

Web Hosting Company Saves \$2,000 a month in cooling

Going green is more than a catch phrase for AISO. It's a commitment that runs through every facet of its operations. So when it came time to replace the company's existing CRAC (Computer Room Air Conditioner) unit in 2008, it turned to a new start-up company from Colorado. Four years later, our energy-efficient models are still saving AISO \$2,000 a month in cooling costs.

Specifications

Customer

AISO.net

Location

Romoland, California

Property Type

Web Hosting Company

Square footage

2,000 with plans to add 11,000 more

Solution

2 Coolerado C60's

Results

- \$24,000 annual savings
- Low maintenance
- Zero breakdowns
- 80% energy savings

AISO's mission is to be the most reliable and responsible green web hosting company on the planet. That may sound like a tall order, but for 17 years, the company's been living up to its mission in more ways than one. AISO pioneered the use of on-site solar panels to power its data center. It also uses virtualization, a practice that consolidates the job of countless physical servers into fewer energy-saving virtual servers. By using this technology, the company reduces its energy consumption by 80 percent.

So, when it came time to replace the company's defunct air conditioner, Phil Nail, AISO's Chief Technology Officer, wanted to find an energy-efficient option that followed suit with the company's other green initiatives. That's when he heard about an energy efficient air conditioning company

from Colorado. Nail made plans to check out the company at a show in Anaheim and was impressed by what he saw.

The Coolerado units have a number of unique features that set them apart from traditional air conditioners. Instead of using pumps, compressors, or R22 freon, they use indirect evaporative cooling technology that runs fresh outside air through air filters and then a heat and mass exchanger (HMX). This unique process delivers cool air using one-tenth of the energy of typical air conditioners.

AISO's previous CRAC unit had one major down fall - it was unreliable and down much of the time. Because the Coolerado units don't rely on costly pumps and compressors, there are fewer parts to maintain or break down.





“The Coolerado units do exactly what they’re supposed to do. They’ve been absolutely perfect,” said Nail.

Besides requiring very little maintenance—which consists of routinely changing the filters that trap particles blown in from the dusty southern California desert—the Coolerado units provide a significant savings in energy costs.

“We probably use only 300 watts of power. That saves us easily \$2,000 or more a month by using Coolerado versus a regular AC. And, since we’re off the grid, that just allows us to put in more equipment without expanding our energy needs,” said Nail.

Adding new equipment without increasing energy needs is critical in an industry that’s quickly becoming one of the biggest users of power. In 2011, the Uptime Institute in New York said annual global data center CO2 emissions equaled that of the airline industry, and it estimated data center CO2 emissions will quadruple between 2010 and 2020.

AISO estimates the amount of energy it saves through green technologies is equal to planting over 4,400 trees, removing over 330 cars off the highway, reducing over 1,952,735 pounds of CO2 per year, and eliminating the use of over 1.5 million kilowatts.

The company also found a way to reduce its use of water by using a rainwater collection system on its roof that stores over 10,000 gallons of water. The rainwater collected is used for Coolerado’s unique indirect evaporative cooling process and for watering its green roof during dry periods.

How have all these energy-efficient initiatives impacted business? Since 1997, AISO has been profitable, debt-free, and growing an average of twenty percent each year. In fact, it recently began preparations for adding an 11,000 square foot facility. And, it already knows which air conditioning provider it’s going to use for the expansion.

About Coolerado

Based in Denver, Colorado, Coolerado has been designing, manufacturing and marketing super-energy-efficient air conditioning systems for light commercial use, based on its proprietary, patented and proven technology since 2004. Customer energy savings of over 80% have been recorded with this cost-effective technology. Coolerado products are highly reliable and virtually maintenance-free and are currently operating in many countries around the world. Coolerado is another quality product by Seeley International.

Another quality product by



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