

Barrel Room Humidifier

APPLICATION

Designed for barrel rooms, the Sentinel 5850 offers effective humidification without wetting, and no need for water softening or other treatment before fogging. It's a complete solution to barrel room fogging needs.

The Sentinel 5850 has three components:



Nozzle



Control Module



Blower

FEATURES AND BENEFITS

Nozzle

Atomizes water into tiny droplets for evaporation. Fogmaster's unique vortex nozzle uses turbulent low pressure air (3 psi) to do the "slicing and dicing". It has no tiny orifices to clog, and is highly tolerant of poor quality water. The nozzle materials (acetyl polymer, vinyl and stainless steel) are chemically inert and resist solids build-up in facilities with hard water.

Control Module

Regulates the flow of water to the nozzle and maintains humidity at the setpoint. It connects to your water supply, reduces pressure to 3-5 psi at the nozzle, and controls water flow and droplet size with a precision needle valve. You can adjust pressure, flow and humidity setpoint independently as required. An LED on the control module displays the Relative Humidity continuously; when a switch is pressed, it shows the humidity setpoint. To ensure an unimpeded fog plume, the humidity probe comes with a 50 ft. cable. The system is factory calibrated and accurate within 1% RH.

Blower

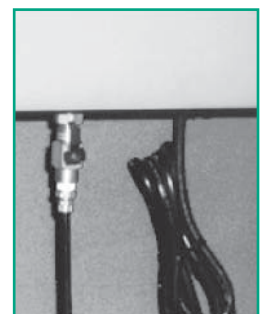
Supplies air to the atomizing nozzle. The Sentinel 5850 uses a totally enclosed, fan cooled (TEFC) motor and direct drive regenerative blower. Power options are 120 or 240 V 50/60 Hz, single phase, and 240 or 480V, three phase. The standard length of the blower control and sensor cables is 50 ft; longer cables are available on special order.



Humidity controller with continuous RH display and set point adjust.



Control module features rainproof NEMA 4X enclosure, see-thru cover with lockable catches, environmental cable



Liquid port shutoff valve with backup screen filter. Not shown: primary filter and hose bib adapter.



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INSTALLATION AND MAINTENANCE

Designed for “do-it-yourself” installation, the Sentinel 5850 includes everything you need except the 2” PVC air line from the blower to the nozzle. The blower and controller may be placed wherever convenient. The nozzle should be positioned as high as possible in the barrel room to maximize “hang” time for fog droplets to evaporate. The nozzle can be adjusted 90° axially, and 360° radially by turning the union at the air line. Straightforward system maintenance: clean the blower intake air filter (a light on the control module illuminates when the filter is dirty), remove dirt from water screens and the blower cooling fan.

ABOUT ARS/SWASH™

ARS/SWASH Sanitizing Equipment is an operating division of ARS Enterprises. ARS was established in 1971 to provide cleaning, sanitizing, sterilizing and humidifying equipment and field maintenance and repair services to food and beverage firms, hospitals, laboratories and pharmaceutical or medical device manufacturers. Our equipment and service have earned us an outstanding reputation among our customers who have come to rely on ARS.



SPECIFICATIONS (Model 58501OH or 58502OH)

Components	Control module, blower, blower control cable (50 ft each), Fogmaster® nozzle with 2” PVC slip union, hose bib connector, water supply screen (100#), 50 ft water supply line, air filter, blower fittings to adapt to 2” PVC pipe. (not included.)
Nozzle	Counter-rotating vortex design. High turbulence in nozzle shears feed liquid into fog-sized droplets. Non-clogging design (no small orifices).
Fogging Liquids	Unit dispenses at a rate of up to 5 gal/hr [315 ml/min], adjustable.
Fog Properties	Typical droplet size is 3-10 micron VMD.
Blower	Single stage cast aluminum ring compressor with direct drive squirrel cage TEFC motor and pilot duty thermal cutoff. 1 Hp, 120V, 50/60 Hz, 1ø, 9.8A (585010H) or 240V, 1ø, 4.9A (585020H). 230/460V, 3ø configurations by special order. Maximum output 90 cfm. Noise: 64 dBC (1000 Hz); 57 dBC (2000 Hz).
Control Module	Power and Auto/Manual switches. Liquid pressure and flow controls. Blower status lights (start, run, service filter alert). LED readout, adjustable set point (10-90%RH), 1 to 3% adjustable deadband. 50 ft sensor cable.
Control Enclosure	Weathertight (NEMA 4X), corrosion resistant fiberglass with stainless steel hardware.
Materials	Nozzle housing - vinyl w/ stainless clamps; Tubing - nylon, vinyl; Fittings - stainless steel, brass, nylon, acetal; Nozzle - Celcon® acetal copolymer.
Dimensions (HWD)	Control module: 16.5 x 14 x 9 in [42 x 35 x 23 cm] Blower: 14 x 15 x 14 in [35 x 38 x 35 cm]
Shipping Weight	3 cartons: 27, 51, 5 lbs
Warranty	One year limited warranty on materials and workmanship.