



Vertiv™ SmartAisle™ 3

AI-Enabled Micro-Modular
Data Center



Vertiv™ SmartAisle™ 3 AI-Enabled Micro-Modular Data Center

Being an architect of continuity, Vertiv has innovated a new generation of SmartAisle i.e SmartAisle 3, a fully integrated data center infrastructure solution with capabilities embedded to make data center operations efficient, quickly deployable, and provide the most advanced and featured monitoring & control of the entire operations.



Vertiv SmartAisle 3 is a highly sophisticated and integrated modular data center solution with premium efficient air conditioning, UPS solution along with flexible busbar power distribution systems for medium and large data center applications.



SmartAisle 3 reposit industry-standard 19" rack-mounted hardware devices that include servers, voice, data, internet networking equipment, racks, enclosed components, power supply and distribution, cooling, monitoring equipment, etc., and it can perform the complete functions of uninterruptible power supply, cooling and monitoring of the equipment inthe cabinet with significant improvements in energy efficiency by optionally selecting the built-in AI function module.

Applications



Financial Data Hub



Internet Data Center



Edge Computing



Healthcare



Education



Transportation



Scientific Research Center



Government and Defense

All in One Built-in Carriage

Intelligent Lighting

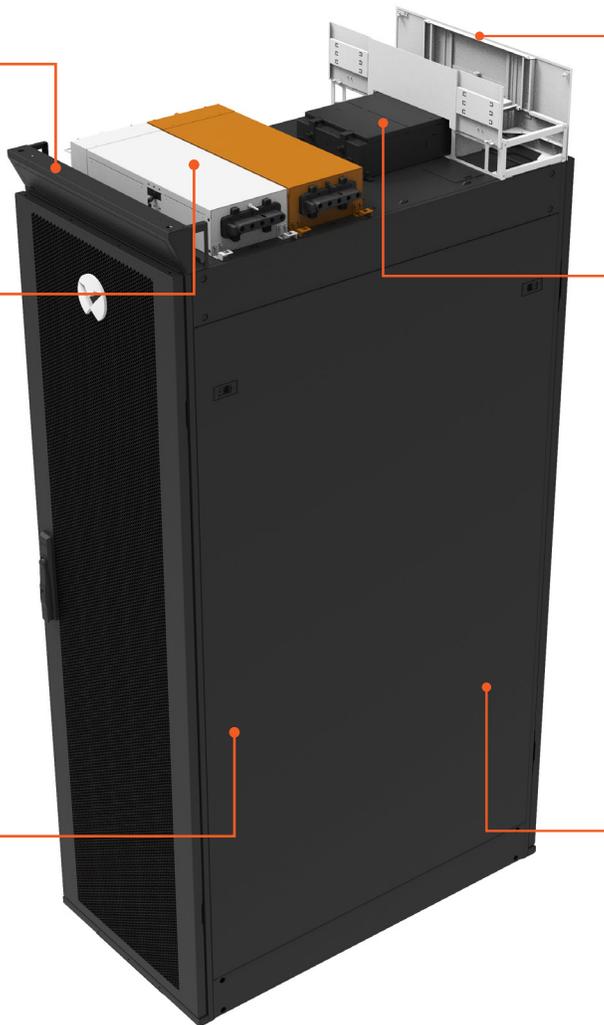
Integrated 3-color bright lights with a user-friendly interface, providing adjustable space lighting

Soft Busway

- 2N ready, ensuring robust reliability
- Reduced power distribution installation simplifies the process
- Streamlined design enhances overall reliability
- Integrated thermistor at flexible connectors for real-time over-temperature monitoring

Sensors

Front and rear of Carriage feature temperature, humidity and door sensors, eliminating the hassle of complex on-site cabling installation



Cable Tray

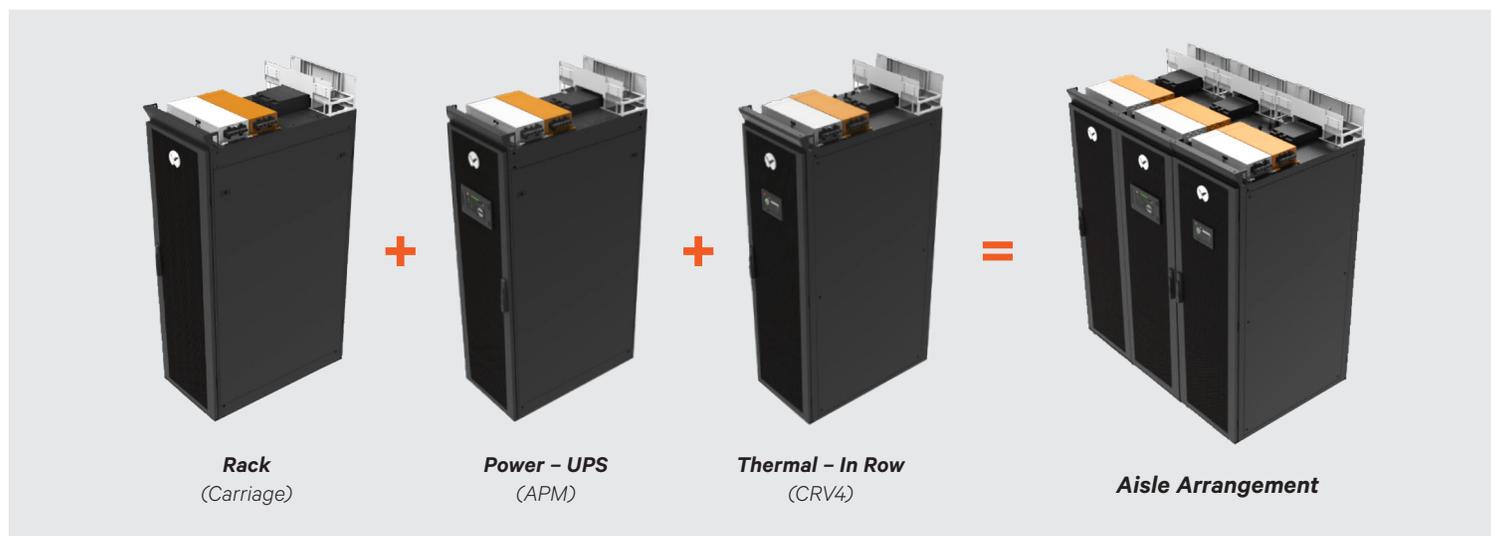
Specifically designed cable tray feature helps easily guide the cable run over the entire SmartAisle unit

Smart Pod

- Individual Carriage monitoring gateway oversees Carriage conditions including temperature, humidity and door status
- Manage power distribution to rack PDUs
- Control over Carriage lighting and roof status detection, while also reserving space or future management capabilities

Power Distribution System

- Inbuilt power distribution set up for necessary utilities
- Geist rack PDU using standard C14/C20 power cord, dual color chassis and U-locking feature



Intuitive 15-inch Local Touch Screen Control Panel

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

Main Screen

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

Thermograph Profile

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

IT Load Profile

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

System Alarms

Displays all the current alarms with the precise fault location and the level of urgency

Nephogram

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

Rack	Top	Center	Bottom
Row 1	27.00	27.00	27.00
Row 2	27.00	27.00	27.00
Row 3	27.00	27.00	27.00
Row 4	27.00	27.00	27.00
Row 5	27.00	27.00	27.00
Row 6	27.00	27.00	27.00
Row 7	27.00	27.00	27.00
Row 8	27.00	27.00	27.00
Row 9	27.00	27.00	27.00
Row 10	27.00	27.00	27.00
Row 11	27.00	27.00	27.00
Row 12	27.00	27.00	27.00
Row 13	27.00	27.00	27.00
Row 14	27.00	27.00	27.00
Row 15	27.00	27.00	27.00
Row 16	27.00	27.00	27.00
Row 17	27.00	27.00	27.00
Row 18	27.00	27.00	27.00
Row 19	27.00	27.00	27.00
Row 20	27.00	27.00	27.00

PUE Screen

Displays the precise PUE with detailed bifurcation of power usage

Upgradable 95-inch Local Door Display

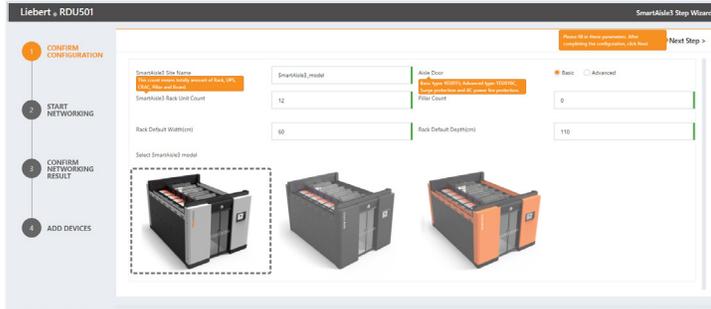
- SmartAisle 3 comes standard with a 15-inch touch screen display with option to upgrade to a stunning 95-inch local door display, complemented by a built-in mobile app for remote management.



Instant Setup of Carriages

- One-click networking feature that doesn't require professional personnel. It effortlessly handles the complex environmental monitoring and management systems, reducing the debugging cycle by 75%.

1. Simple Configuration Setup



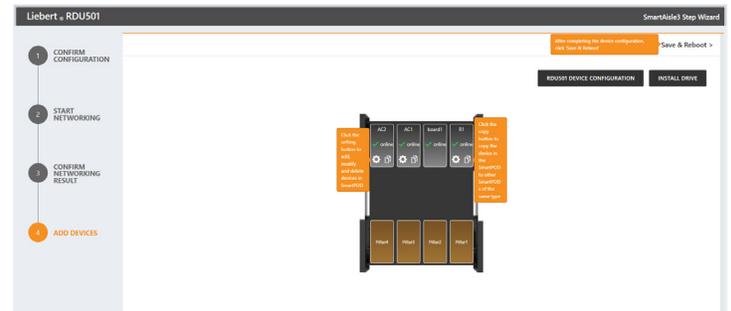
2. Automatic Network Setup



3. Network Setup Succeeded



4. Additional Cabinet Settings

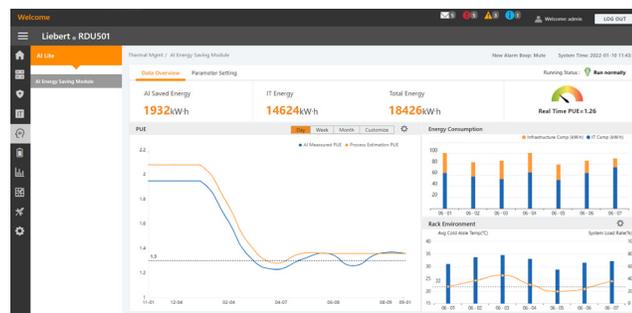


AI Function Self-Learning and Automatic Optimization

- Clear Algorithmic Logic: Reinforcement Learning + Regression Prediction for high algorithm efficiency.
- Fast Convergence: Achieves optimization convergence on average within one week.
- Adjustable Temperature Stability: Seeks to achieve superior energy efficiency while maintaining safe temperatures.
- Measurable Energy Savings: Average energy savings of 20%.



Local Display Interface

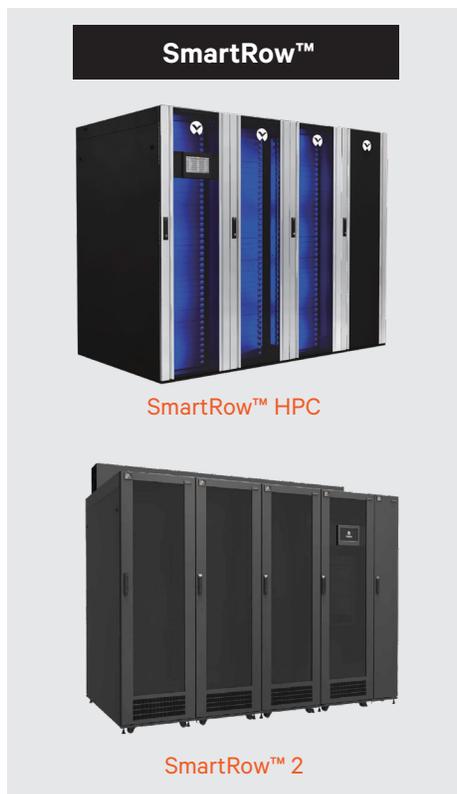


Remote Monitoring Platform Interface

Vertiv™ SmartAisle™ 3 Overview



Vertiv™ SmartSolution Family



Vertiv™ SmartSolution Edge to Core Architecture

Large and growing number of smart devices and sensors generating a massive amount of information at the Edge. Most of the data will be processed and filtered at Edge sites, then remaining content will be sent to the Core.

Today's data center need a comprehensive monitoring software solution, that collects all the data you need to run your critical infrastructure efficiently, and delivers a real-time, integrated view of the entire IT facility and its subsequent assets. Vertiv's innovative monitoring software solutions allowed you to gain visibility and management of your data center from the Edge to Core of your network.

