

Patented ASHRAE Psychrometric Cooling Chart

Customer Quotes

- *“Sunbird provides the ability to measure, monitor, and document what is actually happening in our data centers. Then, we can implement things to keep the costs down.”*



- *“Sunbird provides just the right information, so that you can really manager very well, very easily. It's definitely helped us make better, faster decisions. What might have taken us days to gather before is now right at our fingertips.”*



- *“We buy into a high degree of accuracy in everything that we do, and we like the tools and the products that we use to be at that level too. Sunbird lets me sleep better at night because I know that accuracy is not something that I need to worry about. I've had absolutely no issues.”*



Avoid Overcooling and Save on Energy Costs

Today, data center professionals are heavily focused on increasing the sustainability of their facilities and operations. With cooling representing up to 40% of a data center's energy consumption, optimizing cooling is a key objective for many.

Correctly setting temperature set points is one of the most impactful changes you can make to reduce energy waste and save money. According to Energy Star, data centers can save 4-5% on energy costs for every 1°F increase in server inlet temperature.

The American Society of Heating, Refrigerating, and Air-Conditioning (ASHRAE) offers the most widely accepted thermal guidelines for data centers to ensure you are sufficiently cooling and humidifying equipment without wasting resources.

Sunbird's patented electronic ASHRAE psychrometric chart visualizes the temperature and humidity of all the racks in your data center to help you adjust set points.

How Sunbird's ASHRAE Cooling Chart Works

- Automatic Data Collection – Live measured readings from your temperature and humidity sensors are automatically retrieved and stored by an enterprise-class polling engine.
- Zero-Configuration Analytics – All the hard work is done for you with this out-of-the-box chart widget. Simply select your site, sensor position, and ASHRAE guidelines, and your chart is automatically built.
- 100% Customizable – Build a psychrometric cooling chart with your own custom thermal envelope by selecting your minimum and maximum thresholds for temperature and humidity.
- At a Glance Insights – Immediately see which of your racks are inside or outside of the allowable and recommended ranges with red-yellow-green color-coding.
- Be the First to Know of Issues – Set warning and critical threshold alerts on temperature sensors to proactively respond to temperature fluctuations.

Why You Need the ASHRAE Cooling Chart

- Save Energy Costs – Overcooling and overhumidifying a data center wastes energy and water and increases operational costs. Ensuring that equipment operates within the recommended temperature and humidity ranges reduces energy consumption leading to cost savings and improved sustainability.
- Precise Cooling Control – Detailed information about your racks' temperature and humidity enables you to precisely control cooling systems to maintain optimal conditions.
- Compliance with Industry Standards – ASHRAE provides guidelines and standards for environmental conditions in data centers that are widely accepted in the data center industry. Maintaining equipment within ASHRAE's recommended ranges ensures compliance with industry standards and best practices which potentially extends the lifespan of equipment.



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How Vodafone Saves Energy Costs with Temperature Sensors and Sunbird's DCIM Software

Vodafone had sustainability objectives to reduce the carbon footprint of their data centers.

To achieve this, they needed granular data about their data center environment. They added more temperature sensors to their data centers, going from 16 to 800 sensors in a single location.

"We're placing temperature sensors at the top, middle, and bottom of every rack," said Andrew Marsh, Senior Manager for Infrastructure and Data Centers, Vodafone.

Vodafone uses Sunbird DCIM to collect, trend, and report on the data from their temperature sensors. Sunbird transforms the live measured readings into actionable information that Vodafone can visualize and understand where they are overcooling so they can raise temperatures.

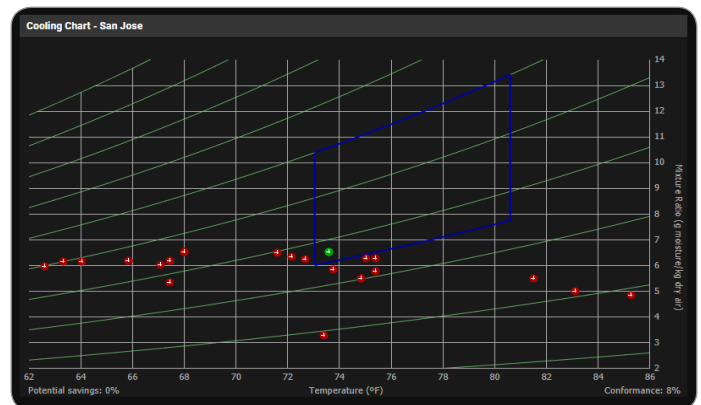
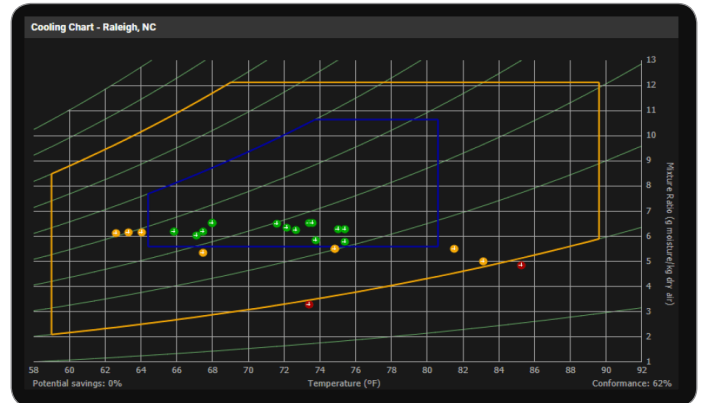
"We're using Sunbird to measure the individual temperatures so we can see the Delta T," said Marsh. "That allows us to raise temperatures which saves us a large amount of money."

"Sunbird provides the ability to measure, monitor, and document what is actually happening in our data centers. Then, we can implement things to keep the costs down," said Marsh.

[Read the complete case study.](#)



Andrew Marsh,
Senior Manager for Infrastructure
and Data Centers



Call 732.993.4476 or visit SunbirdDCIM.com

Sunbird Software is changing the way data centers are being managed. With a focus on real user scenarios for real customer problems, we help data center operators manage tasks and processes faster and more efficiently than ever before, while saving costs and improving availability. We strive to eliminate the complexity they have been forced to accept from point tools and home grown applications, removing the dependency on emails and spreadsheets to transform the delivery of data center services. Sunbird delivers on this commitment with unexpected simplicity through products that are easy to find, buy, deploy, use, and maintain. Our solutions are rooted in our deep connections with our customers who share best practices and participate in our user groups and product development process.

Based in Piscataway, NJ, Sunbird serves over 2,000 DCIM customers worldwide. For more information, please visit SunbirdDCIM.com.

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