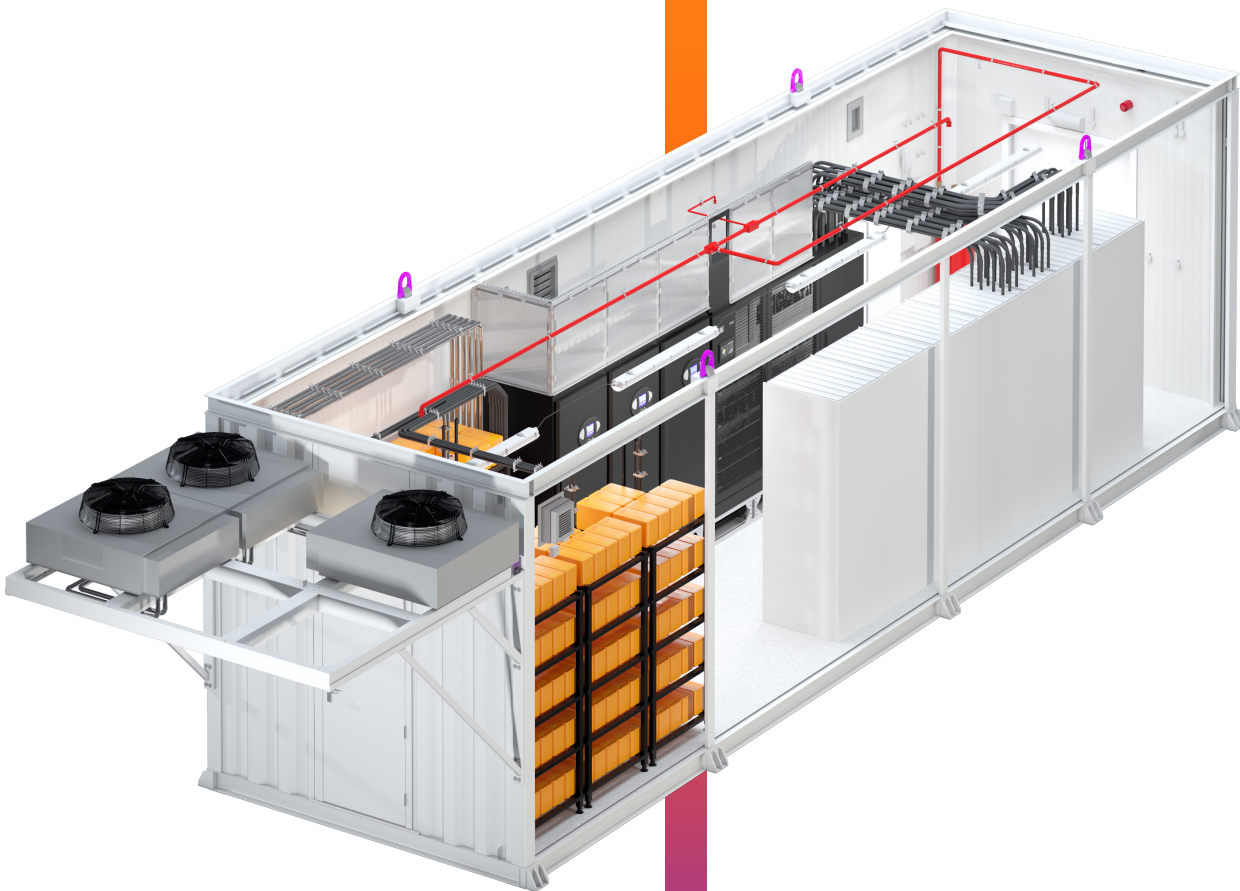




Vertiv™ Power Module 1000/1200

1000/1200 kVA/kW packaged power
infrastructure in a "plug and play"
enclosure



Vertiv™ Power Module 1000/1200 enables you to deploy isolated, power-dense critical infrastructure capacity just in time to meet your business demands.



Exterior view of Power Module 1000/1200

HIGHLIGHTS

- High power density built around market-leading Liebert® UPS technology
- Energy efficient operation with airflow containment to ensure optimal equipment conditions
- Rapid deployment with limited site work enabling nearly “plug and play” functionality
- Simple, hot scalability of your site’s power capacity by simply adding more Vertiv Power Modules
- System efficiency up to 95%

For larger sites, bringing infrastructure online as soon as possible offers the largest ROI – enabling you to deliver capacity when and where it is needed. Often, this requires challenging scheduling and sequencing of skilled technicians from different disciplines, who often can’t work in parallel – meaning that small project delays from one trade can snowball into big project delays.

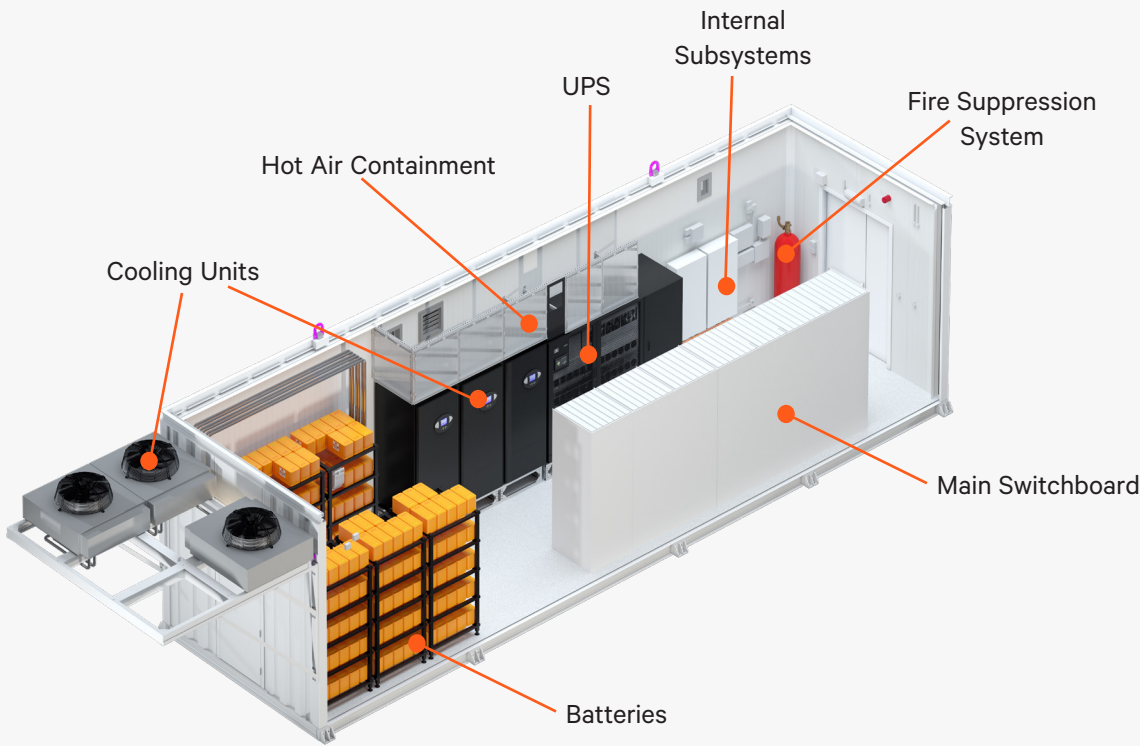
What if you could deploy critical power infrastructure in a pre-packaged way that made it independent from other construction activities?

With Vertiv Power Module, you can rapidly construct redundant blocks of 1000 or 1200 kVA/kW critical power infrastructure for your new or existing facility, allowing you to focus on the sensitive areas of the facility that require the most attention and management. And the Power Module can be used in a site architecture that is hot scalable – meaning you can add capacity to the site by simply adding additional units, without taking the critical loads offline.



Cutaway view of Power Module 1000/1200

Component Overview of Power Module 1000/1200



Power Module 1000/1200 leverages core Vertiv Critical Power and Thermal Management technologies to deliver a simple, yet robust design that grows with your needs at the most critical locations.

Power Module 1000/1200 incorporates:

- Liebert® EXL S1 UPS offers industry-leading power density and proven reliability
- Multiple switchboard configurations offer distribution options for both critical (UPS-protected) and non-critical downstream loads
- Flexible incoming and outgoing power connections, overhead or underfloor, that can match the site architecture you choose

- Breaker-based normal to emergency power automated transfer
- Integral energy storage with VRLA batteries
- Redundant Liebert thermal management units with air containment – ensuring optimal operating conditions for all subsystems, even in the event of utility power loss
- Clean agent fire suppression to reliably protect assets in the event of a fire

The enclosure simplifies and drastically shortens the on-site time required to install and startup, and reduces the potential for risk, quality, or schedule delays. The entire

Vertiv Power Module and its sub-systems are designed to minimize additional work required at the site – from arrival on site to startup and commissioning in days instead of months.

Capacity & Installation Flexibility



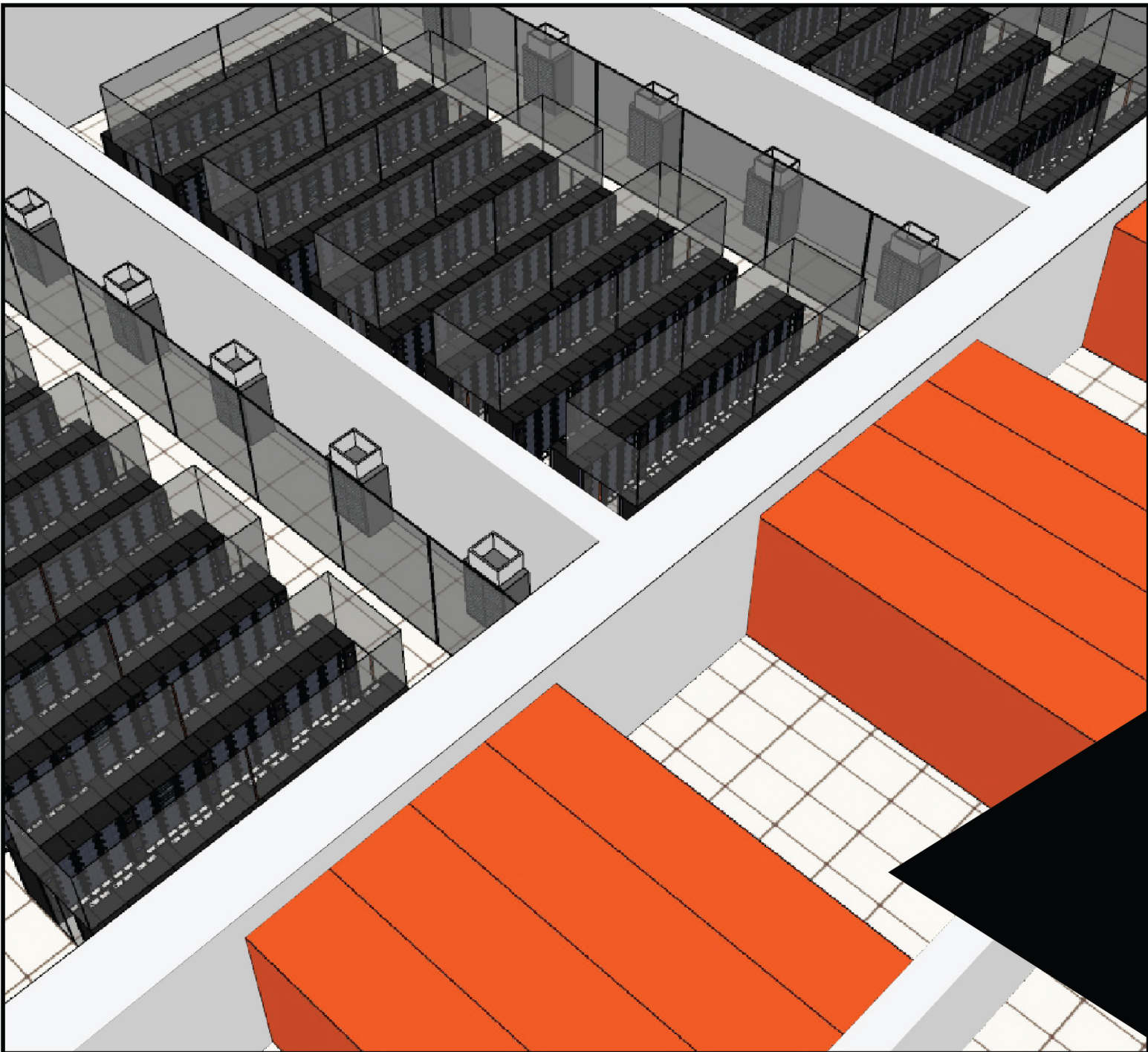
Power Module

- Single module represents a N redundant system
- 1 x UPS - 1000/1200kVA
- Max Battery runtime 5 min @1000kW EOL
- Individual Transformer & Generator inputs
- UPS and Mechanical/Non-Critical load outputs

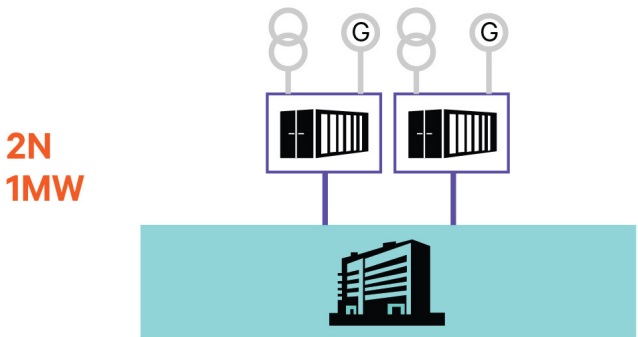
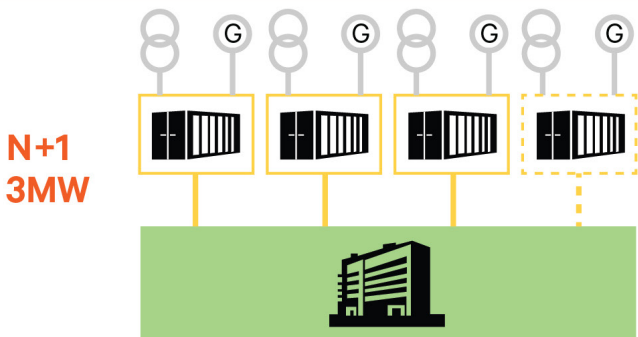


Customer Facility

- Maximized floor space for revenue generating equipment
- Multi module configuration allows for various site power topologies based on customer requirements (2N, N+1)
- Scalability - Modules can be added based on initial power requirements and future expansion plans



Example Topologies





Interior view of Power Module 1000/1200

Power Module 1000/1200 Technical Specifications

REFERENCE DESIGN		Power Module - 1000		Power Module - 1200	
Enclosure External Dimensions					
Enclosure Length (*with externally-mounted condensers)		12192 (*14922)mm			
Enclosure Width		3400mm			
Enclosure Height		3550mm			
Estimated Transportation Weight		up to 22t			
Enclosure Type		Welded steel frame and walls			
Input AC Parameters					
Region		EMEA			
Voltage/Frequency		230/400V-3ph / 50Hz			
Recommended Transformer Size		2000kVA		2500kVA	
UPS					
UPS Type		Liebert® EXL S1			
UPS Rating		1000kVA		1200kVA	
UPS Active Power		1000kW@ p.f.1		1200kW@ p.f.1	
Battery					
Battery Type		VRLA			
Number of Maximum Battery Strings		6			
Battery Backup		5 min @ 1000kW, EOL			
Battery Disconnecter Per String		Fused Switch Disconnecter (DC-20)			
Cooling					
Cooling Unit Model		Liebert PDX033			
No. of Cooling Units		3			
Cooling Unit Redundancy		N+1			
Nominal Cooling Capacity Per Unit		33kW			
Exterior Ambient Operating Range		-20°C to +40C			
Fire Detection and Suppression					
Fire Detection System		Conventional			
Fire Suppression System		NOVEC™1230			
Designed Concentration		5,6%			
Very Early Smoke Detection System		Optional			
Lighting					
Lighting Element		LED			
Lighting Illumination at Floor Level		300lx			
Emergency Lighting		LED, 3h backup			
Electrical Distribution					
Main Switchboard Rating		3200A, 3ph&N+E		3600A, 3ph&N+E	
Rated Operational Voltage (Ue)		400V/50Hz			
Rated Short-Time Withstand Current (Icw@1s)		50kA		65kA	
IP Rating		30			
Form of Separation		Form Type 4b;IEC 61439-2			
Automatic Transfer Switch		Breaker Based			
UPS Load Distribution Points:					
Bulk Feed		1x1600A		1x2000A	
Semi-Bulk Feed		2x800A		2x1000A	
Distributed Feed		2x(2x400A + 3x250A)			
Cooling & Non Critical Load Distribution Points:					
Bulk Feed		1x1250A			
Semi-Bulk Feed		2x630A			
Distributed Feed		2x(2x400A + 3x250A)			
Power Connections		Cables			

