VERTIV™

Liebert®

SmartAisle™
EMPOWERING DATA
CENTER INFRASTRUCTURE

VERTIV™

Vertiv, formerly Emerson Network Power, designs, builds ,and services mission critical technologies that enable vital applications for data centers, communication networks, and commercial & industrial environments
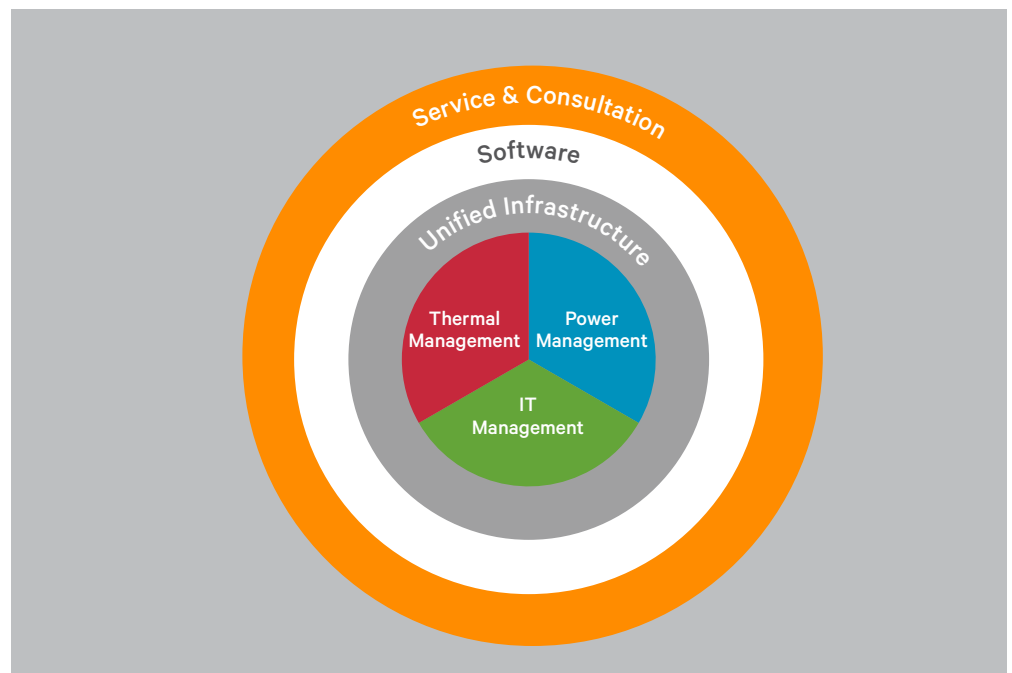
We support today's growing mobile and cloud computing markets with our portfolio of power, thermal and infrastructure management products, software and solutions, all complemented by our extensive global service network.

We help strengthen the world's most vital applications by bringing together global reach and local knowledge, and our decades-long heritage, including brands like Chloride, Liebert, NetSure, and Trellis.

Vertiv
Your Vision, our Passion

With a unique combination of industry expertise, technology, and resources, our mission is to support and power mission-critical technologies that drive possibility.

Service & Consultation
Software
Unified Infrastructure
Thermal Management
Power Management
IT Management

Chloride®

Our global industrial power solutions meet the most demanding technical specifications and provide safe, reliable power no-matter the challenge

NetSure™

Our global intelligently engineered DC power systems deliver high availability, energy efficiency and scalability for converged networks

Liebert®

Our global power and thermal management solutions are some of the world's most efficient and reliable power and cooling technologies

Trellis™

Our industry-leading software gives customers an integrated view of operations across IT and facilities resources, enabling better decisions that save time and money

The IT & Telecom industry has revolutionized the network businesses due to technological manifests in the R&D to enhance server capabilities. This has strengthened the functioning of SMEs relying heavily on the infrastructure provisions to support the business requirements.

However, space crunches in the digitized world have created environments where dedicated IT room improvements are neither practical nor cost-effective.

With ever increasing demands, the next level of challenges SMEs internally face are:

• How do I get more efficiency from my data center?
• How quickly can I achieve my ROI from my IT operations?
• How to ensure that my data center is always up and running?

Efficiency of a data center:

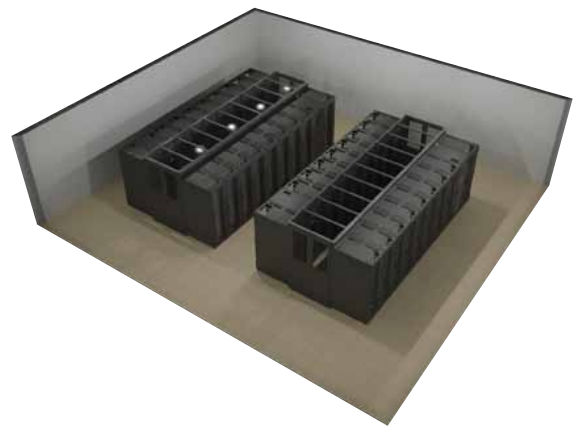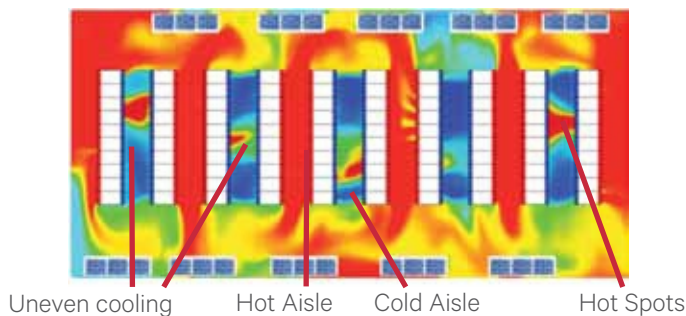The air conditioner in a DC consumes about 60% of the total power spectrum which can be reduced by:

• Hot Aisle & Cold Aisle arrangement
• Aisle Containment (Hot/Cold)
• Focused cooling methodology for server racks
• Quick adaptation to the varying load demands

Quick ROI (Returns on Investment)

ROI can only speed up if the:

• Deployment of data center is quick
• Fully operational in least possible time
• Easy assembly process with no dependency on physical aspects at site.
• Entire components are purchased from a single vendor to reduce lead time & integration concerns

Legacy Data Center Setup:
Thermographic view

Uneven cooling   Hot Aisle   Cold Aisle   Hot Spots

Ensuring 100% uptime:

Critical applications can't afford shut-down time due to huge revenue losses. To avoid this:

• All components are connected to a single controller which monitors and maintains their desired functioning
• Critical warnings and alarms must be generated to prevent early failure of any component in the data center facility

How can I simultaneously achieve the best efficiency with a quick deployment and the highest uptime in my data center???

Enter Liebert SmartAisle,

The most advanced fully integrated data center infrastructure solution with the futuristic capabilities embedded with sophisticated technology to make the data center operations efficient, quickly deploy able , and provide monitoring and control of the entire operations.

Closely coupled systems like Monitoring, Physical Security, Surveillance, Power Management, Optimized cooling, Fire suppression, Water Leak detection are pre-configured in the SmartAisle for a completely synchronized operation

LCD Touch screen Large Display Panel Controller

- Enhanced system visibility in the controller users to gain a complete insight of the system operation.
- Assist in trouble shooting to ensure that the system is always operating at its best efficiency

Unmatched efficiency

- Smart-Aisle logic for air conditioning ensures the most accurate cooling environment for servers
- A high efficiency UPS system for efficient power conversion and transmission

Rapid Deployment

- With an integrated approach, SmartAisle facilitates quickest onsite deployment of the entire DC in a matter of weeks.
- The add-as-you grow modular design creates a provision for future expansion of the DC space

Remote Monitoring

- Built-in with an RDU-AG2 monitoring kit, the SmartAisle enables an unmanned operation by transmitting statistical data to users
- With an emergency exhaust system, fire-suppression system, lighting controls, and smoke detection makes the SmartAisle2.0 a fail-proof system.

Liebert SmartAisle is a combination of the most advanced innovations in data center with the simplest self-assembled integrated design that is tailor-made to fit and perform in your white-spaces surpassing your expectations.

WELCOME TO THE WORLD OF THE MOST ADVANCED CONTROLLER INTEGRATING THE ENTIRE DATA CENTER INFRASTRUCTURE
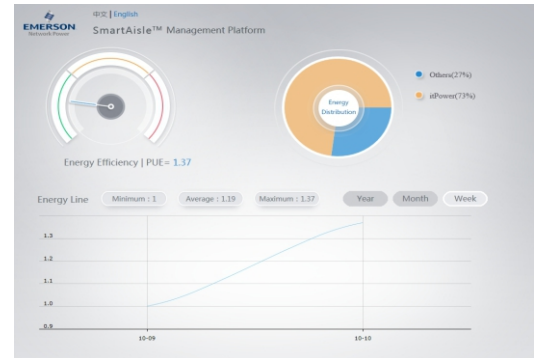
MAIN SCREEN

Displays the current status of the unit, operational efficiency, aisle temperature and number of alarms based on priority

PUE Screen

Displays the precise PUE with detailed bifurcation of power usage by recording the demand fluctuations

THERMOGRAPH PROFILE

Displays the entire temperature field of each rack in the unit providing micro-level data for temperature variation

SYSTEM ALARMS

Displays all the current alarms with the precise fault location and the level of urgency in the SmartAisle2.0

IT LOAD PROFILE

Displays the capacity utilization for the load rate and the power supply to factor the instant demand profile variation

NEPHOGRAM

Displays real-time temperature reading for each rack on both sides of the hot aisle and the cold aisle

Smart Aisle is equipped with precis
management, monitoring and contr
integrated into a holistic

MODULAR CONSTRUCTION

- Knocked down components shipped from the factory with an easy-to-assemble at site design.
- Part-wise build up from the base with lowest dependency on physical infrastructure at site.

POWER DISTRIBUTION SYSTEM

- Inbuilt power distribution set up for the necessary utilities and the IT racks with metered devices which measure the power consumed
- Just a single input power cable needs to be connected to the SmartAisle system which distributes metered power internally to each equipment
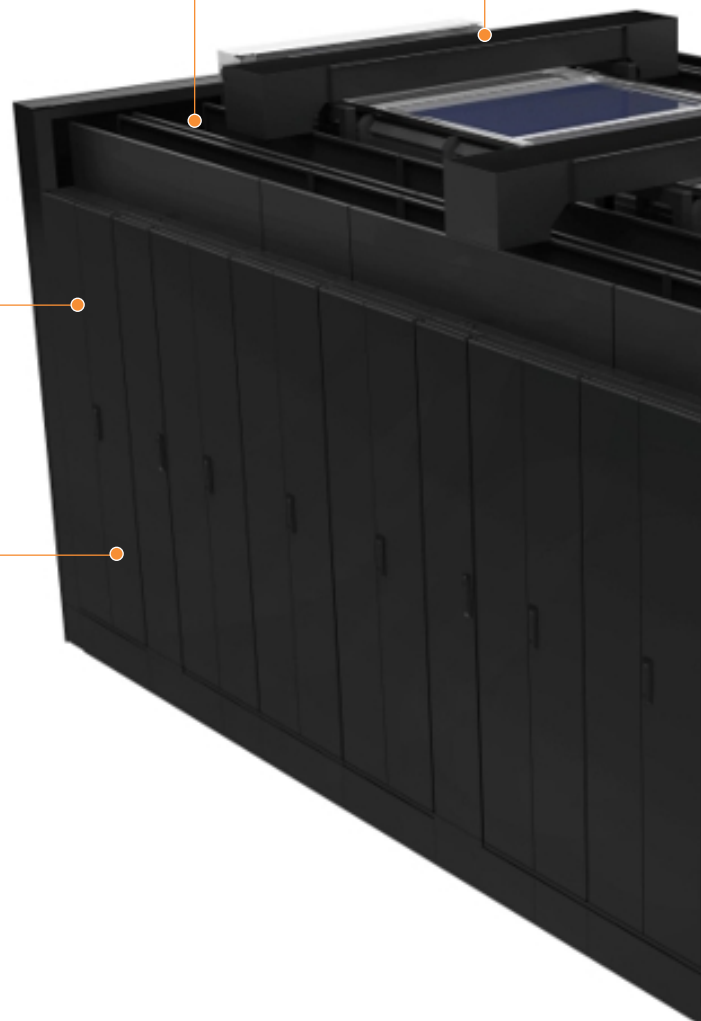
UPS SYSTEM

- Highly advanced APM series UPS unit specifically designed for high operating efficiency
- Power transmission efficiency of upto 96% on full load

PRECISION COOLING UNITS

- Inrow cooling unit -CRV+ for faster response to dynamic loads
- Highly efficient at higher return air temperatures
- Integrated with Smart Aisle logic control feature that functions on the most efficient/accurate thermal control algorithm to maximize energy saving

cision cooling, UPS system, power
ol technologies and fire suppression
enclosed system solution.

CABLE MANAGEMENT

- Specifically designed roof trunking feature helps easily guide the cable run over the entire SmartAisle unit.
- The guide paths are designed to track each and every connection from the source to the terminal

SUPPORT UTILITIES

- Magnetic locking roofs with automatic opening feature for exhaust ventilation in case of power outage
- Bright lighting for ease of visibility in the set-up
- Automatic sliding doors with access control
- Fire alarm integration with a built-in fire suppression mechanism

REMOTE MONITORING

- Equipped with an RDU-Ag2 card, SmartAisle can be placed even at remote site locations.
- The critical alarms and warnings along with the statistical and analytical data can be transmitted to the user seamlessly for monitoring and control.

ADVANCED TOUCH SCREEN DISPLAY CONTROLLER

- The most sophisticated controller with unparalleled capabilities of measuring, controlling and monitoring entire system configuration thereby even providing a real time PUE of the system

VERTIV