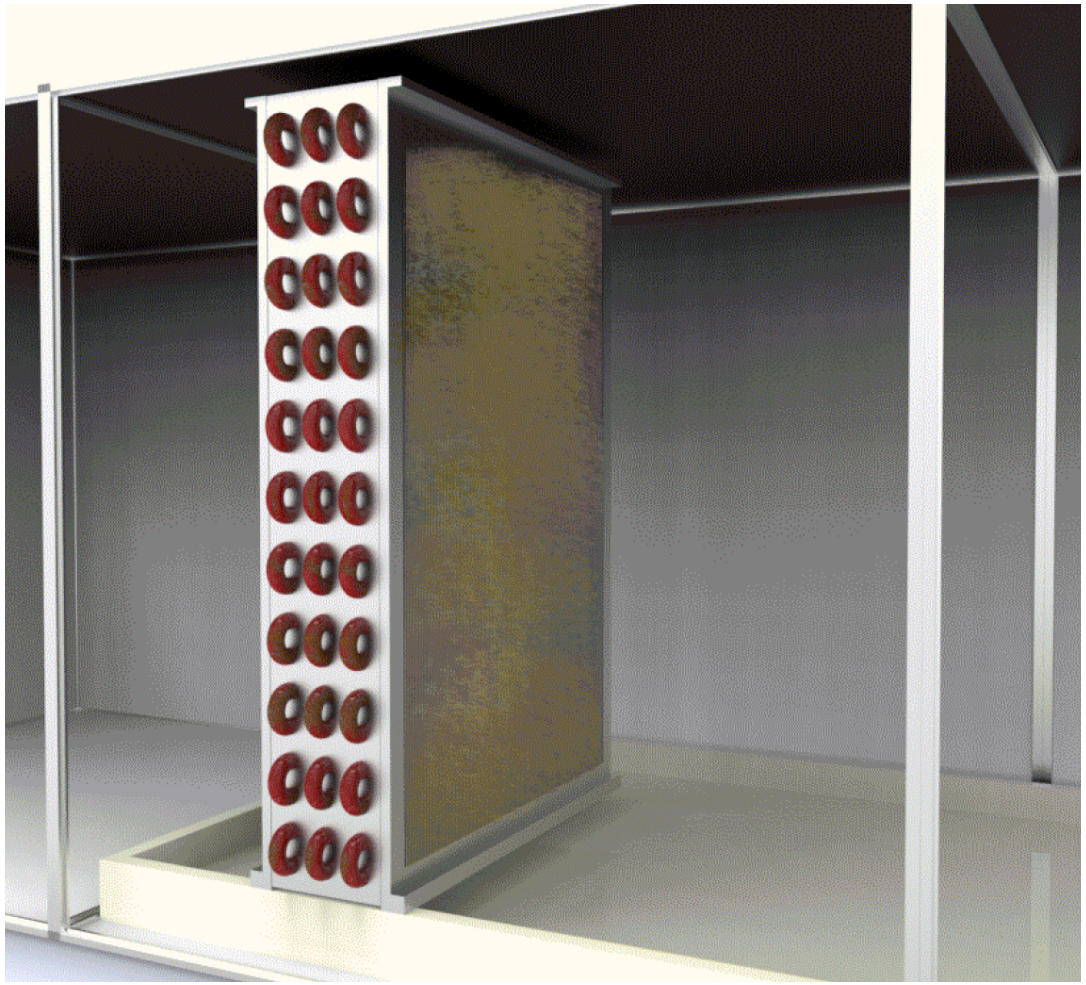
What happens inside HVAC Systems ?



Air recirculation, temperature fluctuations and humidity allow microorganisms to combine with each other in complex ways and settle all over surfaces inside the AC system in the form of an unpleasant **biofilm**.

This biofilm adheres particularly in between the fins of heat exchangers (coils), it settles in water collection tanks and clog the filters in the ducts.

A biofilm less than .5 mm can reduce system efficiency up to 40%.

What happens inside HVAC Systems ?

LIGHT PROGRESS

- Proliferation of **BACTERIA**, **VIRUSES**, **PATHOGENS**, **SPORES MOULDS**, etc.
- AC system inner surfaces are covered by an unpleasant **BIOFILM**
- Coils and filters are **CLOGGED** and loose their efficiency
- Maintenance interventions with **CHEMICAL** are frequent and necessary

Benefits of using

LIGHT PROGRESS

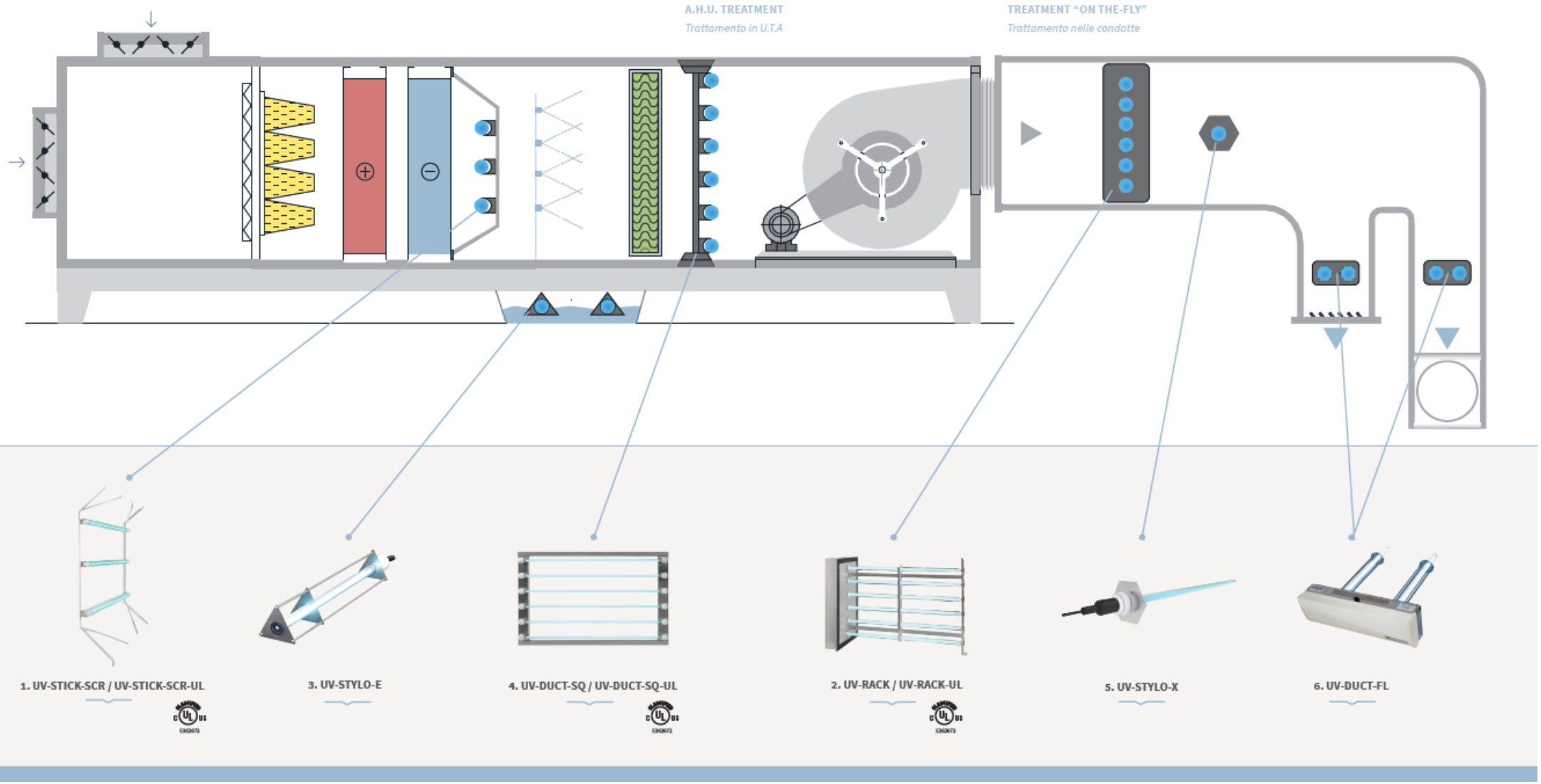
devices

- HEALTH
- ECOLOGY
- COSTS

What are LIGHT PROGRESS devices designed to improve Indoor Air Quality and comfort ?

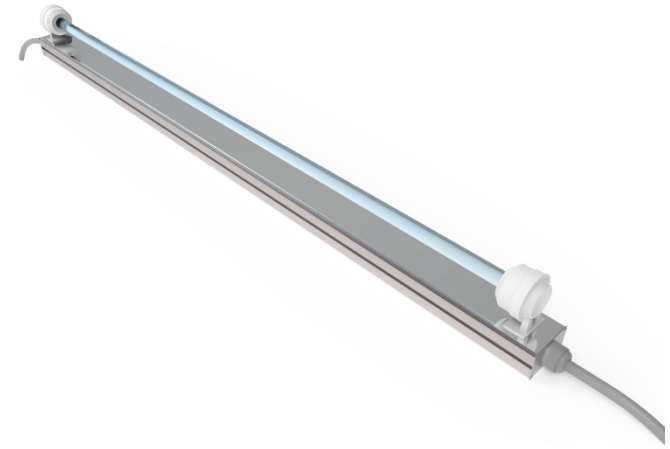
LIGHT PROGRESS

Application Scheme

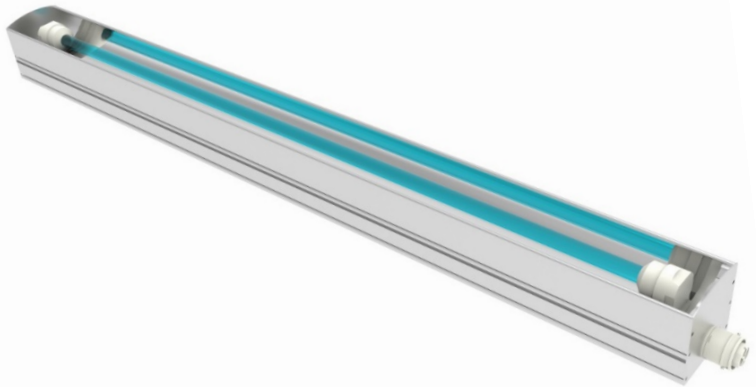


LIGHT PROGRESS

UV-STICK-SCR



UV-STICK-AX…SCR
Aluminum body + plain Reflector



UV-STICK-AL…SCR
Aluminum + Parabolic Reflector

UV-STICK-NX…SCR
Stainless Steel body + plain reflector

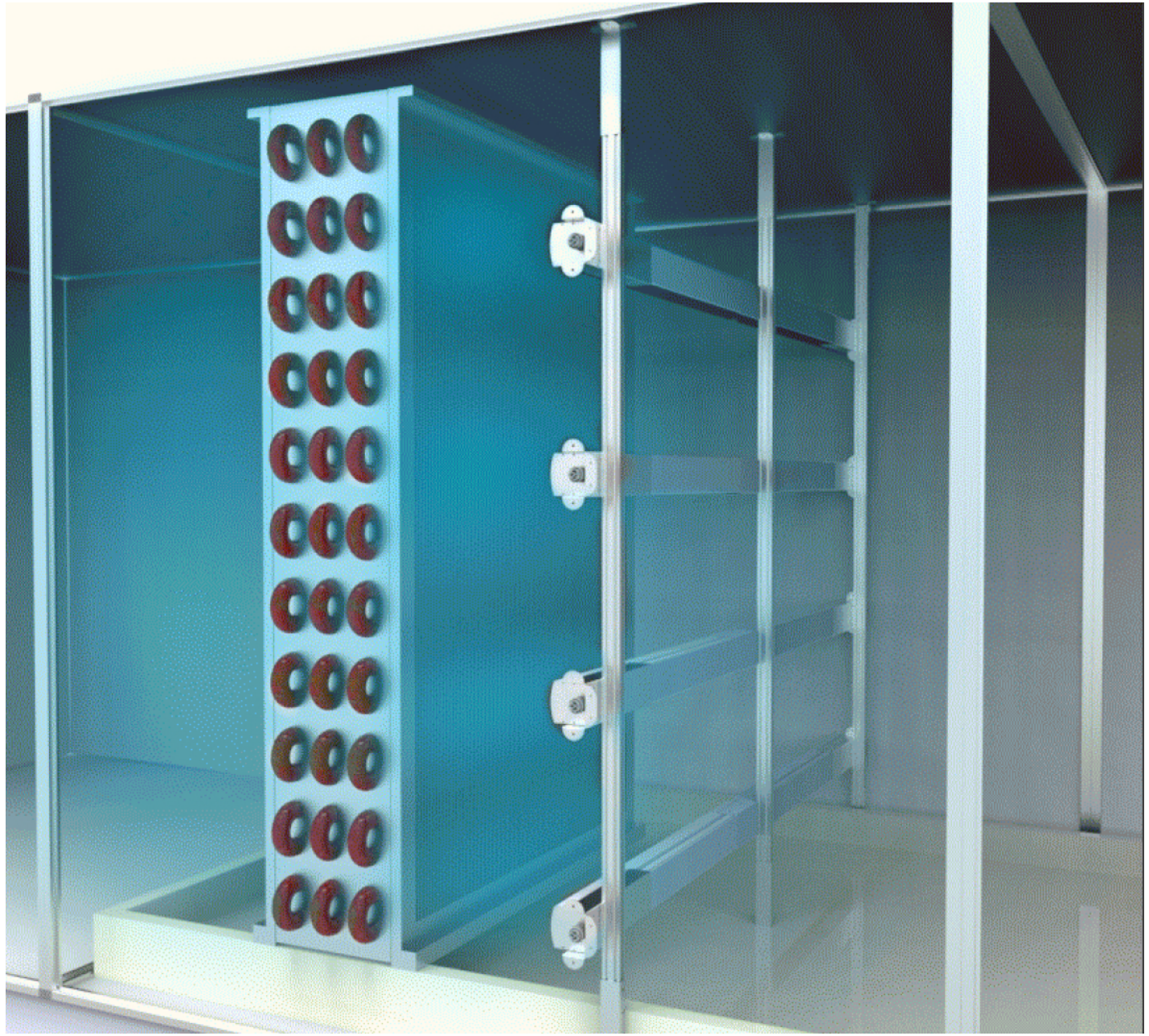
Specific for Coils treatment, it avoids settling and proliferation of Biofilm on the surfaces.

Special mirror bright reflector to increase UVGI power.

If sized correctly it can be used also to treat air at each passage.

Available in SS or Aluminum.

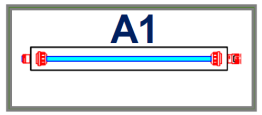
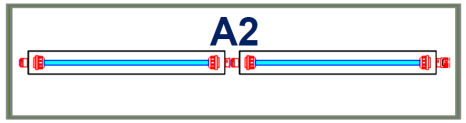
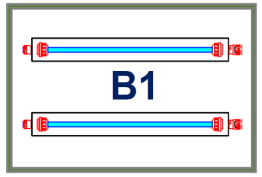
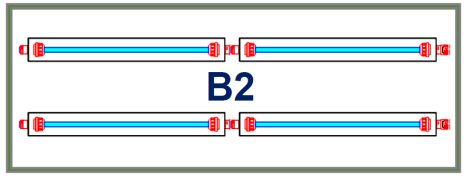
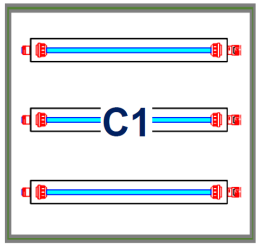
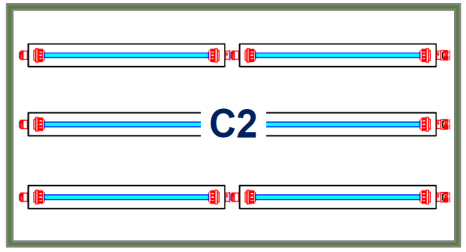
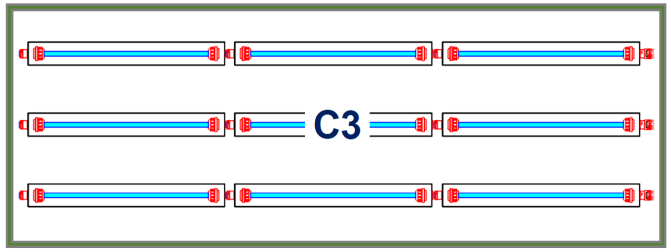
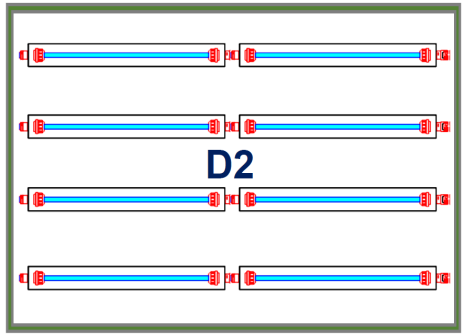
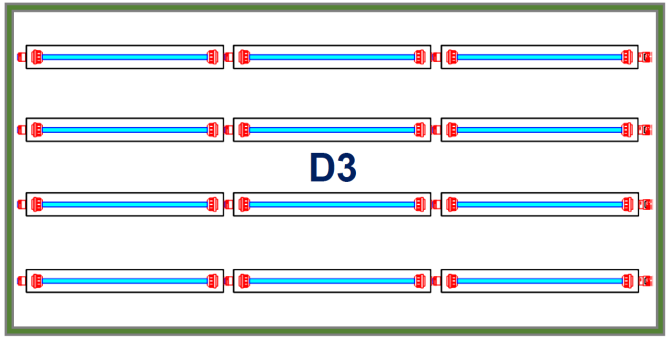
Ballast on-board.



UV-STICK-SCR

Mounting kit is provided to fit every AHU, UV-STICK-SCR is very flexible and easy to apply, the serial connection of more than 10 devices allows you to switch ON all the systems, through 1 single power supply cable.

Signals and alarms can be checked on a control board.

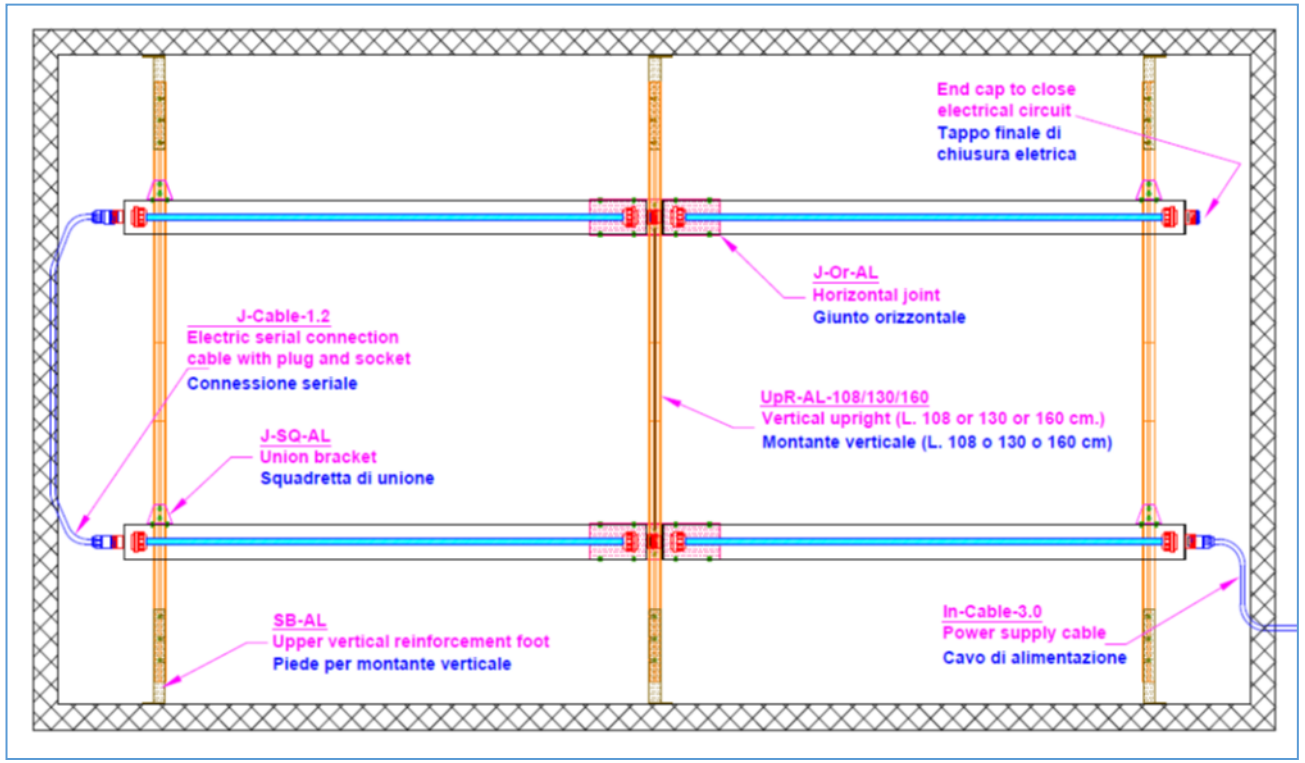
N° FILE / Altezza (interna UTA) \ N° COLONNE / Larghezza (interna UTA)	1	2	3
A			
B			
C			
D			

We designed 9 different **application layouts** to fit all common AHU sizes.

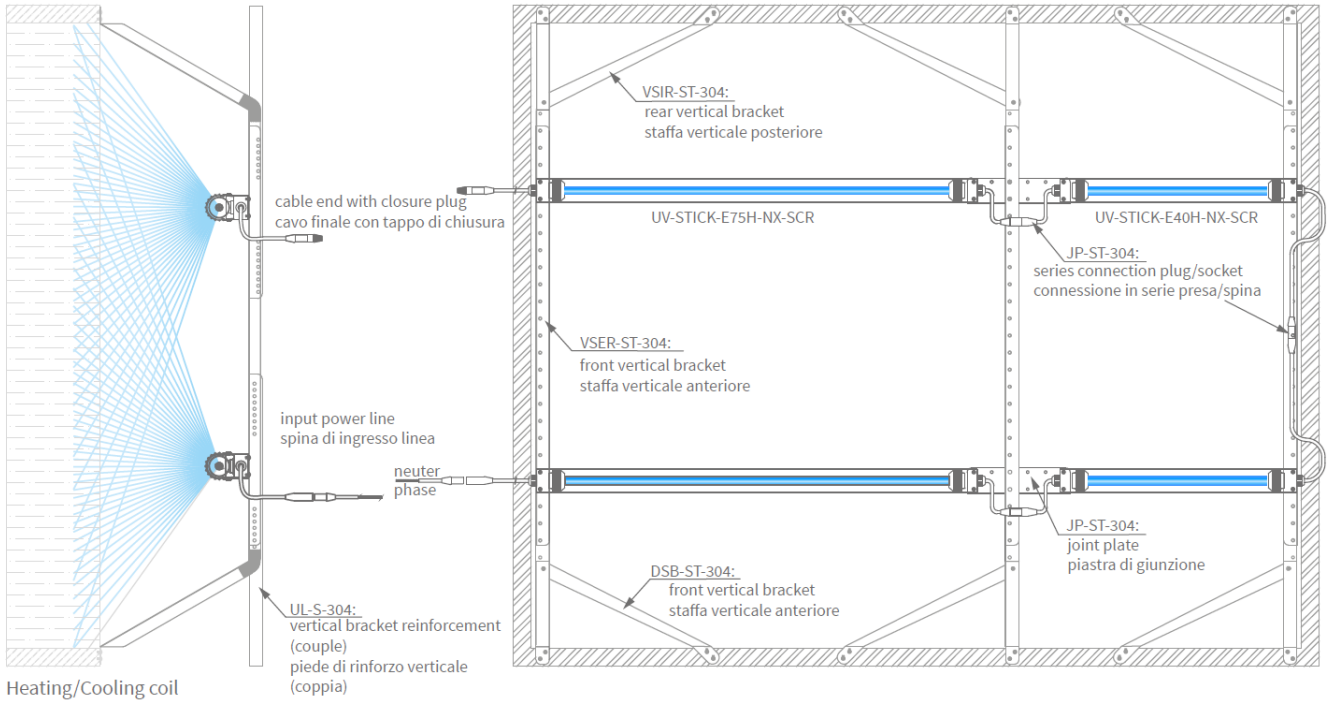
These solutions **include also the mounting kit** to install the devices on AHU walls;

The 9 different kits have different options to fit the systems inside AHU's

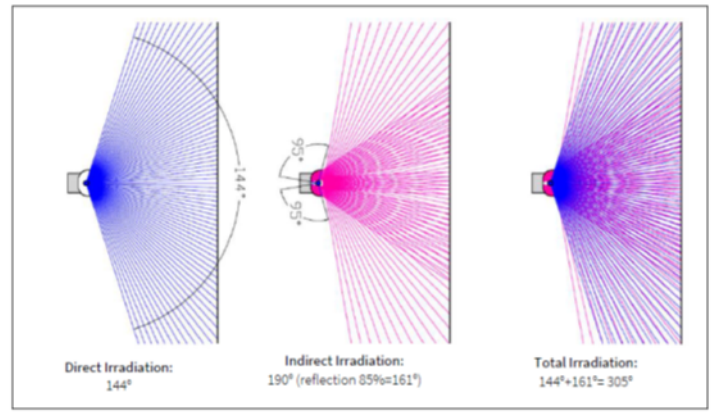
On the AHU's wall = include vertical uprights.
It is easier to apply; devices are linked inside the AHU only on AHUs' floor and ceiling.



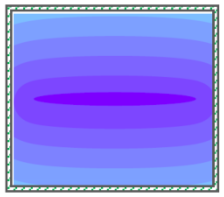
Directly on the coil frame = This solution provide less pieces, but the fixing phases could be more complicated, (especially in small AHUs);



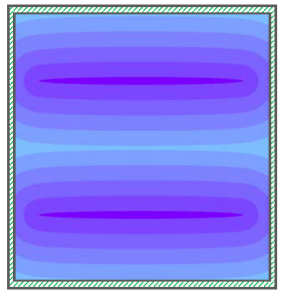
Reduction 99%		
	Aspergillus N.	Legionella Pn.
1	6 min.	12 s
2	7 min.	14 s
3	8 min.	16 s
4	9 min.	18 s
5	10 min.	20 s
6	11 min.	22 s
7	12 min.	24 s
8	13 min.	26 s



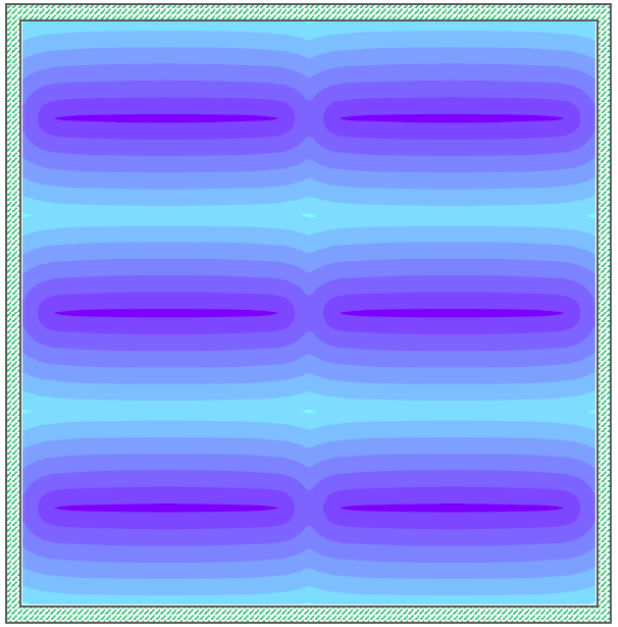
IRRADIATION MAP: this simple schema show you the distribution and intensity of UV-C rays toward the coil, even though you can reach 99% of microbial load reduction within seconds/minutes, always remember that UV light has to be always turned ON while Air Conditioning System is working!



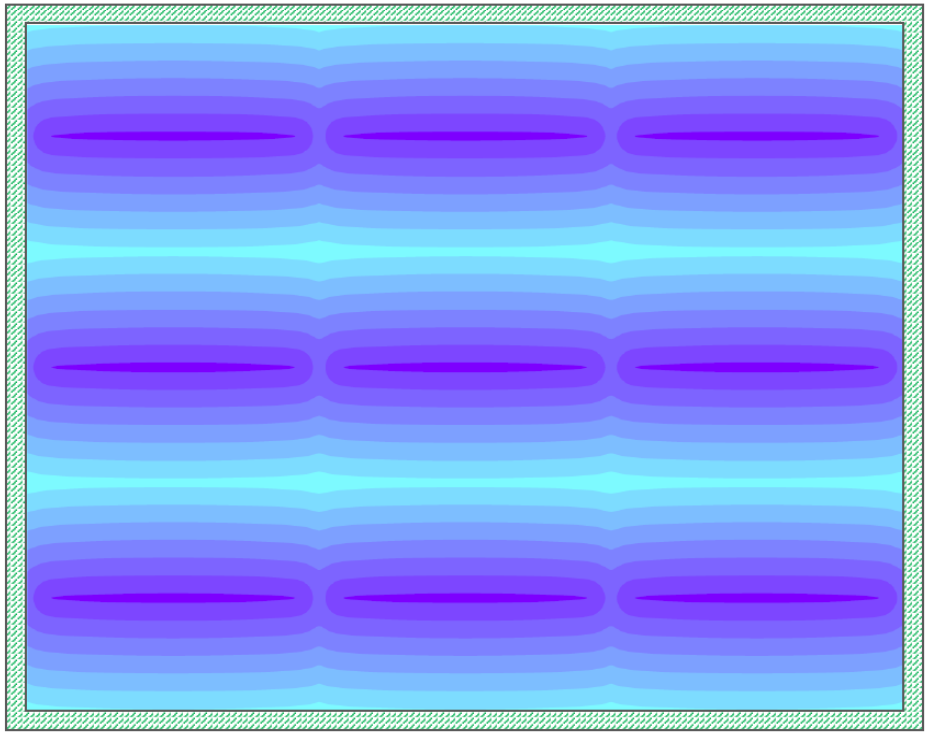
A 1



B 1



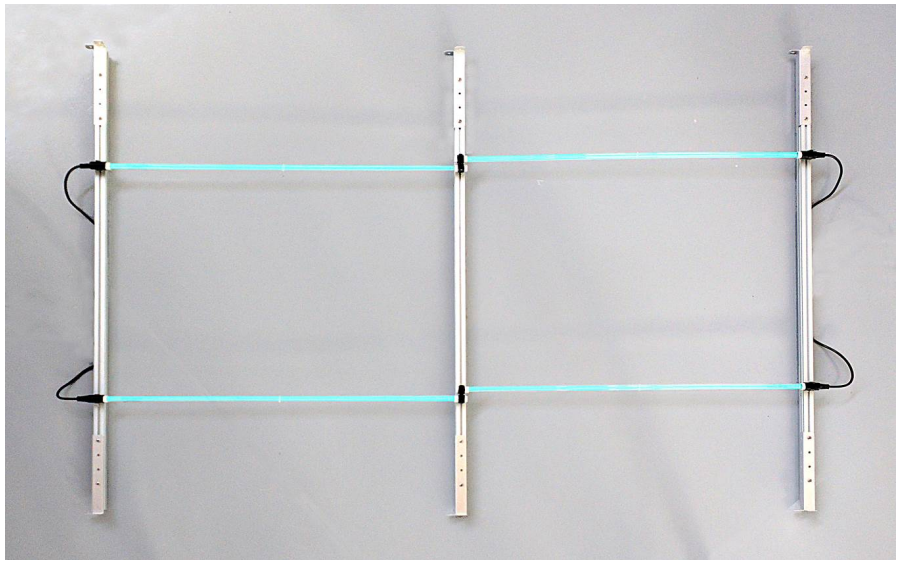
C 2



D 3

LIGHT PROGRESS

UV-FCU



UV-FCU + KIT
special application in AHU

UV-FCU
Fitted in a Fan Coil Unit

Simple and basic system for a AHUs low cost UV solution.

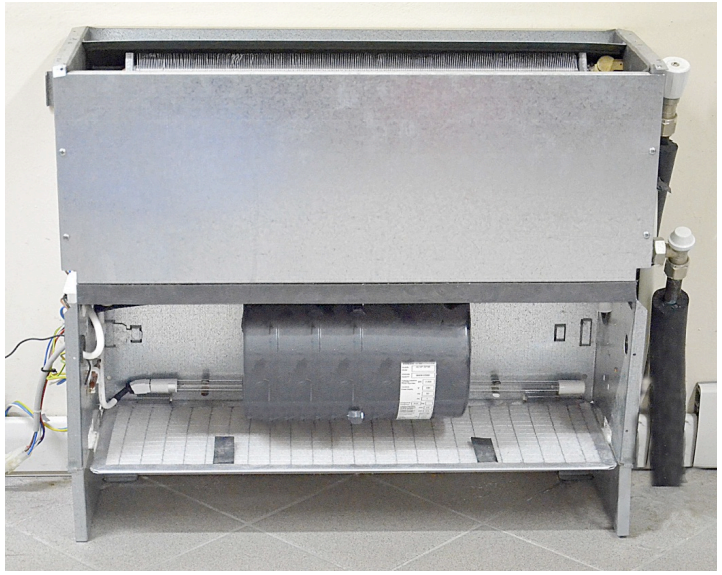
Each system includes ballast, lamp, clips.

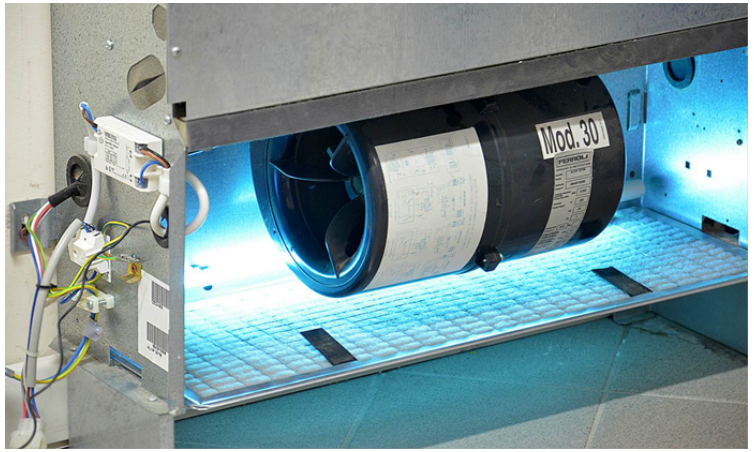
360° irradiation

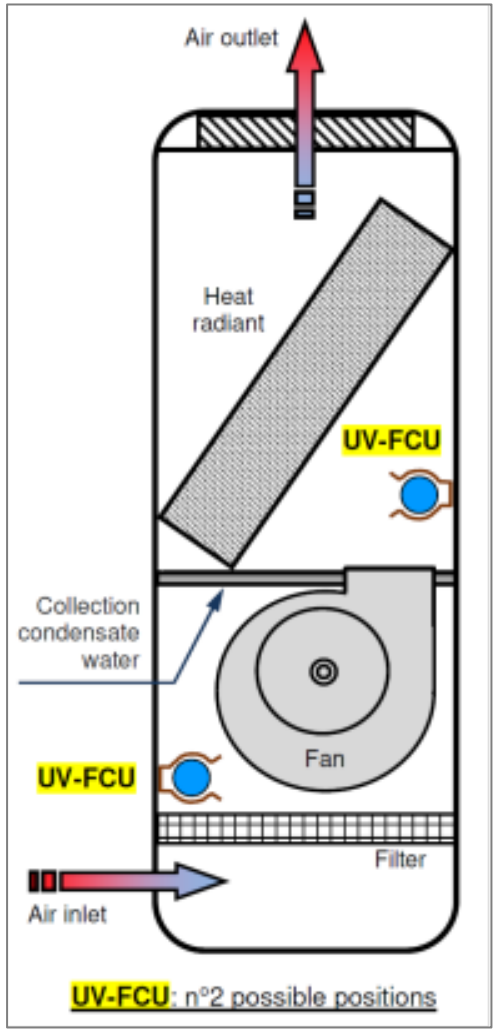
Available in many different length.

Ballast easy to link

CE RoHS 2002/95/EC

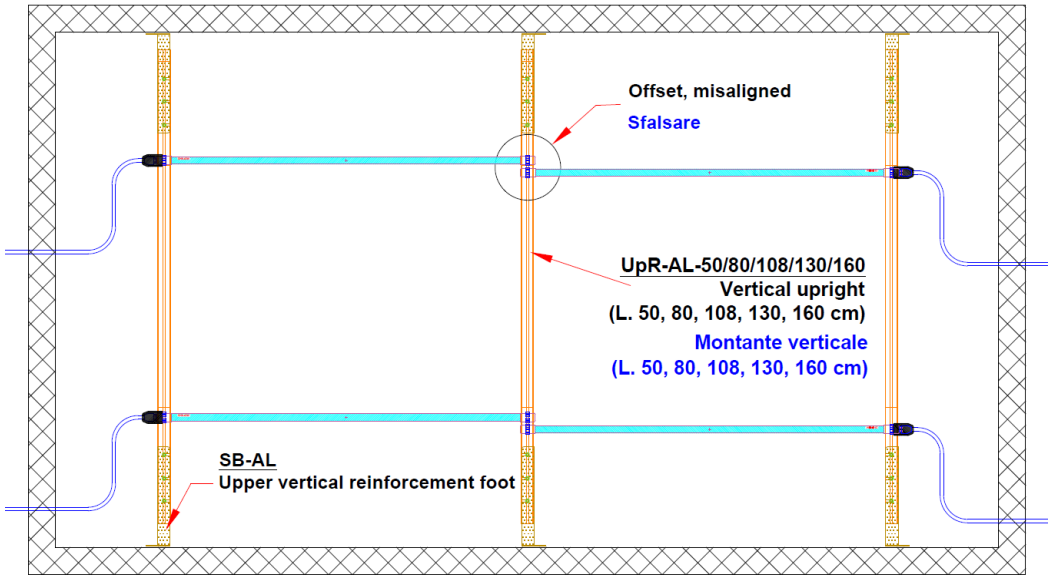


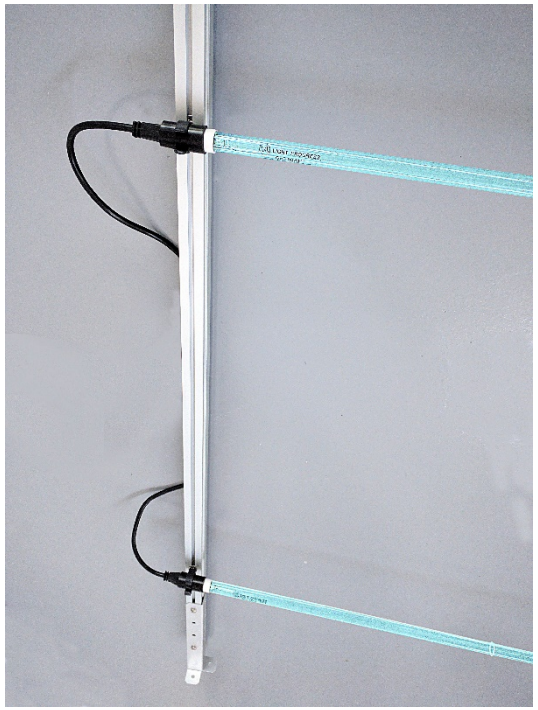




The perfect spot to apply UV-FCU-CL is the space between fan and heat/cooling battery.
The installation is easy, you can also apply it on fan already installed and working (retrofit on existing systems).

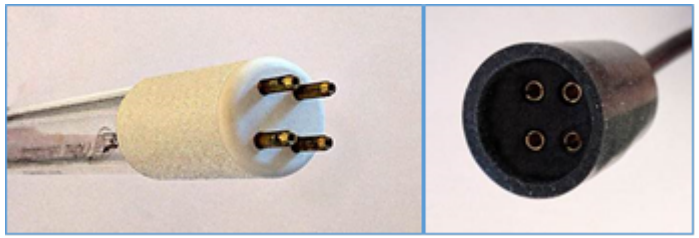
The power supply to power up the system is compact and is equipped with a special connection plug/socket that simplifies the lamp replacement. We suggest to apply it on the fan coil side and power it using the primary electrical connection used by the fan.





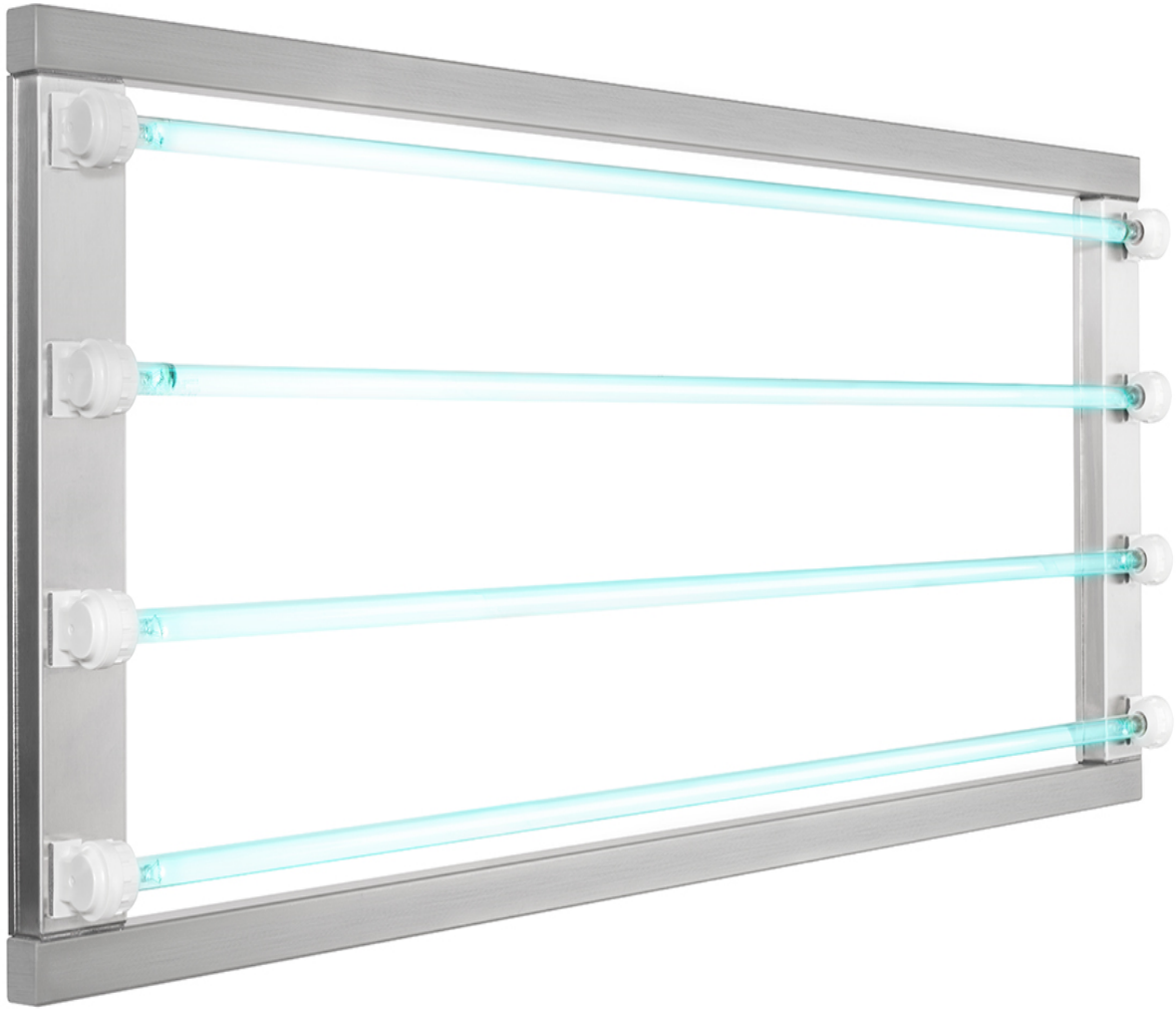
The easiest way to apply UV-C light inside AHU, a basic system to treat coil, filters and other internal surfaces inside AHUs.

Clips are provided with the system; in this way you can practically install the lamp on the mounting kit and then connect it through the quadri-pin plug to the ballast. Now you are ready to power up !



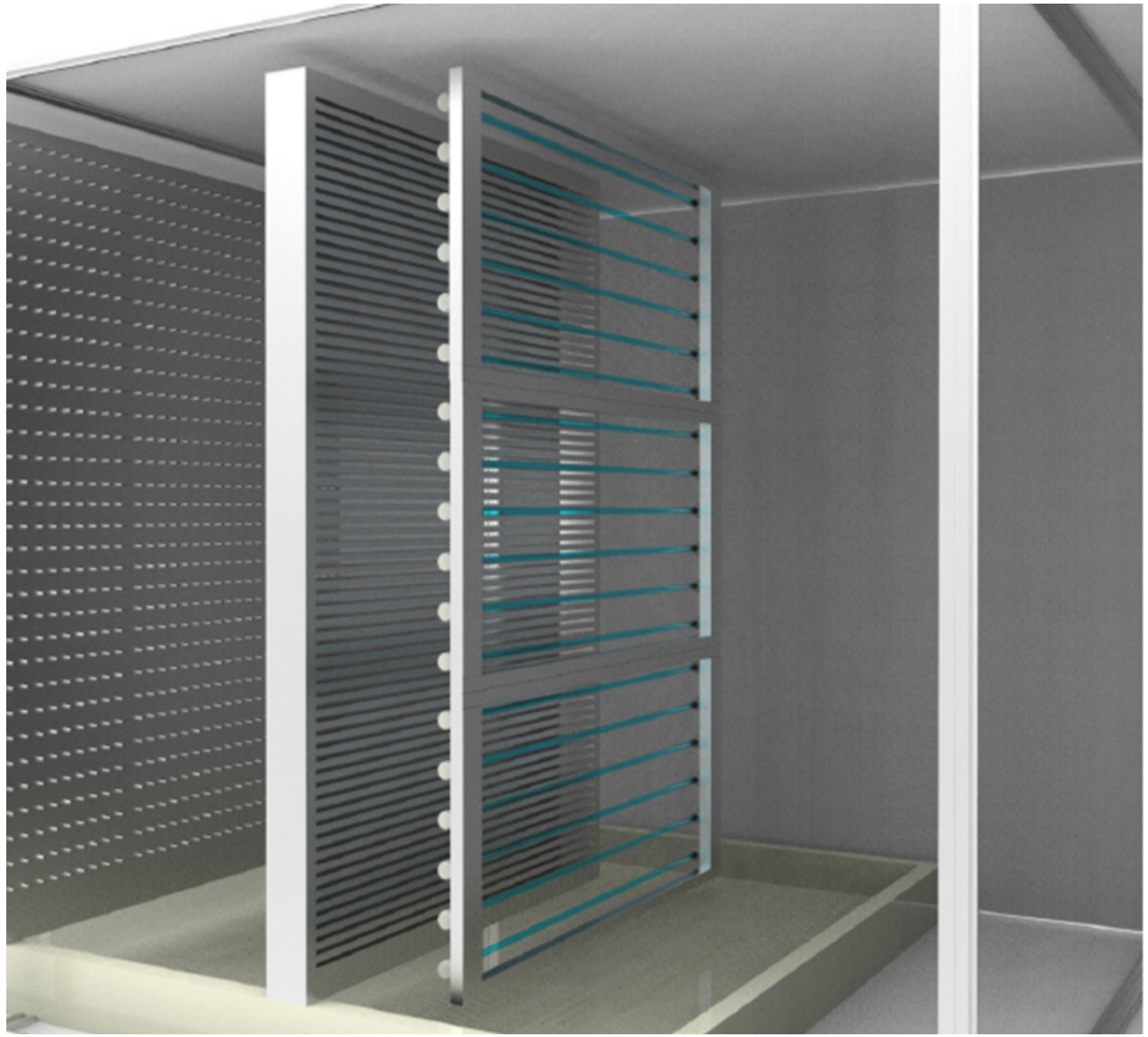
LIGHT PROGRESS

UV-DUCT-SQ



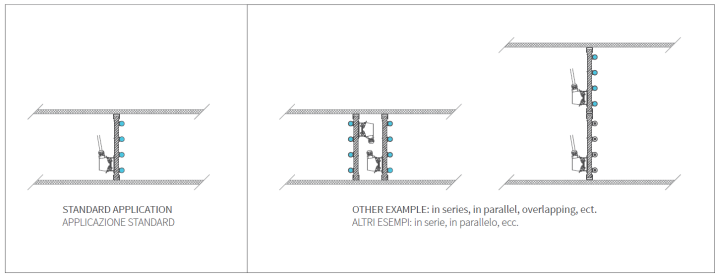
Square-grid device, the distance between lamps has been designed and can be sized to treat the air, beside internal surfaces constant disinfection.

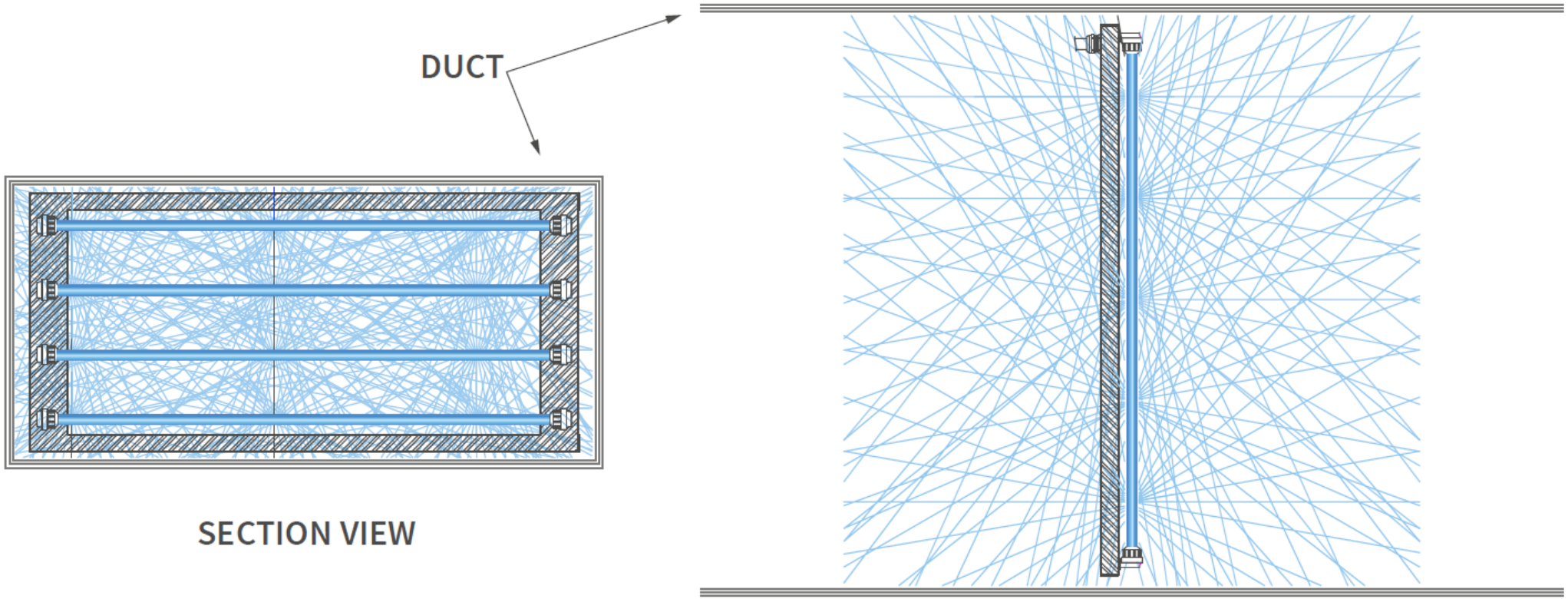
Signals and alarms can be checked on the control board, where ballast is also located.



UV-DUCT-SQ

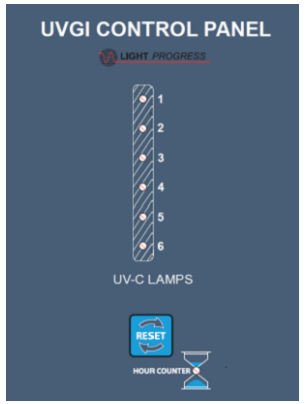
UV-DUCT-SQ has been designed to adapt to different sizes and ducts sections, placing one device to cover the surface or matching more devices together side-by-side, one on the other (overlapping), in series, etc. using scroll-in “U”profile, like filters or its original mounting kit with adjustable sizes.





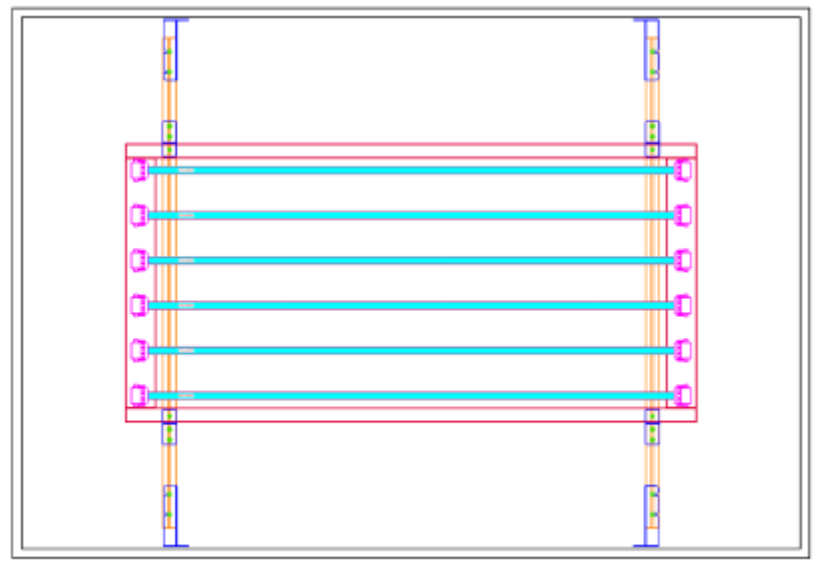
SECTION VIEW

TOP VIEW

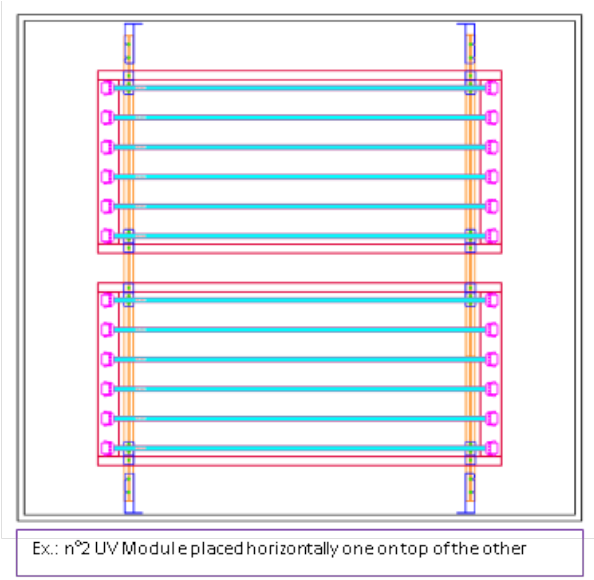


One device, endless solutions.

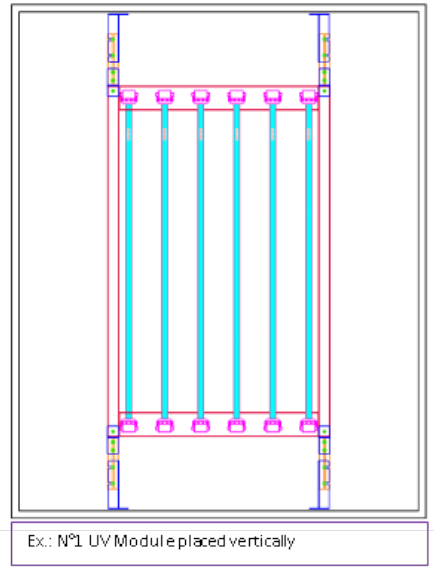
Simple control board to let you have all under control.



Mounting Example: n°1 UV Module placed horizontally



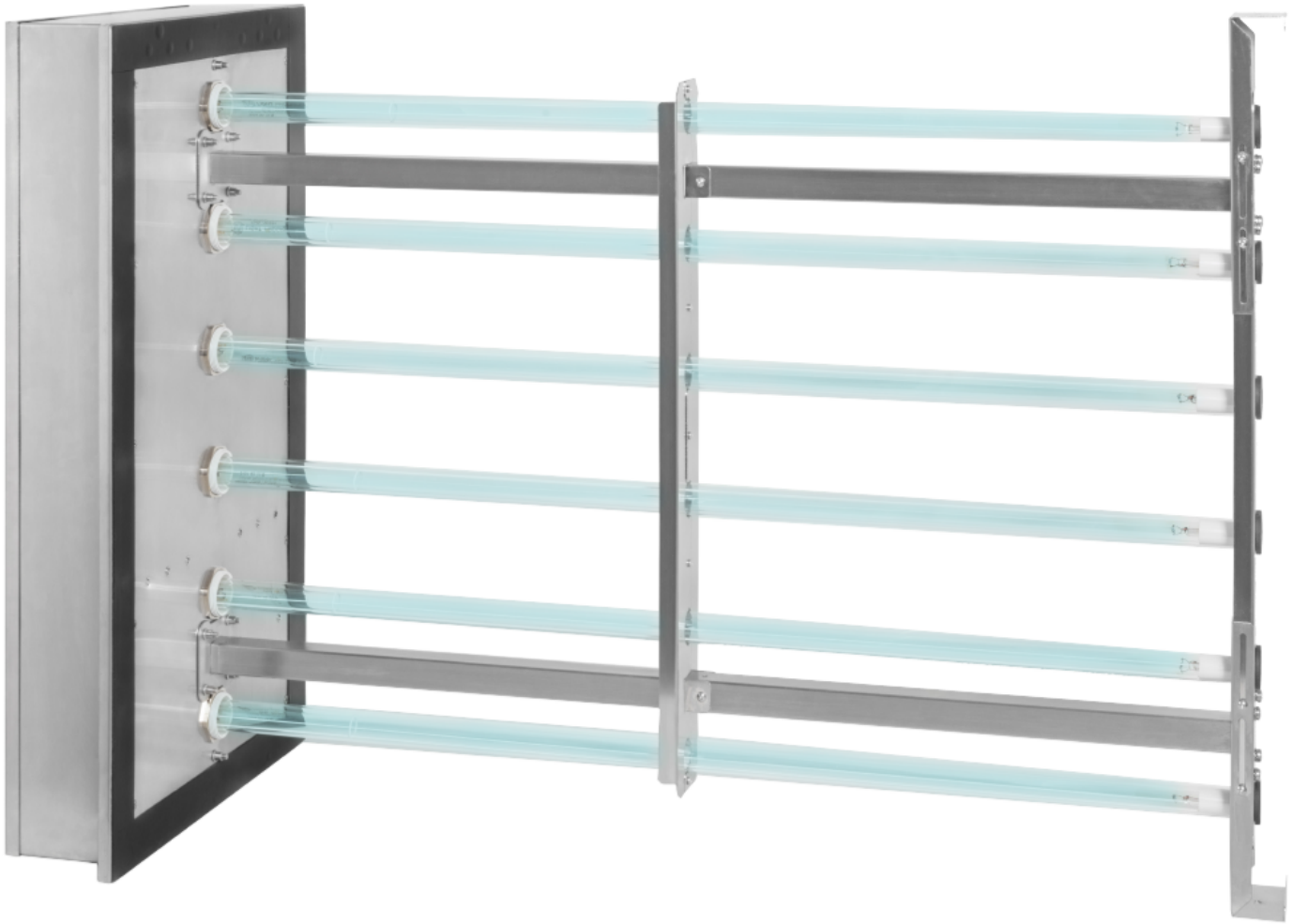
Ex.: n°2 UV Module placed horizontally one on top of the other



Ex.: N°1 UV Module placed vertically

LIGHT PROGRESS

UV-RACK



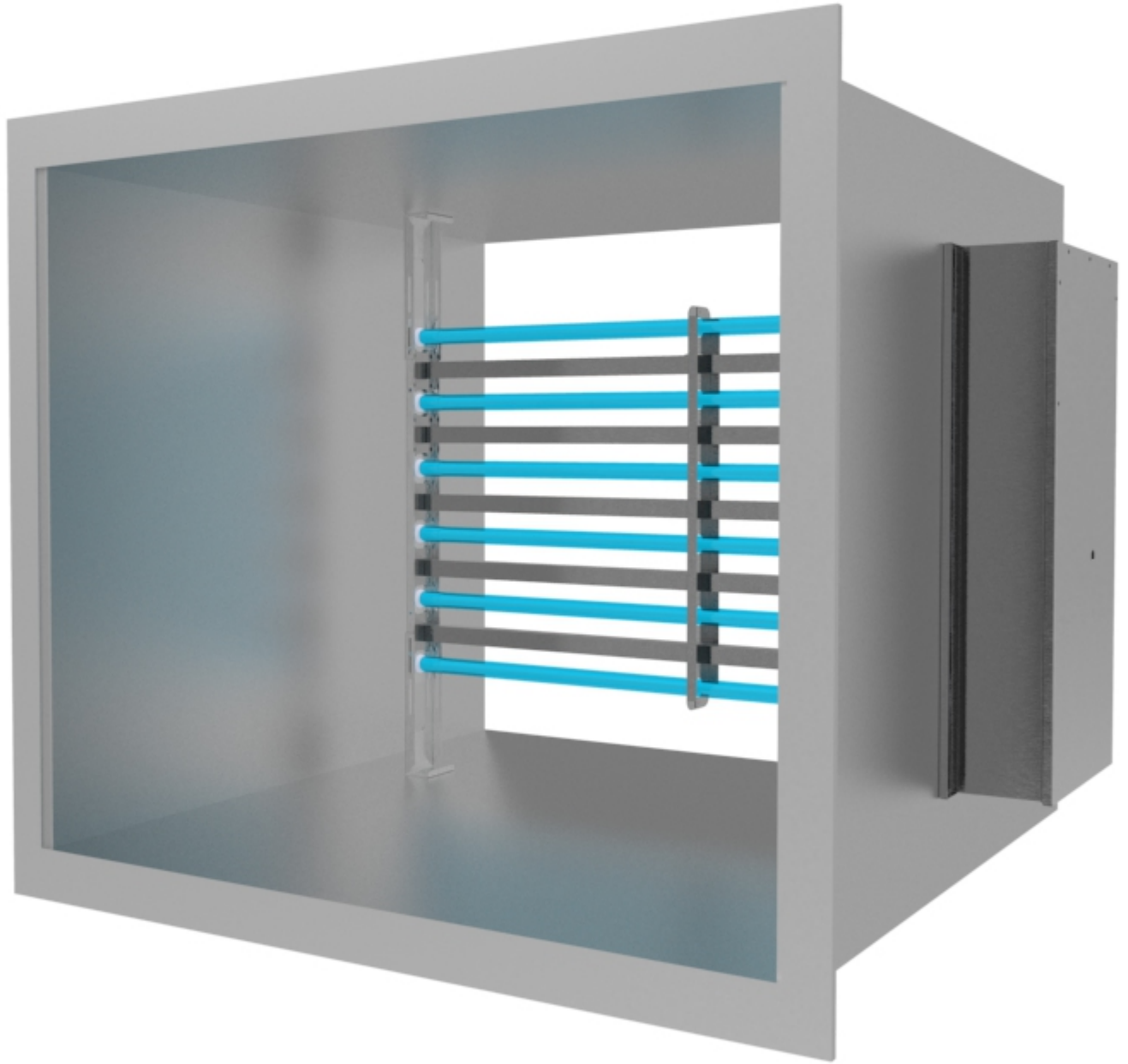
Designed for in-duct air treatment, it may be applied inside final AHU portion to sanitize surfaces, too.

Adjustable feet to fit duct sizes

Ballast on-board.

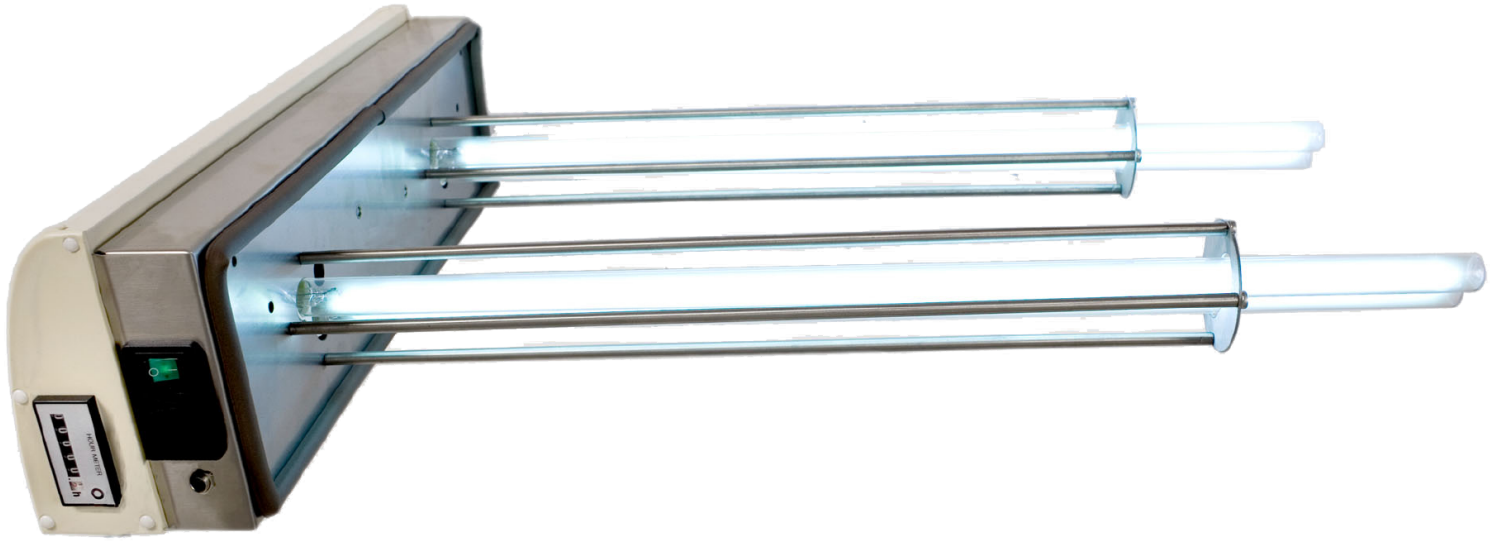
UV-RACK

UV-RACK has been designed to adapt to different sizes and ducts sections, it is very compact, and its installation requires just a few simple steps: insert the lamps within the air duct through a cut and screw UV-RACK case on the external channel wall, and you’re done!



LIGHT PROGRESS

UV-DUCT-FL

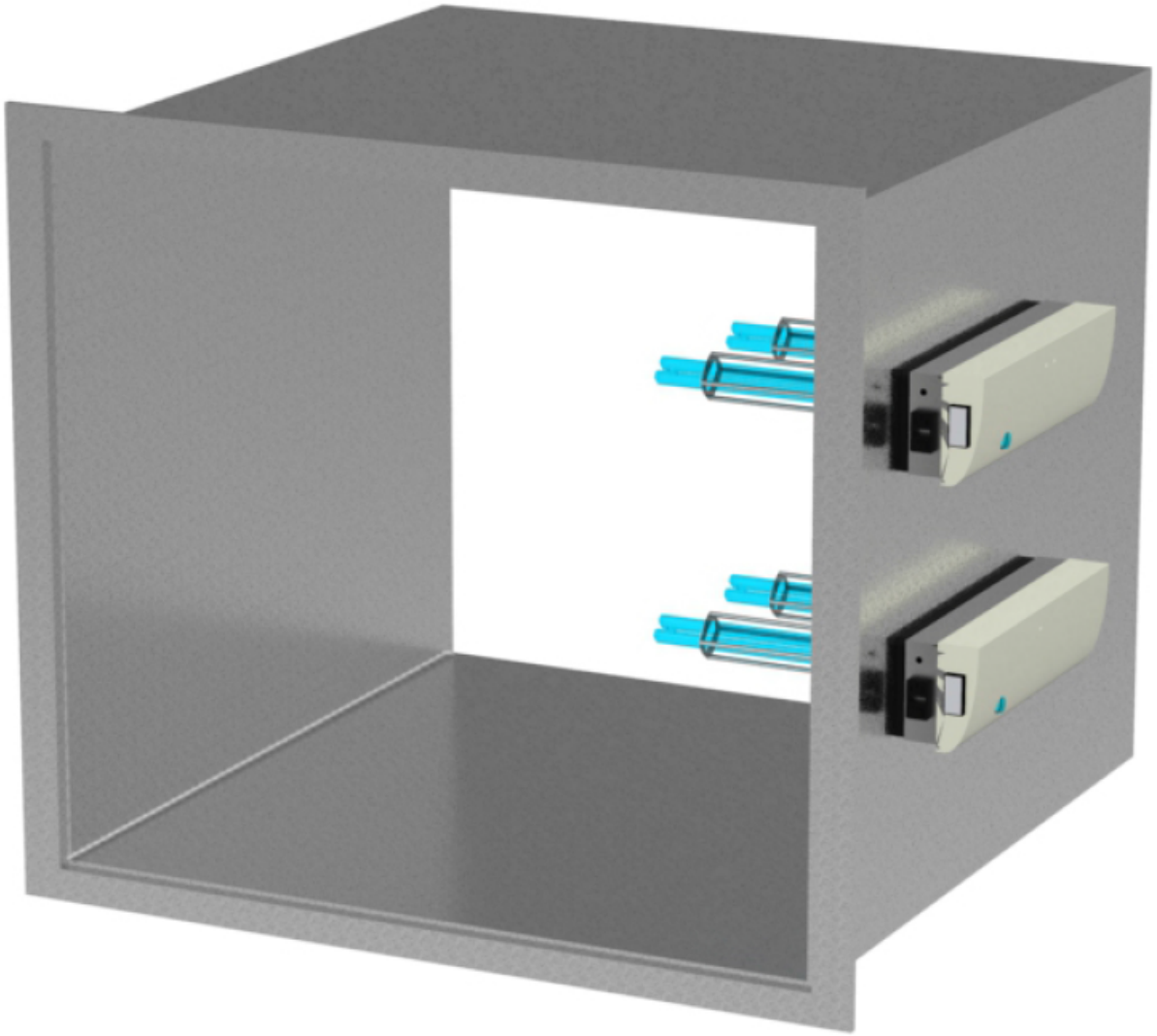


Designed for in-duct air treatment, it can be applied inside final AHU portion to sanitize surfaces, too.

Fits in small spaces, even for retrofit applications.

Ballast on-board.

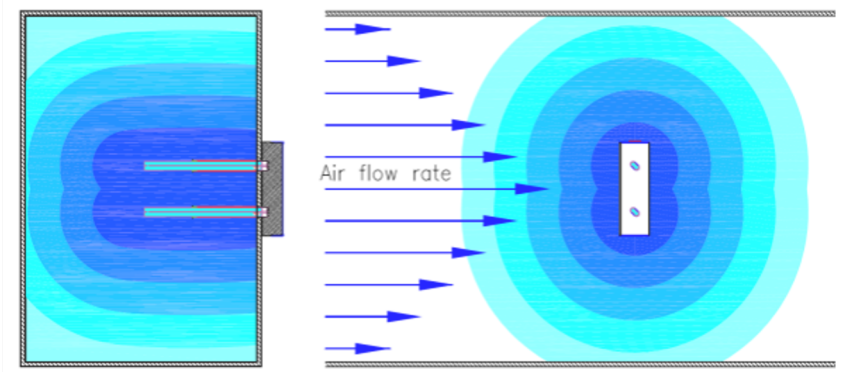
CE RoHS 2002/95/EC



UV-DUCT-FL

Its installation requires just a few simple steps: insert the lamps within the air duct through two holes and screw UV-DUCT-FL flange on the external channel wall, and you’re done!

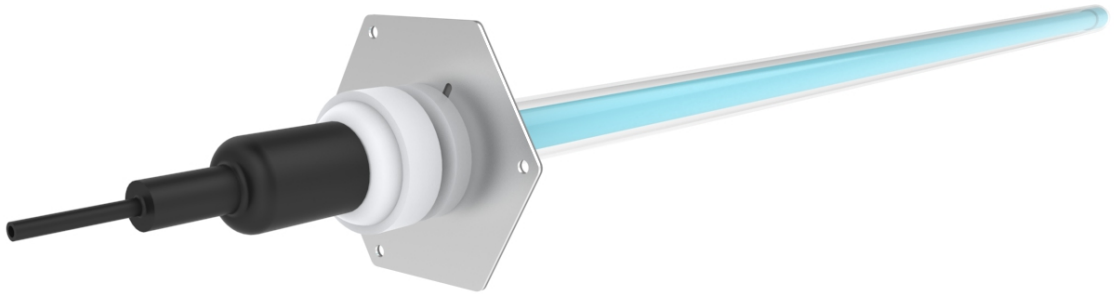
UV-DUCT-FL



Quick and easy installation, directly inside the air conditioning ducts.

LIGHT PROGRESS

UV-STYLO-X

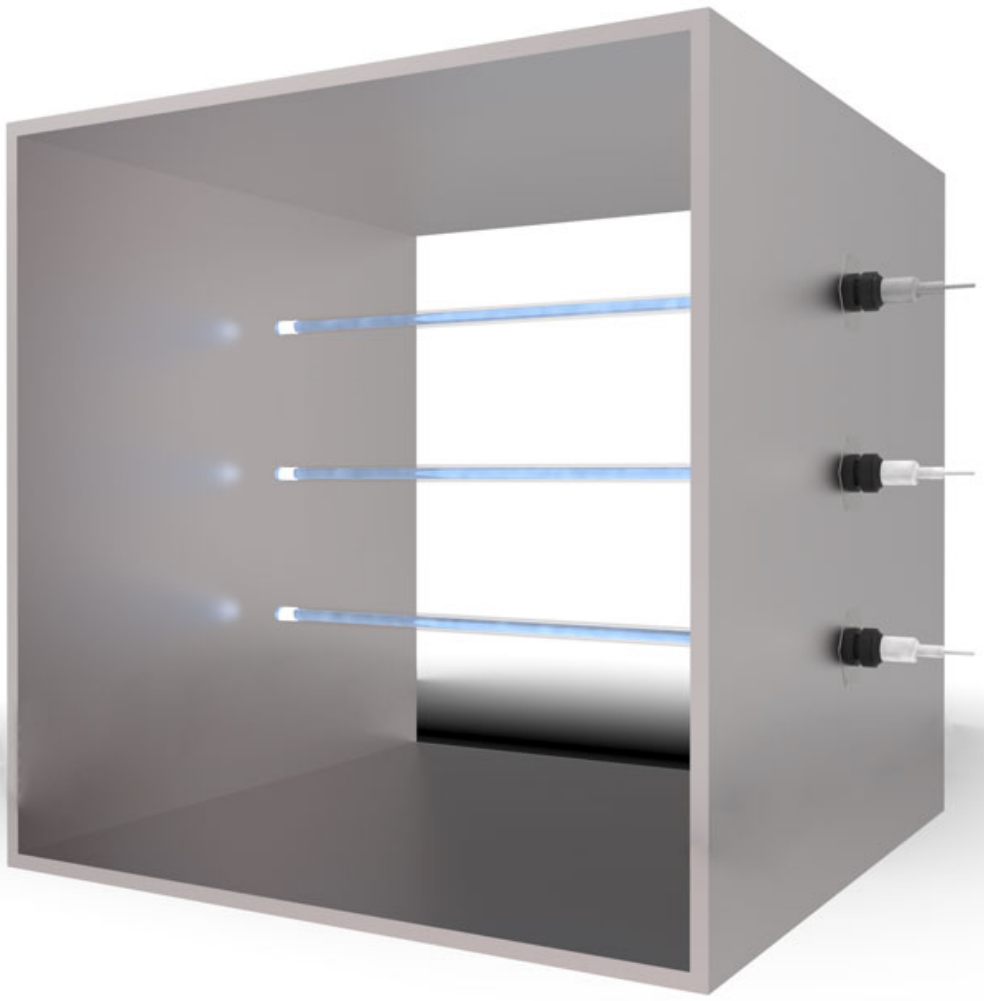


Simple lamp enclosed in a pure quartz sleeve, stainless steeel flange it can be applied anywhere.

Fits in small spaces, even for retrofit applications.

Separated power supply

CE RoHS 2002/95/EC

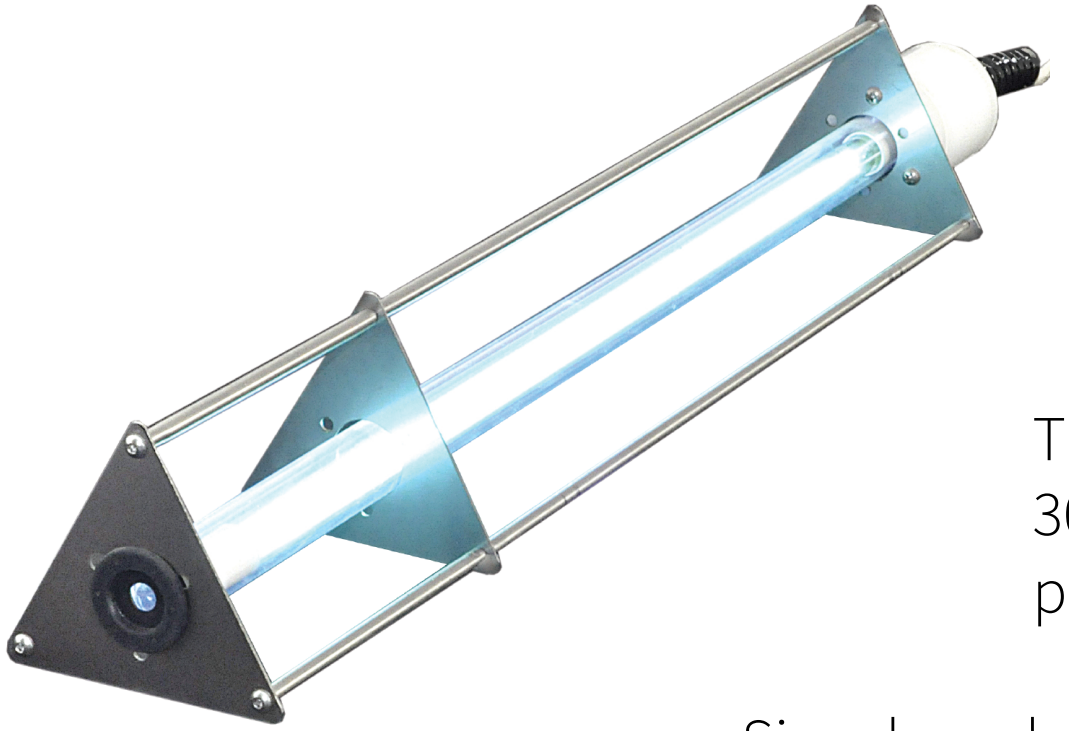


UV-STYLO-X

Its installation requires just a few simple steps, lamp replacement ad maintenance can be done without dismounting the system from the duct.
You can install as many as you want and create UV section in any AC system.

LIGHT PROGRESS

UV-STYLO-E



Installed inside the humidifier collection tanks submerging the device (up to 10 m) or under water splashes.

Triangular frame in stainless steel AISI 304 in which is housed a UV-C lamp protected by a pure quartz sleeve.

Signals and alarms can be checked on the control board, where ballast is also located.

CE RoHS 2002/95/EC