The **Ekko**Sense® Effect

The real-time operational visibility you need to:

Remove thermal and power risk
Optimize cooling capacity
Minimize energy waste
Lead the way to achieve net zero

across your critical M&E infrastructure

The data behind data centers

Why data center optimization matters - the state of the industry at a glance.

% of global electricity demand used by data centers...

1%

IEA

Potential energy savings possible by INCREASING server inlet temperature by just 1°F...

4%

Energy Star

M&E teams currently monitoring and reporting equipment temperature on a rack-by-rack basis...

5%

EkkoSense Research

Potential reduction in global greenhouse gases if innovative AI solutions employed...

16%

Capgemini Research

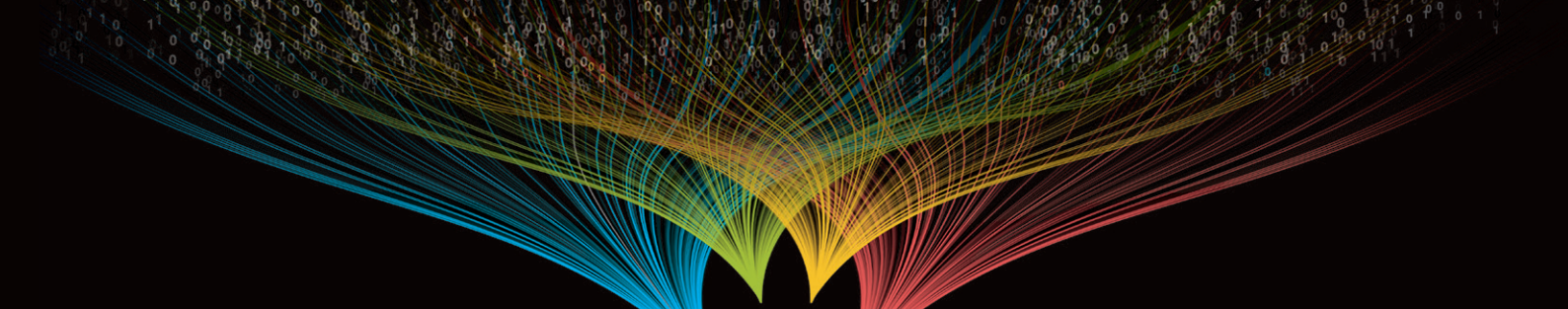**Potential savings missed on data center energy consumption...**

30%

EkkoSense Research

Current average data center cooling utilization...

40%

EkkoSense Research

Global data center CAGR through 2026...

4-21%

Various

# of kilowat hours wasted globally by inefficient cooling and airflow management in data centers in 2020...

150bn

Uptime Institute

% of unplanned data center outages that are caused by thermal issues...

33%

EkkoSense Research

% of IT racks in the average data center that operate outside of ASHRAE's temperature guidelines...

15%

EkkoSense Research

% of the average data center's energy consumption that is attributed to cooling...

35%

Various

Global $$$ loss attributed to inefficient cooling and airflow management in data centers in 2020...
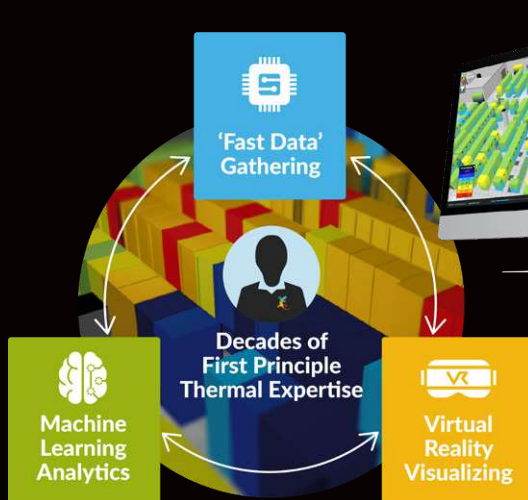
$18bn

Uptime Institute

The EkkoSense Approach

Challenging traditional methods and incumbent software systems to redefine data center optimization.

Critical Things®

EkkoSense provides a unique SaaS platform for data centers that uses ML and AI analytics to provide real-time monitoring, capacity management and thermal optimization insights.

'Fast Data' Gathering

Decades of First Principle Thermal Expertise

Machine Learning Analytics

Virtual Reality Visualizing

EkkoSoft® Critical

Using the latest gaming technologies to provide the most immersive, simple to use interface and quickest to deploy platform in the data center M&E space.

Discover more

Big Data. Fast Data. Smart Data.
AI driven optimization for critical infrastructure with the most intuitive 3D digital twin available.

Reduce data center cooling energy costs by up to 30%

Focused cooling performance recommendations and advisory actions with our industry first Cooling Advisor tool.

Reduce your carbon footprint and meet ESG commitments

Unlock immediate carbon savings to support corporate net zero programs.

Remove thermal and power risk

100% ASHRAE thermal compliance and comprehensive power monitoring prevents tiny dropouts developing into big outages.
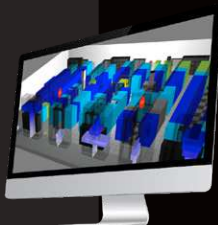
Release up to 60% stranded cooling capacity

Correlate your cooling with IT workload using advanced analytics.

Complete operational visibility in real-time

Local and remote granular insight with any device, at anytime, from anywhere in the world.
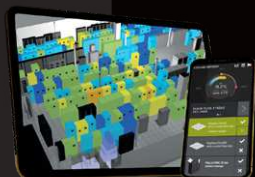
Achieve an ROI in 12 to 24 months

EkkoSense benefits come at a fraction of the cost of more expensive and complex legacy DCIM or CFD solutions.

EkkoSoft® Critical

Defining sustainable optimization for critical infrastructure

The most intelligent, intuitive and immersive AI driven self-optimization software tools for your data center.

Granular Data

Gather highly granular cooling, power and space data at an individual rack level using the latest low-cost IoT-enabled wireless sensors.

Digital Twins

Latest 3D visualization techniques make it easy for data center teams to interpret complex data and highlight anomalies.

Machine Learning & AI Analytics

Machine learning data and AI algorithms help translate potentially billions of data points into insights to support real-time optimization decisions.
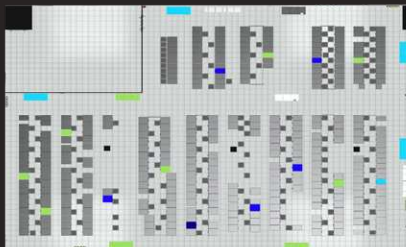
Recommended Actions

Providing operations teams with real-time insight, clear recommendations and auditable actions, enabling continuous incremental data center optimization.

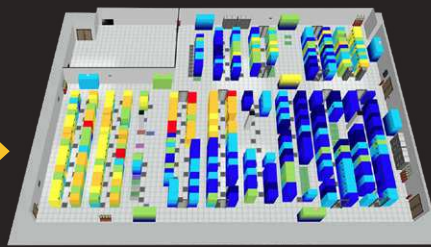# The power of EkkoSense AI - making the invisible, visible

EkkoSense AI and Machine Learning are changing the game for data center operators.

Typical BMS View

Most data center teams see only the cooling unit temperatures. Rack inlet temperatures are not properly monitored and their true status is invisible.

EkkoSense 3D Interactive Digital Twin

Comprehensive thermal data capture and monitoring gives full visibility and uncovers risk, predicts failures and provides opportunities for improvement.

EkkoSense AI and Machine Learning
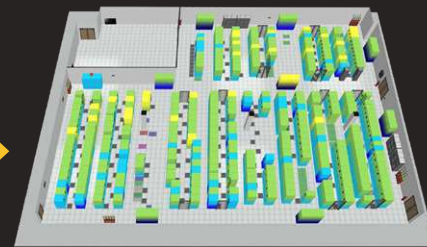
AI powered software with Machine Learning allows operators to quickly and easily fine tune the data center to ensure maximum efficiency.

Rack temperature

BEFORE EkkoSense optimization

AFTER EkkoSense optimization

100% ASHRAE compliant operating environment

Safer IT and M&E equipment

More efficient with less energy consumed
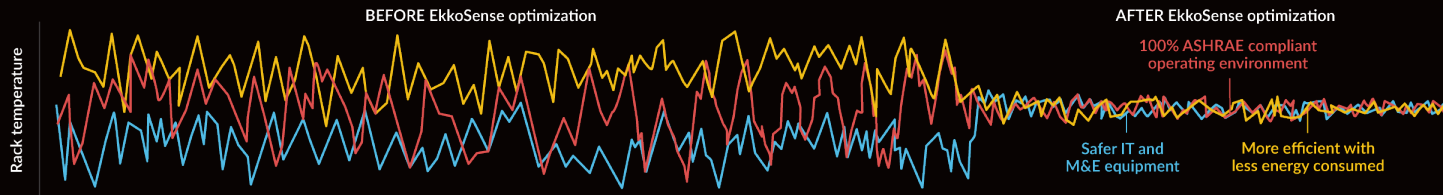
Digital Twin

Immersive real-time optimization of all your data center rooms from the smallest Edge site through to your largest facility.

Comprehensive real-time visibility across your entire data center enterprise estate.

Intuitive interaction, with accessible 3D visualizations and a simple drag-and-drop interface providing access to a broad range of M&E functionality.

Clear visualizations that help to successfully communicate complex data – making it easier to compare changes and highlight potential anomalies.

Support for ongoing data center optimization through the active display of suggested airflow and cooling improvements.

Removes the requirement for over-complex DCIM suites or expensive, non real-time external CFD consultancy.

Real-time visualizations based on latest monitoring results, with Digital Twins refreshed to reflect updates.

Intuitive Digital Twin approach for increased visibility.

One of the main barriers to data center optimization has always been the complexity of traditional DCIM tools and CFD solutions.

EkkoSense solves this challenge by creating a concise Digital Twin of your data center environment. We draw on new levels of sensing granularity, real-time analytics and innovative gaming software techniques. This makes immersive real-time optimization of all your data center rooms a reality – from the smallest Edge site through to your largest facility.

Our powerful 3D visualization and analytics platform makes data center optimization far more accessible. The intuitive Digital Twin models take things to the next level. Digital Twins not only keep things simple by visually representing all your current cooling, power and thermal conditions, but also offer immediate tangible recommendations for continuous optimization.

Discover more

Cooling Advisor

The industry's first fully embedded AI driven cooling advisory tool. It's like having your own in-house optimization consultant - and then some!

Intuitive process specifically designed to provide operations teams with clear recommendations of next best action to undertake to step towards maximal optimization efficiency.

Users can progress towards optimization goals at their own pace, taking advantage of Cooling Advisor recommendations to reach and maintain best practice operations.

Advisory actions are all structured to ensure support for 100% ASHRAE rack thermal compliance – ensuring protection from thermal risk across your data centers.

Active risk mitigation is in-built – with clearly defined steps, back-out mechanisms and logging of all user inputs and activities available within the module.

EkkoScore Optimization Rating. An entirely new performance metric that brings together temperature and cooling load data to provide a true measure of data center cooling optimization.

There's nothing like having your own smart Cooling Advisor.

Cooling Advisor applies powerful machine learning and AI technology to provide valuable, proactive thermal advice. This helps facilities managers, energy managers and data center operations teams ensure their data center's thermal performance stays optimized.

Built right into the heart of the EkkoSoft Critical SaaS 3D visualization and analytics software, Cooling Advisor is the industry's first process-driven advisory capability available as part of a thermal optimization solution. By following the clear recommendations offered by Cooling Advisor's algorithms, data center teams can independently keep on track in their journey to secure up to 30% cooling energy savings.

Powered by machine learning insights from over 50 million EkkoSoft Critical data points, Cooling Advisor also draws on the deep cooling optimization best practice expertise of EkkoSense's team of PhD-level thermal, software and electronics engineers. Cooling Advisor keeps on learning – both from the success of its own recommendations as well as broader EkkoSense optimization insights.

Discover more

![EkkoSense logo]

Capacity Planning and Power Management

Intuitive, real-time M&E Capacity Planning and Power Management for entire data center estates.

Track and manage your data center capacity changes in real-time, with the ability to make immediate capacity decisions across connected rooms.

Manage all your current and future cooling, space and power demands within a single, intuitive system.

Highlight and release previously unidentified stranded M&E capacity, avoiding potential additional capital investment.

Actively manage all your rack power usage and associated PDU utilization across your estate, ensuring precise control as you work. Reduce overall data center energy usage.

Replace unwieldy capacity and power spreadsheets with comprehensive power usage and capacity reporting.

Custom rack-level power reporting ensures new levels of support for colocation customers.

Taking data center management to the next level.

EkkoSense's distinctive software optimization model lets data center teams gather and visualize capacity, power and cooling performance at a much more granular level. This goes beyond traditional DCIM reporting tools to provide tangible M&E insights that – in turn – enable data centers to be run much leaner.

One of the main barriers to data center optimization is the complexity of traditional DCIM tools and CFD solutions.

EkkoSense's innovative 3D visualization and analytics capabilities take data center Capacity Planning and Power Management to the next level – allowing organizations to run leaner data center enterprise estates.

Traditional legacy DCIM tools typically offer limited M&E capacity and power reporting, and - because of this – continually fail to deliver aside from their core IT-based management strengths.

EkkoSense offers comprehensive capacity planning and power management functionality to provide true real-time space, power and cooling support. All of this at a fraction of the cost of traditional DCIM solutions.

Discover more

Critical Things®

Disrupt traditional data gathering cost models with our IoT suite of sensors and flexible integration solutions

Support your transition towards a 'fully-sensed' data center environment. Designed for simple, rapid installation.

Secure 128-bit AES encryption

Communication between all hardware and EkkoSoft Critical secured with 128-bit AES encryption. Wired interfaces protected with TLS.

Direct mode for Edge support

Enables the EkkoHub to connect directly with EkkoSoft Critical, making it an ideal monitoring and alarming solution for an organization's many smaller Edge sites.

Comprehensive data center coverage

EkkoLink data aggregator can retrieve data from other on-site third party devices and networks using Modbus, OBIX or SNMP connectivity.

Integration with existing 3rd Party systems

The Critical Things® family is also able to access data from existing 3rd party systems such as BMS, EPMS and other logging platforms.

Bring the power of EkkoSense AI to your critical facilities

Request your free demonstration and experience the future of data center optimization, today.

Watch our video

Book a demo

Used and trusted by the largest global operators.

CBRE · BT · Cigna · gsk · daisy.

DIGITAL REALTY · interxion A DIGITAL REALTY COMPANY · TELEHOUSE

servicenow · BRITISH AIRWAYS · sky · Virgin media O₂ · 3

Fidelity INTERNATIONAL · VISA · Santander · Telefónica

Ekko Sense

North America: 1-833-921-3335
Headquarters: +44 (0) 115 678 1234
info@ekkosense.com
www.ekkosense.com