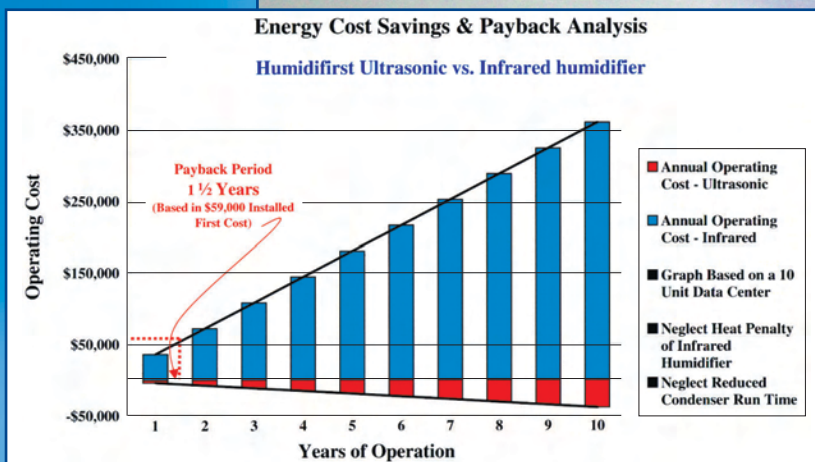
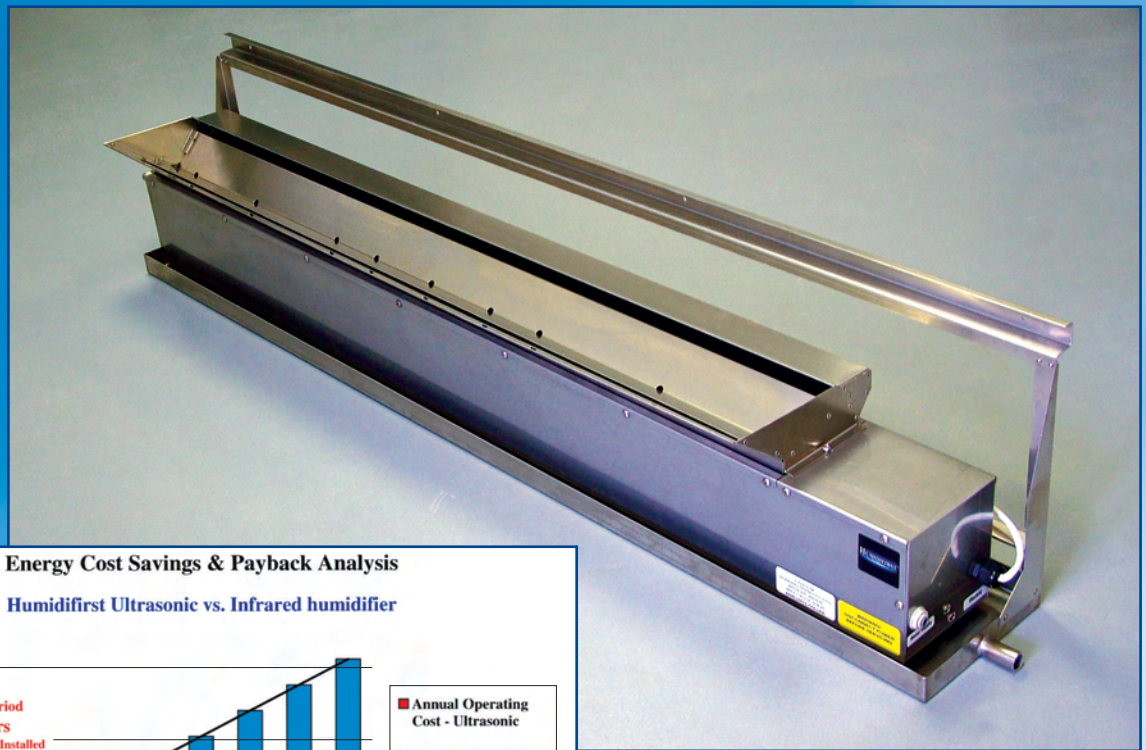


# HUMIDIFIRST®

ULTRASONIC HUMIDIFIERS

## For Liebert Units



### Works For Less.

An average computer room with 10 air conditioners using an infrared humidification system will draw about 96 kw/h or 9.6 kw/h per air conditioner for 3,500 to 4,000 hours per year-for humidification only. At a cost of \$0.10 per kw/h, the energy cost of this system at an average yearly operation of 3,750 hours is \$36,000. By comparison, for this computer room, 10 Humidfirst Ultrasonic humidifiers will draw only 3 kw/h or 0.300 kw/h per air conditioner at an approximate cost of \$1,100 per year. In this example, the Humidfirst system saves \$34,600 on energy costs alone. Typical payback periods are less than two years.

### Even More Savings.

The ultrasonic humidifier cooling effect reduces the cooling load by 1,050 BTU per pound of moisture generated (latent heat of vaporization). The ten units will provide 158 lbs/per hour which equates to

an added \$5,000 savings from the cooling effect. That's a total energy savings of nearly \$40,000 per year, before utility rebates.

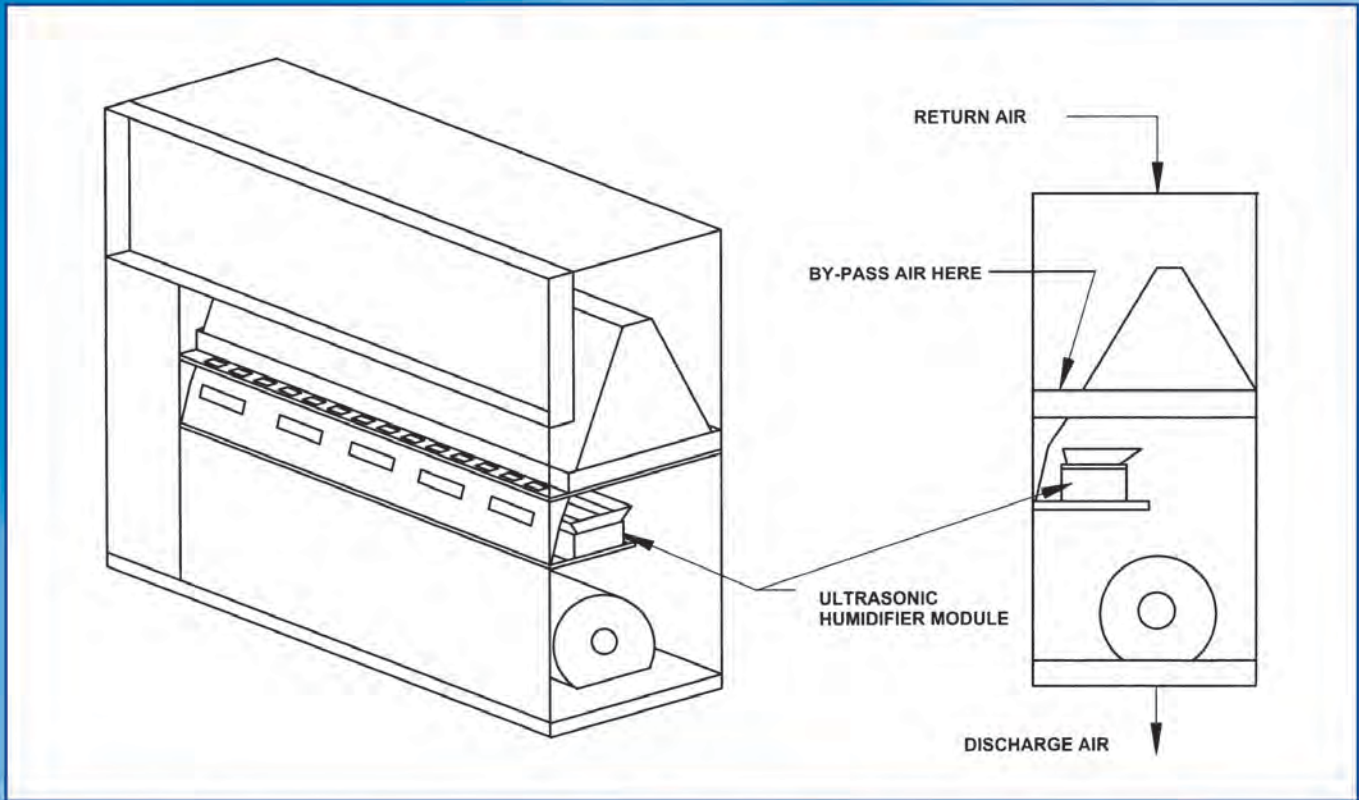
### Low Maintenance

The ultrasonic system is virtually maintenance-free. That's because the use of treated water eliminates the build-up of deposits on any part of the humidifier. With no minerals and particles entering the system, no scaling, plugged nozzles or clogs occur in the system. Likewise, this greatly reduces the need for servicing the equipment since no cleaning is required.

### Speed up your payback schedule with a rebate from your utility company

Many utilities offer rebates for new energy efficient technologies. Check with your utility company for details.

# Our Increased Spacing of Transducers Yields an Ultrafine Mist



The Humidifirst Retro-fit kit is custom designed for your existing Liebert computer room air conditioner - for Liebert 10 ton to 30 ton downflow units.

The ultrasonic's energy efficiency arises through the humidification process itself. To vaporize water at a given temperature, a fixed amount of energy is required regardless of the method used. However, instead of using expensive electrical energy to heat and vaporize the water, the ultrasonic process uses much less electrical power by utilizing the ambient heat in the air stream. Through a process known as adiabatic cooling, vaporization removes heat from the air stream to further maximize humidity control.

Simply put, the ultrasonic humidifier system does not generate heat at any point in the humidification process. As a result it saves you energy in five ways:

- Reduces humidifier's power consumption
- Eliminates unwanted heat added to the air stream
- Eliminates heat lost in the flushing process
- Eliminates heat-based inefficiencies
- Reduces compressor use via free cooling

Not surprisingly, ultrasonic humidifiers provide a remarkable return on your investment.

**HUMIDIFIRST**<sup>®</sup>  
ULTRASONIC HUMIDIFIERS

From:

**CTM**

For More Information,

**Call (800) 311-1200**

Email: [marketing@ctm-ac.com](mailto:marketing@ctm-ac.com)

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