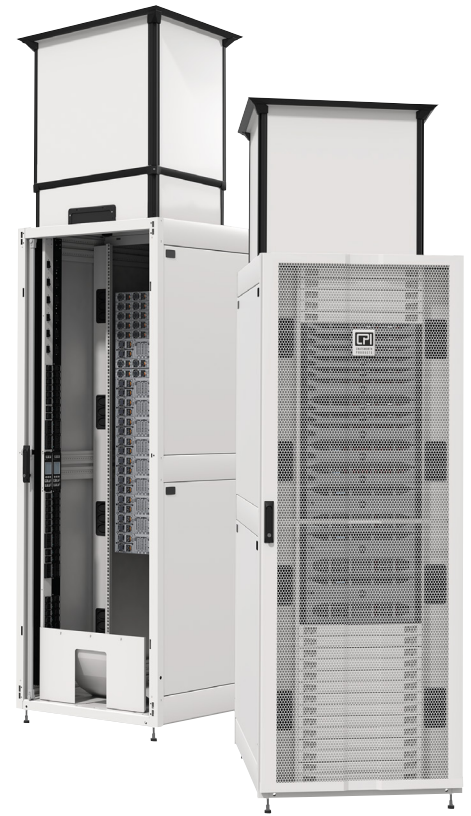




# Six Steps for Deploying an Efficient Data Center Power & Cabinet Ecosystem

In a data center, a power and cabinet ecosystem is the integration of hardware (the cabinet and anything inside or connected to the cabinet) and any software that specifically supports or enhances the hardware's functionality. The ecosystem thrives when this combined infrastructure is provided by a single manufacturer – allowing you to make more informed decisions to achieve total data center optimization more quickly.

The following six steps will help you jump-start deployment to ensure increased ROI for the long-term.



## Step 1

### Support Next-Generation Compute with Strength

A customizable, high-density cabinet provides future readiness, speed of deployment and allows for optimal use of floor space. With the ability to configure and customize cabinets to fit your specific application, you'll also be able to address critical concerns such as effective, efficient power distribution, airflow and cable management and bonding.

CPI's ZetaFrame® Cabinet is expertly designed to provide the ideal mix of configurability, future-proof strength and robust features, allowing for maximum space utilization and equipment support. Our innovative system powers and protects your technology investment with its modular, holistic approach that effectively integrates cable, thermal and power management, environmental monitoring, and access control.

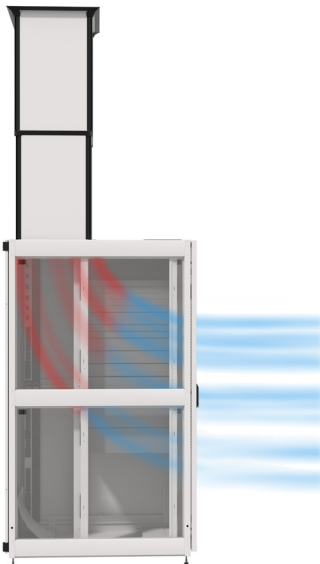


## Step 2

### Manage Power with Intelligence

Power distribution, monitoring and control, as well as power management inside the cabinet, are all critical to ensuring the availability and uptime of your IT applications, as well minimizing the overall energy footprint of the data center. Consider powering up your data center cabinet with uninterruptible power supplies (UPS) and intelligent power distribution units (PDUs). CPI's eConnect® line offers a market-leading temperature rating of 149°F (65°C) and can be preinstalled to save deployment time.

eConnect also features Secure Array® IP Consolidation technology, which allows users to link up to 48 PDUs under a single IP address. Additionally, patent-pending, low-profile locking outlets prevent accidental disconnections without requiring special power cords, thus reducing installation costs.



## Step 3

### Achieve Maximum Efficiency with Thermal Management Solutions

Reducing data center cooling costs is a priority among data center operators. An effective thermal management strategy that utilizes practical concepts, like passive cooling, allows the data center cabinet to support high-density equipment, while promoting better energy efficiency and lower costs.

Within the cabinet, it is important to have a front/rear barrier so cold air flows through equipment, but hot air does not circulate around. Within the room, it is important to isolate hot air and give it a path to return to the air handlers. Solutions such as CPI's patented Vertical Exhaust Duct mount on the top of cabinets and guide hot exhaust air from the enclosure to an overhead drop ceiling or ductwork to create a closed hot air return pathway to the cooling system. Additionally, active cooling solutions, like direct-on-chip liquid cooling, which efficiently handles extreme power densities in high-performance computing environments, are imperative for protecting data center equipment.



## Step 4

### Monitor Environmental Conditions Proactively

One of the most common causes of downtime is hardware failure resulting from exceeded temperature or humidity levels within the cabinet. The ability to monitor these environmental conditions to identify and address any issues before they result in downtime is a key component in any data center management strategy.

Prevent downtime with a simple and automated environmental monitoring solution that alerts you for critical thresholds. eConnect PDUs are provisioned with environmental ports, giving users have the ability to remotely monitor, record and analyze environmental conditions at the cabinet level. For a more robust solution, CPI also offers Remote Infrastructure Management (RIM) Systems (RIM-1000 and RIM-750).

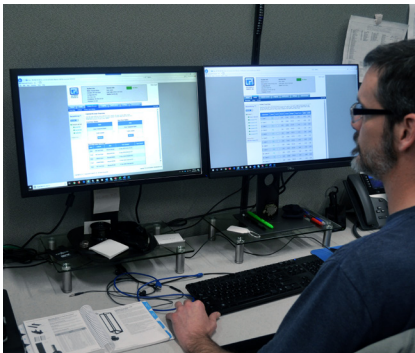


## Step 5

### Secure and Protect Equipment Remotely

Securing personal and business data from theft has become an issue of paramount importance. Access to IT equipment within cabinets must be properly controlled and managed. A networked electronic access control solution at the cabinet level prevents unauthorized physical access in addition to providing administrators an audit trail of all authorized and unauthorized access attempts

CPI's RFID Electronic Lock Kit can be preinstalled in a CPI ZetaFrame Cabinet for quick deployment and offers multiple methods of integration. Through its audit trail capability, data center managers can keep a log entry of each cabinet access remotely, adding another layer of security at the cabinet level.



## Step 6

### Optimize Systems with a Single-Pane View

We often say that a Data Center Infrastructure Management (DCIM) software solution is the lens through which data center managers gain better visibility into the health of data center assets and operation.

A DCIM helps you visualize trends in the room and cabinet from a single dashboard. Power IQ® for eConnect, a DCIM software, turns the measurements and alerts from the eConnect PDU, environmental monitoring and access control into actionable information. Track usage against known capacity, identify areas for improvement and measure results in a simple yet robust interface.

## BONUS

### Speed of Deployment from a Single Supplier

In addition to satisfying all the technical product requirements, working with a single manufacturer who provides a fully integrated solution ensures fast delivery, easy sourcing, customization, and pre/post-sale services that enable a complete ecosystem approach.

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