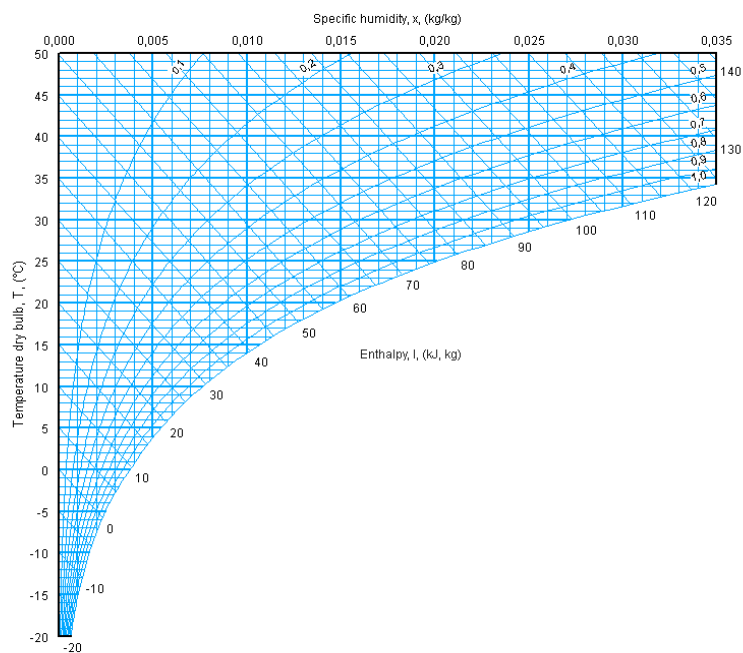
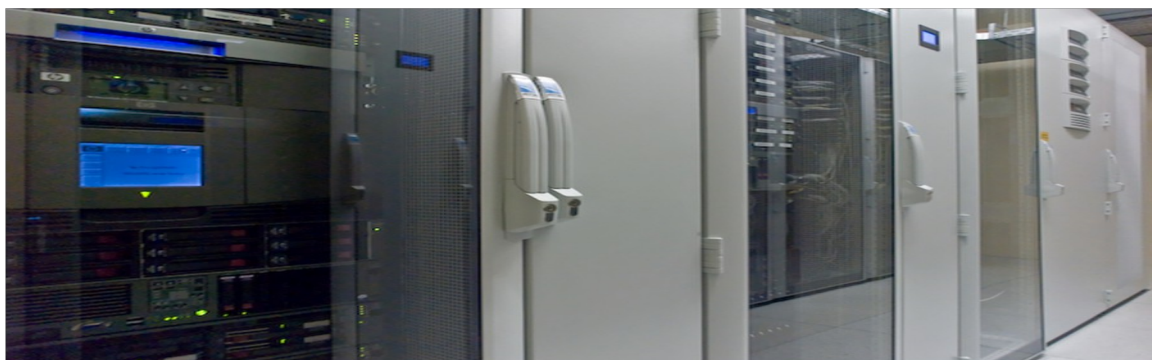




Humidification for direct area and Ultra Low Oxigine





## Air quality as required on each location

For computer-rooms, clean-room, office or laboratories, just everywhere where humidification is essential for the appropriate air quality you can find our humidifiers in action.

Also in printing facilities, assembling area's, museums and photo studios you will be assured of an efficient humidifier with our Ultra-Mist ST2.

The correct humidity in your display of vegetable, fruit, cheese and nuts will contribute to a higher quality, better presentation and more sales of your product.

With other words: for almost any situation you will be able to increase your product presentation as well as the quality of your product, using our Ultra-Mist ST2.

### How does it work

At ultrasonic humidification a ceramic piezoelectric vibration-element produces an ultrasonic vibration just below the water-surface. This vibration creates a column of microscopic small droplets just above the water-surface. These droplets with an average size of only  $5\mu\text{m}$ , (0,005mm) will almost instantly be absorb in the air. By transporting this air to the area that needs humidification, you are able to accommodate each area or location.



## Direct area humidification



For direct area humidification the ultra-Mist ST2 offers you the practical solution. As this humidifier is the example of simplicity and is very easy to install, there is always a suitable spot and it is possible to install the humidifiers in no time. For a standard application an electrical outlet and a water-supply is all you need.

The Ultra-Mist ST2 comes in a smooth maintenance free PE housing, what makes it possible to install the unit in almost any environment. An integrated fan will distribute the mist by diffusion tubes directly in to the area. This way of direct area humidification is often used in bakeries, museums, archives, but also in printing facilities and offices.

The use of osmoses-water ensures a long life-cycle of the vibration-elements and at the same time lime and up till 99% of all bacteria's will be stopped before they can be nebulized in to the air.

As the Ultra-Mist ST2 is equipped with universal connections, you will also profit at direct area humidification of the possibility to arrange applications up till 68Ltr/h in one installation. This allows you to use a minimum number of wall outlets and water-supplies. You will save instantly on the cost of installation.

Depending of the area it is possible to take advantage of the additional cooling effect. Each litre nebulized osmoses-water provides an additional 0.75KW of cooling. In this way you can save on your cost of energy of for example an air-conditioner.

As the Ultra-Mist ST2 is available in various capacities, it will always be possible to offer a solution based up on your location. Below you'll find the available models.

Type	Capacity
ULM-ST2 3L	3 Litre per hour
ULM-ST2 5L	5 Litre per hour
ULM-ST2 8.5L	8,5 Litre per hour

## Cold-Store - ULO & Controlled Atmosphere (CA)



The Ultra-Mist ST2 unit is a well-tried humidifier which is extremely well suited for operating in **Ultra Low Oxygen** cold storage. At the same time the Ultra-Mist ST2 humidifier is well suited for **Controlled Atmosphere** storage for humidification of flower-bulbs or for the germination of seeds.

While much humidifiers are installed inside the ULO storage, the Ultra-Mist ST2 is installed outside the storage. In this way service or maintenance can be handled without disturbing the atmosphere inside the storage and the unit is protected for low temperatures as well as high RH. By using a so called “closed-tube” system, there will only be re-circulation.

Due to this re-circulation the air inside the controlled atmosphere will not be affected in any other way than additional humidification. By the microscopic size of the droplets, with an average size of only  $5\mu\text{m}$ , ( $0,005\text{mm}$ ) ultrasonic mist is still being absorb by the ambient at temperatures below  $0^{\circ}\text{C}$  and does not leave any sediment behind on the stored products.

Due to the adiabatic effect, each litre nebulized osmoses-water provides an additional 0.75KW of cooling. In this way the Ultra-Mist ST2 has a positive effect on your cooling capacity.

The Ultra-Mist ST2 can be controlled in interaction with your cooling (eventually with delayed switching) or with an (active) sensor. MicroNevel has a close cooperation with one of the leading manufactures of sensors and controllers, in this way we are always able to advise you the correct sensor and/or controller.

The Ultra-Mist ST2 comes in a maintenance free PE housing, what makes it possible to withstand most various temperatures. While the use of osmoses-water is mandatory, the maintenance of the Ultra-MistST2 can be limited to a minimum.

## The benefits at a glance

### Maximum energy savings

The Ultra-Mist ST2 consumes up till 90% less energy than regular steam humidifiers of the same capacity.

### Energy saving cooling effect

The very thin mist of the Ultra-Mist ST2 additionally cools the area. When there are air-conditioners active in the same area, these will make less operating hours and consuming less energy.

### Flexible control

The Ultra-Mist ST2 can be controlled by sensors or by a controller-unit, either a simple on/off contact.

### Very efficient to use

As soon as the unit is switched on, the maximum capacity is almost instantly available. When the unit will be switched of, there is the same rapid response, no mist any more in seconds.

### Versatile

The Ultra-Mist ST2 has a modular construction, so it can be easily adapted to various locations. In one setting it is possible to create volumes from 3Ltr./h till 68Ltr./h.

### Microscopic small droplets

The water particles of the Ultra-Mist ST2 are approx. 5µm (0.005mm)  
Due to the droplet size the ambient will absorb the mist very fast and does not leave any sediment behind on the stored products.

### Hygiene

Due to the mandatory use of osmoses-water, the life-cycle of the drop-ins will extend and 99% of all dirt and bacteria's will be removed from the supply water.



## Technical specifications

Specifications	ULM-ST2 3L	ULM-ST2 5L	ULM-ST2 8.5L
Dimensions (H x W x D) in mm	340 x 565 x 425	340 x 565 x 425	340 x 565 x 425
Weight “empty”	22,0 kg	22,7 kg	30,9 kg
Weight “in use”	29,1 kg	30,3 kg	36,4 kg
Capacity (litre per hour)	3	5	8,5
Max. Connected Load (exclusive optional tracing)	400 Watt	580 Watt	1120 Watt
Connection Sizes Air in- & out- let PVC (mm)	50 x 3,0 (mm)	50 x 3,0 (mm)	75 x 3,0 (mm)
Air Inlet (number)	1	1	1
Mist Outlet (number)	1	1	2
Mains Voltage	230 VAC 50 Hz		
Inlet water pressure	0,5 to 5 bar		
Droplet size	smaller then 5 μ		
Water Inlet Junction	¼ inch		
Total of Fans	1		
Air-velocity uninhibited	ST2 3L & 5L uninhibited air volume 85 m³/h	ST2 8.5L uninhibited air volume 185 m³/h	
Noise	Less then 35 dB		
Admissible area temperature (outlet)	-10°C to +40°C		
Admissible inlet temperature (inlet)	-2°C to +40°C		
Ambient temperature Ultra-Mist ST2 unit	0,5°C to +55°C		
Control options	N.O. contact (standard) 0-10V / 4-20mA (optional)		

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