Pea Soup RSG Aviator UL

Smoke Detector Testing system



RSG Aviator UL (Ultra Low) specification	
Size (mm)	230 x 620 x 460
Weight (kg)	17
Heat Exchanger Wattage	400w
Chimney wattages	4 x 160w
Particle size (micron mmd)	0.2—adjustable
Operating pressure (bar)	0-3.5
Power supply standard	110v, 50–450 hz

The Pea Soup RSG Aviator UL is a specialist variant of the RSG Aviator, optimised to produce extremely smooth, very low output of thermally buoyant, non toxic, non contaminating smoke to assist in the testing and installation of the latest series of "smart" smoke detectors, replicating closely the smoke type typically produced by a smouldering fire. It will operate from conventional 110v mains supply or an aircraft power supply.

Unlike conventional water based smokes, the smoke produced by this system is resistant to extremely high temperatures. The unit incorporates a thermal chimney with 4 independently switched 160w air heaters, into which the smoke is introduced. The air within the chimney rises, carrying with it the temperature resistant smoke and an effective, repeatable and consistent thermally buoyant smoke effect results which will activate ionisation, optical, beam and aspirating smoke detectors. The smoke output is fully controllable, from a wisp of smoke to a large plume. The typical particle size of 0.2 micron mmd is optimal for such smoke detector work, although the UL model incorporates a precision micrometer valve with a vernier scale adjusting the amount of chemical being introduced into an inert gas stream, in effect adjusting the smoke density / particle size. The vernier scale allows for previous settings to be repeated with accuracy.

The standard RSG Aviator UL incorporates a stainless steel through tube which allows smoke generation directly through the chimney if required and the attachment of 50mm flexible ducting so that it can be used as a conventional smoke generator as well.

Other options include:

- Uprated Chimney heaters (1kw) with remote operation of power output 0-100%
- Heated Oil Tank—for optimum viscosity control of the smoke chemical
- Instant Smoke on / off option
- PLC touch screen remote with adjustable smoke on / off periods

All RSG smoke systems incorporate

- Solid State Switching of heat exchanger with TCO
- Inert gas carrier purge
- Low voltage remote operation
- Trace heating of oil reservoir
- Machined heat exchanger chamber
- PID microprocessor control





