. It is always best to check with equipment manufacturers on any coating that is used on coils.

12. **Can it be used in a mini-split?**
No. Although UV lamps with the correct microwatt output and UVC 254 nanometer wavelength are very effective for germicidal control and bacteria/virus inactivation, they will also damage the plastic housing of a mini-split. LED lights promoted for this purpose do not have enough microwatt output to be effective as a germicidal lamp, hense they will not damage the plastic housing. So in the LED case it would be promoting an ineffective UV application.

13. **Do you have ways of protecting UV intensity from equipment?**
Yes. Our optional shields.

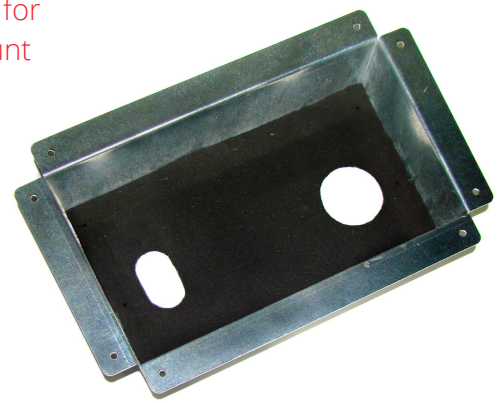
500484
Reflector Plate for all UVC lamps



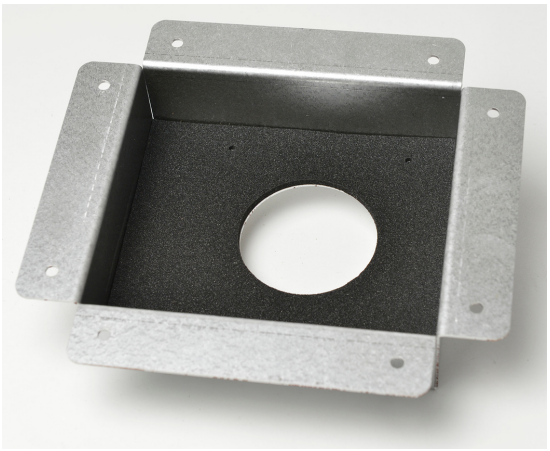
500484-MAG
Reflector Plate with magnet for all UVC lamps

14. **Are there mounting plates for installing on duct board?**
Yes.

500423FM-OS
Offset Duct Board Adapter Plate for FM fixed mount units



500423-OS
Offset Duct Board Adapter Plate for RM remote mount units



15. **What is the lamp lifespan?**
18,000 hours or two years.

16. **Does the UV system need to be cycled on and off or does it stay on all the time?**
If it is a UVC only unit, then it doesn't have to cycle it on and off with the fan, nevertheless it is designed to cycle on an off if need be. If the UV system has both a UVC lamp and a 5" ozone lamp then the system must be cycled with the fan. There is an optional current sensing relay as well.

FCS003
Current Sensing Relay

For product training, please visit *DynamicAQSTraining.com* and login or sign-up to start learning!

If you have technical questions regarding our products, please contact your Dynamic IAQ Regional Manager