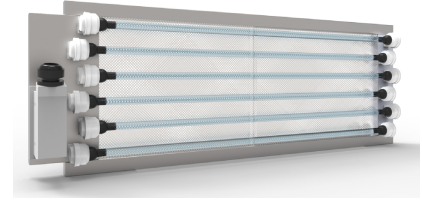


UV-SMELL-SQ

In restaurants or industrial/ community kitchens, during food cooking phases, fats, pollutants and unpleasant smells are generated; this may be disputed by authorities and give often rise of legal issues with the neighborhood. Applied inside kitchen hoods and aspiration systems, UVSMELL-SQ contributes significantly to minimize these problems; fats are carbon and hydrogen compounds, with a structure made of complex chains. If fats are exposed to an intense UV-C irradiation, they absorb part of this powerful energy, and molecules, placed in a higher energy state, become more reactive. For this reason they recombine with oxygen present in the air.



This process causes a particular and immediate chemical reaction, the “cold combustion”. Results of this reaction are organic and odorless short chain gases, such as carbon dioxide (CO₂), water, etc., normally present in air. So the air filtered by UV-SMELL- SQ during normal cooking, reduces the formation and deposits of fat and the consequent risk of fires, limiting also the growth of molds that feed usually on fats.

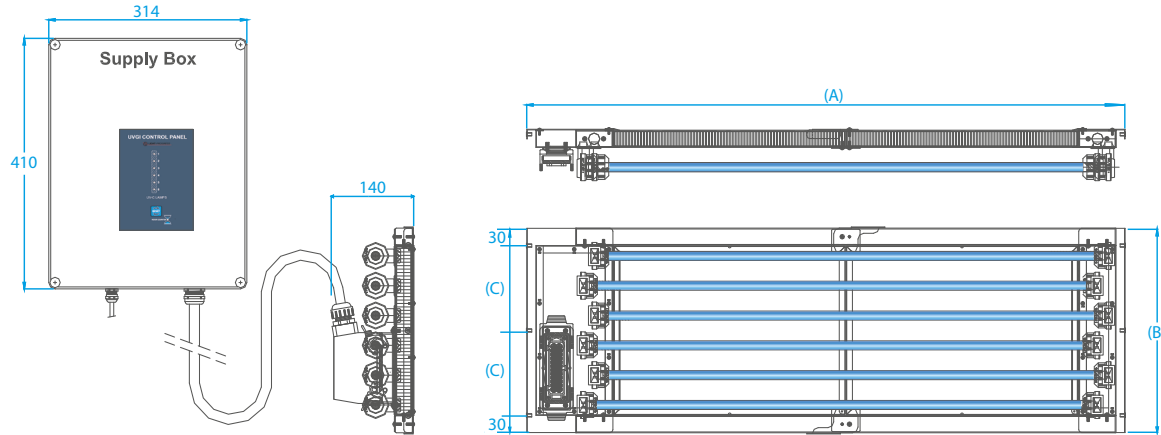
UV-SMELL-SQ reduces the need of aspiration system cleaning and maintenance, extend filters’ life but, more importantly, offers the possibility to work safely. UV-SMELL-SQ uses UV-C lamps and/or UV-C+O₃ (Ozone) lamps, and it is the first device in the market that can handle ozone or ozone-free lamps, alternatively or even combined together, according to clients’ needs. In these kind of applications, UV power is often enough to reach great results, but ozone, persisting in air for few seconds before turning in simple oxygen, maximizes UV-C performances.

Technical data

UV-SMELL-SQ	4/40H (TX)	4/90H (TX)	4/120H (TX)	6/40H (TX)	6/90H (TX)	6/120H (TX)
LIFETIME LAMP UP TO (hour)*	≤ 18.000	≤ 18.000	≤ 18.000	≤ 18.000	≤ 18.000	≤ 18.000
PROTECTION RATING	IP 55					
UV-SMELL-SQ (+Oz)	4/40H-Oz (TX)	4/90H-Oz (TX)	4/120H-Oz (TX)	6/40H-Oz (TX)	6/90H-Oz (TX)	6/120H-Oz (TX)
LIFETIME LAMP UP TO (hour)*	≤ 12.000	≤ 12.000	≤ 12.000	≤ 12.000	≤ 12.000	≤ 12.000
CONSUMPTION (W)	40x4 = 160	90x4 = 360	120x4 = 480	40x6 = 240	90x6 = 540	120x6 = 720
UV-C EMISSION (W)	14x4 = 56	29x4 = 116	41x4 = 164	14x6 = 84	29x6 = 174	41x6 = 246
MODULE DIMENSIONS (mm)	140xAxB	140xAxB	140xAxB	140xAxB	140xAxB	140xAxB
DIMENSIONS (A)(mm)	594	1052	1332	594	1052	1332
DIMENSIONS (B)(mm)	253	253	253	358	358	358
DIMENSIONS (C)(mm)	96,5	96,5	96,5	149	149	149
SUPPLY BOX DIMENSIONS (mm)	314x410x128	314x410x128	314x410x128	314x410x128	314x410x128	314x410x128
WEIGHT(Kg)	5,50	6,00	6,50	6,50	7,00	7,50
MAX AIR FLOW TO BE TREATED (m ³ /h)	1.000 m ³ /h	2.400 m ³ /h	3.200 m ³ /h	1.600 m ³ /h	3.600 m ³ /h	4.800 m ³ /h
PROTECTION RATING	IP 55					

* continuous operation

Technical Drawings



Installation instructions

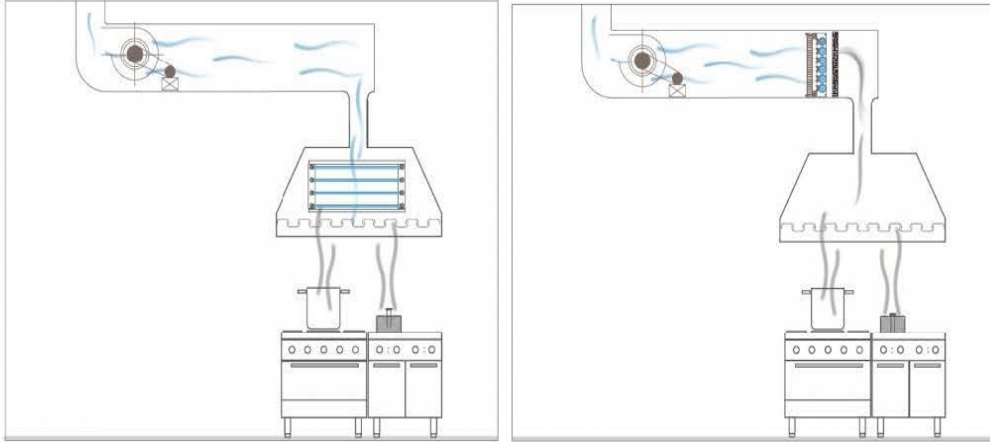
UV-SMELL-SQ is generally placed inside the hood, over the stove and downstream common filters and upstream Carbon filters, but it could be mounted also along air suction ducts. In every case total air flow should pass through UV-SMELL-SQ lamps to reach good results. In this way you can purify the air flow entirely.

UV-SMELL-SQ systems allows you to decide at any time, even after installation, which solution is better for your needs, with or without ozone, considering final results of air quality. This is the only device of its kind that can be equipped with either UV-C or UV-C + ozone lamps. Our technical department designs custom installation layouts for clients' specific needs.



Typical Configurations

CASE 1: air outlet on the chimney

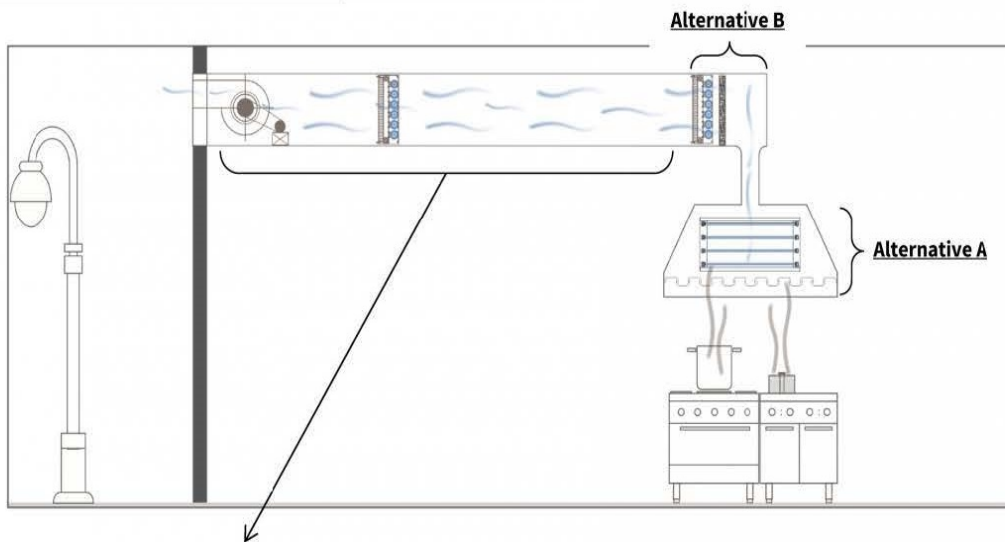


Alternative A: in-hood application

Alternative B: in-duct or plenum application

Common labyrinth, mesh or acrylic filters (in plenum) are ideal to micronize fat particles and help to achieve best efficiency of Light Progress' devices.

CASE 2: air outlet at street level



Longer ducts allow ozone to remain in contact with fats and odours for longer time. This helps either to reduce odours and also the natural re-transformation of ozone into oxygen.

In case you use -OZ systems with air expulsion at street level, it is advisable to apply a second UV system at the end of the line (without ozone), before air outlets. UV rays can eliminate any residual ozone that otherwise could be expelled on the street. As an alternative to the second UV system it is also possible to apply activated carbon filters; filters life is improved by ozone itself because of its cleaning and regenerating action.