HyperPod

Fast, flexible and cost-optimized architecture designed to deploy IT increments of 8 to 12 racks

- Fast
- Flexible
- Cost optimized
- Rack-ready system
- Freestanding pod
- Easy to Configure

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Customer Data Center Challenges

The data center industry continues to evolve at a faster pace than ever before. Trends toward big data, Internet of Things (IoT), and the shift to the cloud are driving the need to deploy IT quickly and at a massive scale. The method of deploying IT is also changing with the shift to fully integrated racks and new rack designs.

To respond to these challenges, customers are driving for faster and more cost-efficient deployments that also maintain flexibility. Traditional approaches to data center deployment are not ideal to meet these customer needs.

1. Traditional air containment attached to the IT racks does not provide the needed flexibility to adapt to various racks and easily roll the racks in and out of position.
2. Installing containment and completing construction after the racks are in place puts fully integrated IT gear at risk and can slow down the deployment cycle.
3. Invasive construction work to hang ceiling grids and routing cabling under raised floors makes the deployment process harder than it needs to be and can be difficult to scale.

Introducing HyperPod™

Schneider Electric has developed a new system to address these challenges and customer requirements. HyperPod is a flexible, freestanding frame and containment system that adapts to different power and cooling configurations. It also provides multiple mounting locations to support all types of required cabling and infrastructure right on the pod. HyperPod is engineered to be quickly and easily pre-installed independent of the IT racks.

Benefits

- Implement efficient data centers, while maintaining flexibility and easily rolling racks in and out
- Quickly install containment and infrastructure before IT is delivered
- Avoid costly, time-consuming, and invasive construction

HyperPod Features and Options

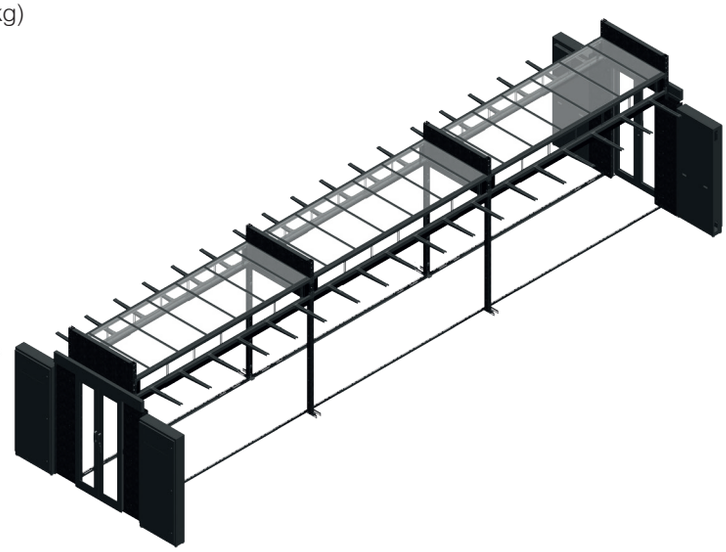
Schneider Electric has engineered HyperPod to provide flexibility in many areas to meet the needs of our customers. The system can be configured for different types of data center applications from small to hyperscale.

Flexible Freestanding Frame

The base frame of HyperPod is a freestanding steel structure that is easy to assemble. It is available in two different heights and the aisle length is adjustable by sliding the telescopic horizontal beams. It also supports multi-pod configurations for larger deployments.

Specifications and Options:

- Aisle Length: 8 to 12 ft. (2,400 – 3,600 mm) long
- Aisle Width: 3 ft., 4 ft., 5 ft., or 6 ft. (900, 1,200, 1,500, or 1,800 mm) wide
- Frame Height: 9 or 10.5 ft. (2,750 or 3,200 mm) high
- Tall frame accommodates up to 52U racks and short frame up to 48U racks
- Total system supports loading of up to 4,000 lbs (1,814 kg)
- Optional aisle crossover tray for routing cables
- Optional lighting kit



HyperPod has been designed to integrate all your data center physical infrastructure requirements

Power Cooling Rack Systems Security & DCIM Services

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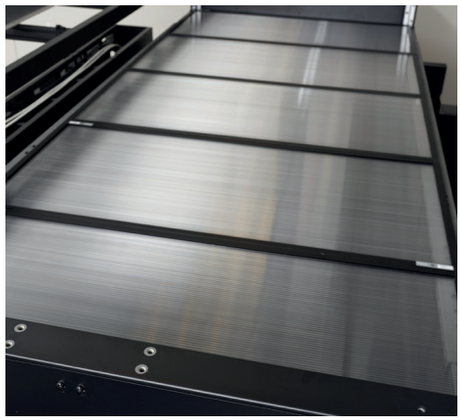
Air Containment

Brush strips, doors, windows, and roof panels attach to the freestanding frame to provide air containment. Not mounting the containment directly to the racks allows the racks to easily roll in and out of position. This also allows the containment to be pre-installed independent of the racks. HyperPod can be configured for hot or cold aisle containment.

Air Containment

Specifications and Options:

- Standard bi-parting or single swing door
- Simple, shrink, or dropout roof options
- Rack height adapters maintain containment for different height equipment in same pod
- Full rack blanking panels maintain containment for partially filled pods
- Windows easily slide to provide access to top of racks from inside aisle
- Hot or cold aisle containment



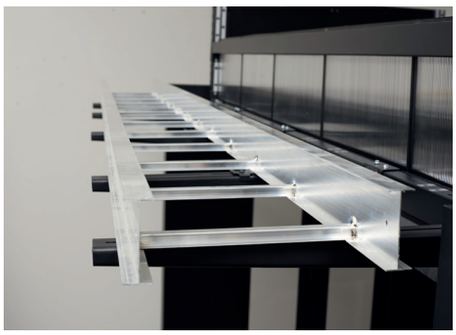
Overhead Support System

HyperPod provides multiple mounting locations to easily route power and data cabling. It can also support ducting, piping, or other infrastructure to eliminate the need for ceiling-mounted grids or routing under raised floors.

Rack Systems

Specifications and Options:

- Mini Cantilevers: weight loading up to 200 lbs (91kg)
- Large Cantilevers: weight loading up to 1,500 lbs (680 kg)
- Overhead support frame: Mounts onto large cantilevers and length adjustable from 8 to 12 ft.



Power Distribution

HyperPod provides multiple options for distributing power to racks in the pod. Options include integrating panelboards, hanging busway, or row-based power distribution units.

Power

Specifications and Options:

- Power distribution cabinets are available to integrate panelboards (3 door options for MH50, split, or solid)
- Power raceway can be used to route power cabling and mount junction boxes
- Busway can be hung from large cantilever and overhead support frame
- Row-based modular PDUs can be integrated into HyperPod

Cooling

HyperPod provides flexibility to adapt to different cooling configurations based on the customer needs. It can be arranged as hot or cold aisle and integrates equally well with perimeter, in-row, or cooling outside the IT room.

Cooling

Specifications and Options:

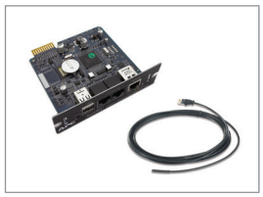
- Hot or cold aisle air containment
- Adaptable to perimeter, in-row or cooling outside IT room (such as air economizer solution with ducting)
- Compatible with vertical duct

Security and Environmental Management

Schneider Electric's NetBotz portfolio can be leveraged for HyperPod solutions to provide surveillance, security, and monitoring.

- Surveillance: Leverage NetBotz™, Pelco™ by Schneider Electric IP, and CCTV camera technology to monitor IT assets remotely
- Management capabilities: Alarming allows alerts, multiple notification methods, scheduling, graph and video attachments, and escalation
- StruxureWare: Available for centralized monitoring of multiple appliances
- Environmental monitoring: Wide range of sensor support to monitor the health of your IT assets — temperature, humidity, leak, door, smoke, vibration, dew point, airflow, dry contact, 4 – 20 mA and 0 – 5 V
- Access control: Control and manage access privileges over the network

Security & DCIM



NetBotz sensors

NetBotz rack access

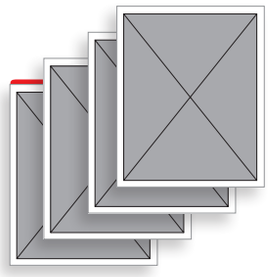
Data Center Infrastructure Management (DCIM)

Services

StruxureWare for Data Centers (DCIM) is a management and monitoring software suite designed to collect and manage data about a data center's assets, resource use, and operation status throughout the data center life cycle. This information is then distributed, integrated, and applied in ways that help managers optimize the data center's power usage effectiveness (PUE) and meet IT, business, and service-oriented goals. From IT assets to racks, rows, rooms, and buildings, StruxureWare for Data Centers delivers the right information to the right users at the right time.

- Adjust the facility's cooling needs when the IT loads change for optimal resource use.
- Optimize existing data center physical infrastructure to reduce OpEx and delay future CapEx.
- Dynamic virtual machine management maximizes application and system availability.
- Provide graphical representation of systems for proactive monitoring and management.
- Instantly calculate recommended IT installation locations for greater agility.
- Support your business process for space and cage management for multitenant facilities.

HyperPod Tools and Resources

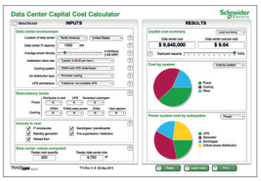


White papers by Schneider Electric are fact-based, vendor-neutral information and highly respected in the industry. There are two new white papers related to HyperPod.

White Paper 260:
Specifying Data Center IT Pod Architecture

White Paper 263:
How Data Center Pod Frames Reduce Cost and Accelerate IT Rack Deployments

whitepapers.apc.com



TradeOff™ Tools are easy-to-use planning tools that model complex interactions of systems based on data and science. There is a new TradeOff tool to help customer with sizing IT pods.

TradeOff Tool 23:
Data Center IT Pod Sizing Calculator

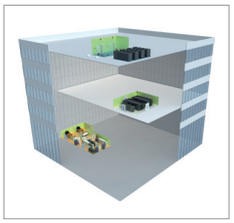
tools.apc.com

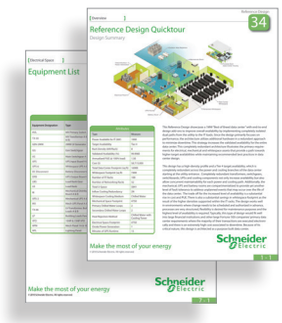
Reference designs

Reference designs are documented and validated conceptual plans covering the electrical, mechanical, and IT spaces. Acting as a common platform and language for discussion, reference designs are a great starting point for any new or retrofit project.

We have developed new reference designs focused on:

Reference Design 65:
5.2 MW Pod-based build, Chilled water, 85,000 sq ft



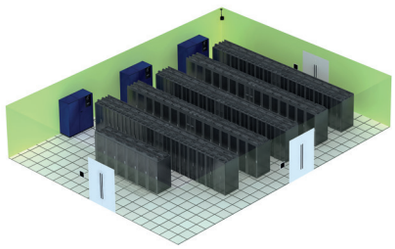


schneider-electric.com/datacentredesigns

HyperPod Configurator Tool

Schneider Electric has an unparalleled set of software tools that empower Schneider Electric engineers and partners to rapidly design and quote efficient, reliable, and validated solutions.

The HyperPod Configurator makes it easy to choose the right frame and accessories to meet the customer requirements. It is accessible through the Design Portal.



To benefit from the Designer tool, contact your local Schneider Electric representative or certified partner.

How Your Organization Can Benefit from HyperPod

HyperPod offers multiple benefits to your organization, including:

- Fast: HyperPod is quick and easy to assemble and a pod-based approach can cut down the overall deployment cycle for data centers
- Flexible: HyperPod provides flexibility to incorporate all kinds of racks and integrates with various approaches to power and cooling
- Cost optimized: A pod-based approach with HyperPod can cut overall costs by simplifying deployment
- Freestanding pod: HyperPod can be pre-installed because of the freestanding frame and supports all required infrastructure
- Easy to configure: The HyperPod Configurator makes it easy to select and order the necessary frame and accessories for your deployment

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June 2018

998-20016615_A_GMA-US

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