

Sentinel 5855

HEAVY DUTY ATOMIZING MACHINE

The Sentinel[®] 5855 atomizer converts your liquid – odor neutralizer, chemical sterilant, disinfectant, sanitizer, or water for humidification – into a fog. Or a mist. You set the droplet size that's best for your application, from less than 3 microns diameter to more than 30.

Typical uses are:

- Applying sanitizers, quats or chemical sterilants for disinfection or sanitizing;
- Fogging water for humidification, dust control, concrete curing;
- Fogging fragrances, oxidizers or H₂S scavengers for odor control;
- Putting out mold inhibitors, insecticides, fungicides, miticides, etc.

Fogmaster's proprietary "cold fogging" technology can apply oil- or water-based liquids ... and even light suspensions! It's reliable. Efficient. And low maintenance. No high pressure pump required, and no air compressor.



The Sentinel 5855 system has three main components:

■ A **nozzle** generates a tornado of turbulent air that chops liquid into small droplets and ejects them as a far-reaching plume. Droplet size is adjusted by changing the liquid flow rate. With a low working pressure [air at 3 psi], piping is inexpensive and installation simple.



The patented nozzle has no small orifices and isn't sensitive to solids. If deposits do accumulate on the nozzle, atomization performance may degrade somewhat but you can continue operating until it's convenient to clean the nozzle. Disconnect the hose or union fitting, and wash deposits off. You can also immerse the nozzle in CLR or Lime-Away to dissolve deposits.



■ A **regenerative blower** supplies atomization air to the nozzle(s). Blower size depends on the number of nozzles, starting at 0.67 Hp for a 1-nozzle system. The standard 5855 uses a 1.1 Hp blower which supports two nozzles.

■ A **control unit** manages blower operation (on-off, and intake filter condition) and fog droplet size. Each nozzle has its own flow control valve and flowmeter to set droplet size.



The Sentinel 5855 has modest liquid pressure demands [less than 10 psi] and can atomize fogging liquids supplied by a pump (centrifugal, diaphragm, piston or peristaltic type); house (city) water; a proportional injector (for in-line dilution); or an elevated tank (gravity feed).

Control options are equally diverse: "one-shot" (countdown) or repeating cycle timer; 7-day clock with up to eight application "events"; odor sensor; humidity sensor; or user-supplied PLC (or any device able to close a switch. Specify the optional "external" port.)

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Fogging nozzles can be mounted wherever they are needed – in wet wells or lift stations, under conveyor belts, in exhaust stacks, dumpster enclosure and so forth. The nozzle assembly is available with 15 ft. hose, or with a 2" pipe union. The hard-piped nozzle can be aimed 90° axially and 360° radially.

Since only the nozzle (with no electrical components) need be in the treatment area, the Sentinel 5855 is ideal for fogging confined spaces, hazardous locations or inaccessible areas; the blower and control unit can be positioned remotely.

An optional cart provides a degree of portability. It can carry the control module, a blower up to 1.1 Hp, a small supply pump or proportional injector, and liquid manifold to support one or two nozzles.

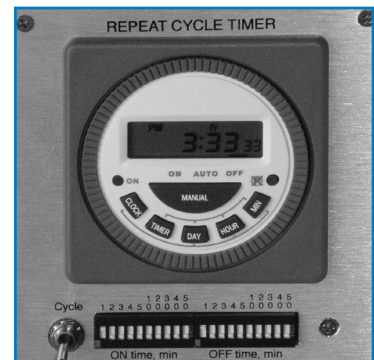


Cart mount unit with 1 hp blower, 2 hose/nozzle assembly, NEMA 4X enclosure, see-thru cover with lockable catches, environmental cable connectors.

SPECIFICATIONS

Components	Control unit; blower; 30A blower relay; Fogmaster® nozzle (union or hose-mount); pump or solenoid valve; pump relay; liquid balance assembly; liquid supply tubing; intake air filter; air and liquid manifold fittings.
Nozzle	Counter-rotating vortex design. High turbulence in nozzle shears feed liquid into fog-sized droplets. Throw distance: 35-50 ft.
Fogging Liquids	Oil- or water-based liquids, or light suspensions. Output per nozzle up to 3-4 gal/hr [200-250 cc/min], adjustable. Higher flow rate produces larger droplets. When applying chemicals, follow label instructions.
Droplet Size	VMD of output varies with flow rate (typical range: 2-50 microns). Liquid viscosity and surface tension also affect droplet size.
Blower	Cast aluminum ring compressor with direct drive squirrel cage TEFC motor and pilot duty thermal cutoff. Standard: 1 Hp, 120V, 50/60 Hz, 1ø, 8.6A (585510x); or 240V, 1ø, 4.3A (585520x). Maximum output 90 cfm. Noise: 64 dBC (1000 Hz); 57 dBC (2000 Hz). Larger blowers (including 230/460V, 3ø configurations) available.
Liquid Delivery	Options include diaphragm, piston, centrifugal or peristaltic pump, proportional injector, house water supply.
Control Unit	Power, Auto/Manual and Prime Pump switches. Liquid flow controls. Status lights (start, run, service filter alert).
Controller Options	<ul style="list-style-type: none"> • C Repeat cycle timer: Independently adjustable ON/OFF cycles (1-165 min each), set with dip switches. • T Day/week event controller: up to 8 timed on-off "events" per day. LCD display. "One-shot" (countdown) timer capability • H Humidistat: LED readout, adjustable set point (10-90%RH) and dead band. Sensor accuracy ±3% RH. 50 ft sensor cable. • E External (customer control device) • A Analog (4-20 mA or 0-5VDC). Consult factory.
Control Enclosure	Weathertight (NEMA 4X), corrosion resistant fiberglass. Lockable stainless steel hardware.
Materials	Tubing - nylon, vinyl; Fittings - stainless steel, nylon, acetal; Nozzle - Celcon® acetal copolymer. Optional: HDPE; stainless steel.
Dimensions (HWD)	Control module: 16.5 x 14 x 9 in [42 x 35 x 23 cm] Blower (1 Hp): 14 x 15 x 14 in [35 x 38 x 35 cm]
Shipping Weight	1 Hp unit: 3 cartons: 19, 21, 51 lbs [9, 11, 23 kg]
Warranty	One year limited warranty on materials and workmanship.

NOTE: Specifications subject to change without notice.



The 5855 offers many controller options. This day of week module provides Manual/Off/Auto timing with up to eight events per day. Output may be on/off cycles (1-165 min each) or continuous.



The humidity module maintains RH at the setpoint. It displays the current reading continuously, and the setpoint on button push.