Power Usage Effectiveness (PUE) Reporting and Optimization

Customer Quotes

"We got good reporting information from the product, and I was able to see that Sunbird is genuine. The software can do what they say it can do"

Peter Giles,
Senior Data
Center Manager

"Great out of the box dashboards."

Andrew Marsh,
Senior Manager
for Data Centers

"Easy to use with intelligent and clear reporting and helpful dashboards."

Greg Rybak,
Data Center
Senior Analyst

"It's definitely helped us make better, faster decisions. What might have taken us days to gather before is now right at our fingertips."

Kyle Kohne
Data Center
Technician

"It has helped our facilities staff immensely with monitoring power usage throughout all of our sites."

Tanner W.,
NOC Technician

Increase Sustainability By Measuring and Improving PUE

As organizations aim to increase the sustainability of their data centers, Power Usage Effectiveness (PUE) is one of the most common metrics used to measure overall data center energy efficiency.

PUE is a ratio of the total amount of power used by a data center to the power delivered to IT equipment. Expressed as a formula, PUE = Total Facility Energy / IT Equipment Energy. While a PUE of 1.0 would be perfectly energy efficient, reaching a PUE of 1.2 is a common goal.

Traditionally, calculating PUE required manually collecting utility meter readings, summing up UPS or PDU power readings, performing math, and recording that information somewhere periodically.

However, Data Center Infrastructure Management (DCIM) software automatically calculates PUE in real time and provides many ways to improve PUE so you can focus on your energy efficiency initiatives instead of time-consuming and potentially inaccurate PUE math.

Automatic and Real-Time PUE at Your Fingertips

- **Automatic Data Collection** – Energy consumption data from building feeds, IT loads, and non-IT loads is automatically retrieved and stored.

- **No More Manual Math** – The PUE for each of your sites is automatically calculated in real time.

- **Trend PUE Over Time** – PUE trend charts make it easy to see how energy efficiency initiatives, seasonality, load variations, and other changes impact PUE.

- **Actionable Insights** – Out-the-box energy charts and reports make it easy to track progress, identify trends, and benchmark against industry standards.

- **Compliance Reporting Made Easy** – Data center energy consumption information can feed into your enterprise system for corporate sustainability reporting.
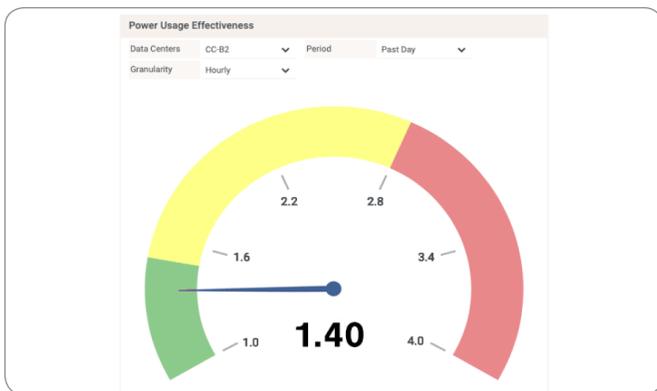
Drive More Efficient Data Center Operations

- **Complete Power Management** – Automatically collect the live measured readings from intelligent rack PDUs and other key points in the power circuit so you can make smarter decisions to reduce energy consumption.

- **More Efficient Facilities** – Leverage data to drive more informed capacity planning so you can get the most utilization out of your existing facilities, reduce resource waste, and defer enery-intensive expansions.

- **Avoid Overcooling** – Patented electronic ASHRAE psychrometric charts visualize the temperature and humidity of each rack to help you reduce cooling costs.

- **Find and Shut Down Ghost Servers** – A built-in report identifies all your potential ghost servers that waste energy sitting idle in your cabinets so you can decommission or repurpose them.

- **Understand Costs Any Way You Like** – Analyze energy costs by data center, business unit, or application to identify power hogs, compare efficiencies, and drive more efficient behavior.

- **More Efficient Private Cloud or Virtual Environment** – Integrate with VMware to map virtual machines to their physical hosts and then move those instances to the most efficient servers.

Power Usage Effectiveness (PUE) Reporting and Optimization
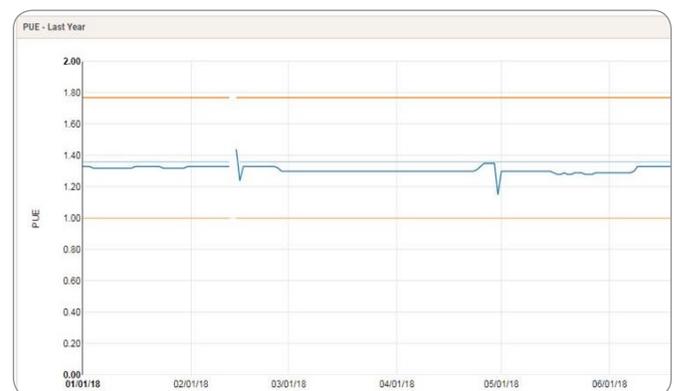
Automatic PUE Gauge Chart

Know the PUE of any site at a glance with an easy-to-understand gauge chart where you can configure the green-yellow-red ranges.

PUE Trend Chart

Trend the PUE of multiple sites over time to see the impact of energy efficiency initiatives and compare efficiency.
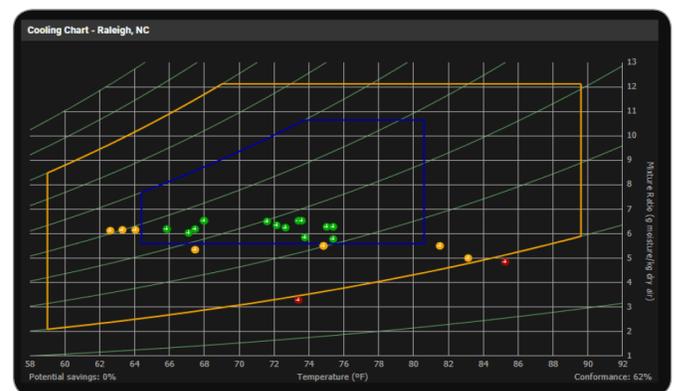

Cooling Dashboard

Get an out of the box dashboard of cooling efficiency KPIs like latest temperature and humidity per cabinet, Delta T per cabinet, and cooling capacity.

Patented ASHRAE Cooling Chart

Visualize the temperature and humidity of each rack to help you safely increase set points and stop overcooling and wasting energy.

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.