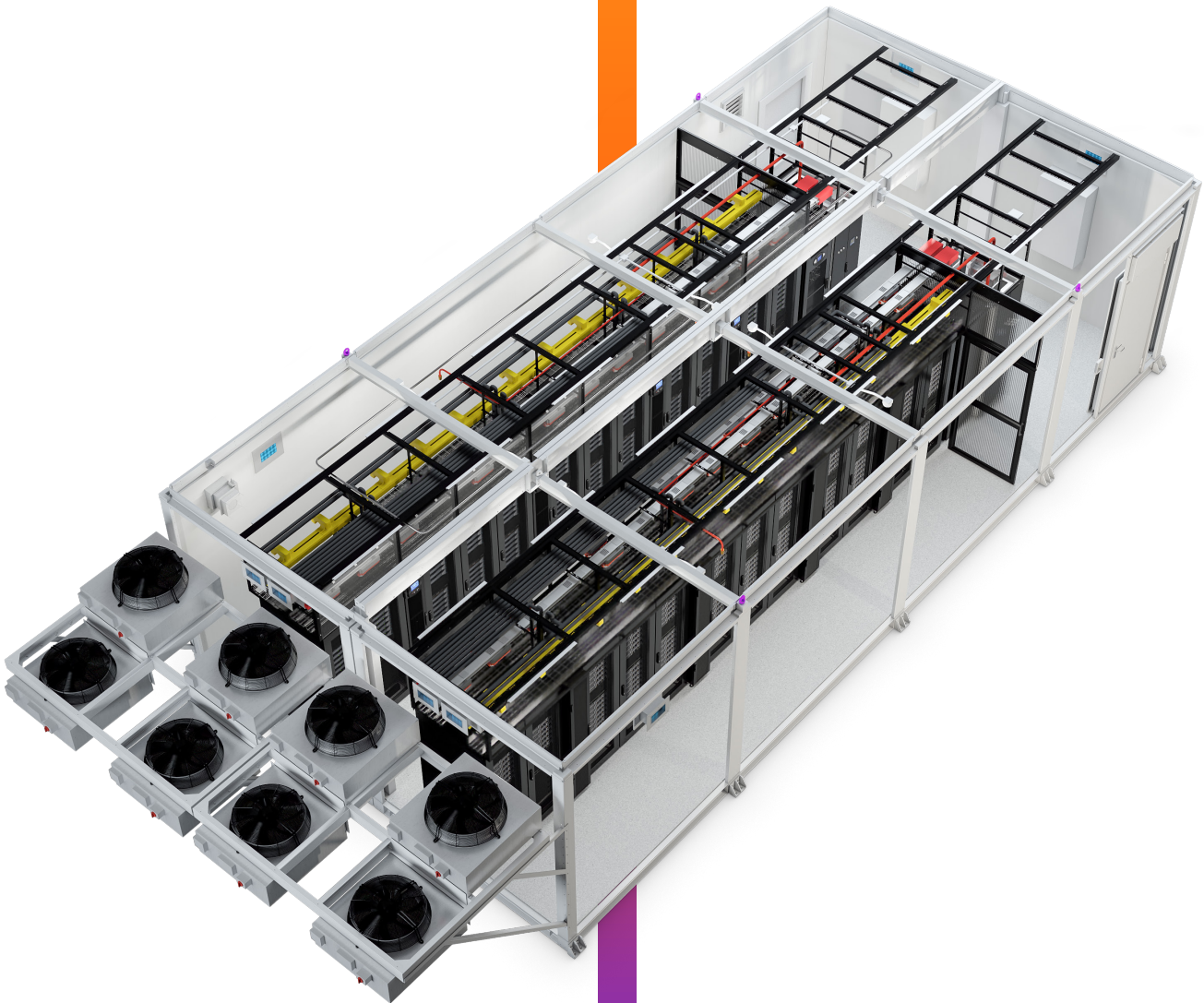




## Vertiv™ SmartMod™ MAX

Simple and configurable infrastructure  
solutions for your critical IT needs



*Imagine the advantages of a rapidly deployable, standalone data center with all the capabilities to achieve your critical IT needs.*



Exterior view of Vertiv SmartMod MAX

Vertiv SmartMod MAX is a simple, configurable system that extends the capability of the SmartMod platform to larger deployments. For IT deployments up to 180kW and 26 IT racks (600 mm wide), SmartMod MAX offers a simple way to install capacity in a fraction of the time a typical IT build might take.

With integrated, pre-engineered, and pre-fabricated infrastructure, you can rapidly achieve your objectives, and you don't have to blow the budget or overbuild based on uncertain future needs. Right-sized systems designed to work together and optimized for constructability allow you to build just what you need today, better aligning your capital plans to your business challenges and simplifying the process of getting business critical systems up and running.

The modules are shipped in two prefabricated sections, then connected and sealed at your site by experienced Vertiv

personnel to create a contiguous space, just like a traditional data center. Configured with two rows of racks, the system uses aisle containment to ensure optimal performance and efficiency of thermal management systems.

SmartMod MAX leverages core Vertiv™ Critical Power, Thermal Management, and Monitoring & Control Technologies.

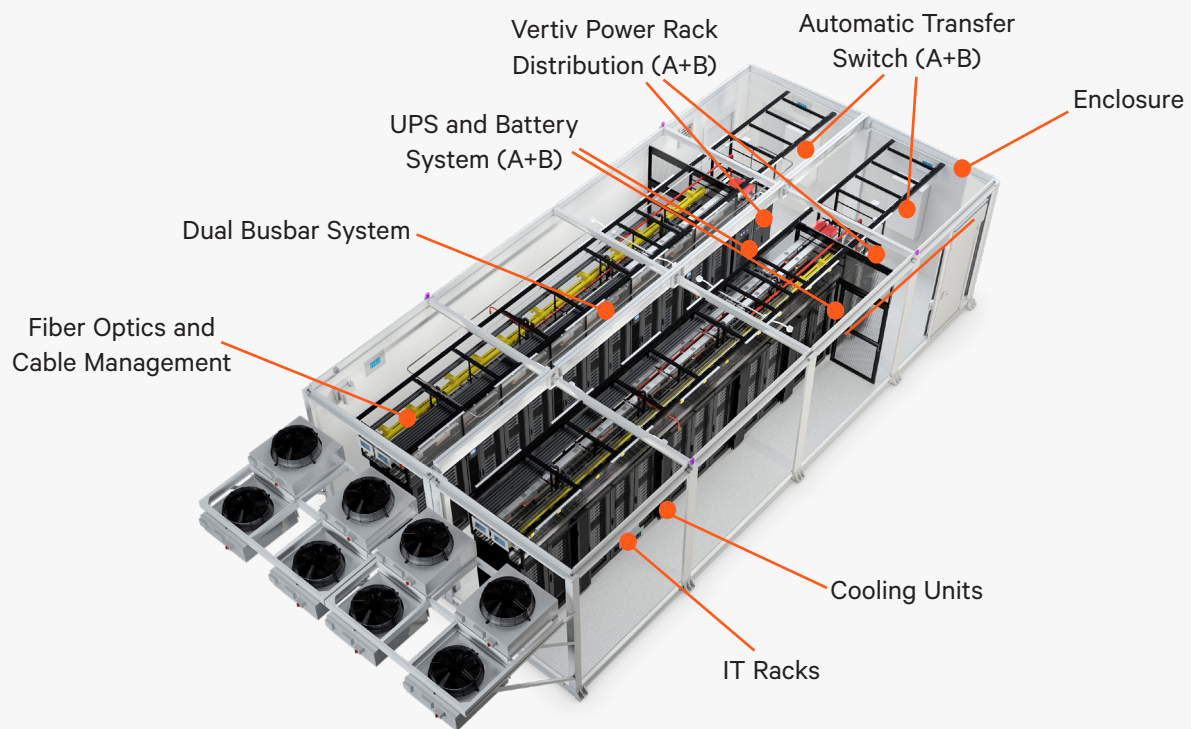
#### **SmartMod MAX incorporates:**

- Liebert® UPS power protection options based on your needs - using either the modular and scalable Liebert APM, or the space-saving Liebert EXL S1
- Close-coupled in-row Liebert CRV thermal management units with intelligent iCOM controls
- Classic and cost-effective Vertiv racks
- Vertiv rack PDU's
- Thermal containment to isolate hot aisle and cold aisle airflows for optimum thermal performance

- Automatic Transfer Switch (ATS) to reliably select normal or emergency power sources
- Clean agent fire suppression and aspiration smoke detection
- Overhead infrastructure, including piping, electrical distribution, and fiber ducts

All subsystems are factory installed into a secure, weatherproof and transportable enclosure – simplifying and drastically shortening on site time required to install and startup, and reducing the potential for risk, quality, or schedule delays. Configuration options are available to provide desired redundancy (N, N+1, 2N) and battery runtime. In addition, when deploying multiple units or at multiple locations, having a common look and feel, layout, and equipment kit simplifies maintenance and operations activities. Vertiv backs it all up with the proven service and support network.

## Component Overview of SmartMod MAX



Enclosure cut-out view of SmartMod MAX





Interior view of SmartMod MAX

## SmartMod MAX Technical Specifications

REFERENCE DESIGN		ESXDE-228AC021-000	ESXDE-27CAC021-000	ESXDE-32CAC022-000	ESXDE-37GAG022-000	ESXDE-40IAH022-000	ESXDE-40RA6021-000
Enclosure External Dimensions							
Enclosure Length (mm)	6426	8010	9594	11178	11970	11970	
Single Enclosure Width (mm)	2900	2900	2900	2900	2900	2900	
Enclosure Width (mm)	5810	5810	5810	5810	5810	5810	
Enclosure Height	3330	3330	3330	3330	3330	3330	
Max Module Overall Length (mm)	9024	10608	13674	15258	16050	14568	
Weight	2x10000kg	2x12000kg	2x14000kg	2x16000kg	2x18000kg	2x17500kg	
Input AC Parameters							
Region	EMEA						
Voltage/Frequency	400VAC, 50Hz						
IT Racks							
Rack Height	42U (2000mm)						
Rack Depth	1100mm						
600mm Wide Racks	8	12	12	16	18	26	
Rack Load	8kN						
Electrical							
Electrical Distribution Board	2						
Automatic Transfer Switch	1	1	2	2	2	1	
UPS Cabinet	2						
UPS Module Redundancy	N+1	N+1	2N	2N	2N	N+1	
UPS Rating	120kVA - 2x(60kVA + 30kVA)	120kVA - 2x(60kVA + 30kVA)	160kVA	160kVA	200kVA	120kVA - 2x(60kVA + 30kVA)	
Battery Backup Time	10min @ 100kW IT Load	10min @ 100kW IT Load	12min @ 140kW IT Load	12min @ 140kW IT Load	7min @ 180kW IT Load	10min @ 100kW IT Load	
Busbar System	Two per row						
Maximum Rack Load	15kW	15kW	15kW	15kW	15kW	9kW	
PDU	2 per rack						
PDU Capacity (max)	3x32A @ 230/400V-3ph	3x32A @ 230/400V-3ph	3x32A @ 230/400V-3ph	3x32A @ 230/400V-3ph	3x32A @ 230/400V-3ph	3x16A @ 230/400V-3ph	
PDU Type	monitored						
Mechanical							
Air Conditioning Type	In-row, direct eXpansion						
Air Conditioning Redundancy	N+1						
Air Conditioning Units	8	8	10	10	12	8	
Cooling Capacity for IT Load (35°C)	110kW	110kW	145kW	145kW	180kW	110kW	
Exterior Ambient Operating Range	-20°C to +45°C						
Fire Detection and Suppression							
Very Early Smoke Detection System	Optional						
Fire Detection System	Conventional						
Fire Suppression System	NOVEC 1230						
Cable Trays							
LAN Cable Trays	200mm wide mesh						
Fiber Optic Tray	4" x 4"						
Spill-over Exit	Single per IT rack						
Lighting							
Lighting Element	LED						
Lighting Illumination	300 lux at floor level						
Emergency Lighting	1 lux at floor level, 1h backup						

These SmartMod MAX configurations depict different scenarios available within the SmartMod platform. Multiple flexible options in terms of different module dimensions, electrical topologies as well as rack dimensions, maximum number of racks and rack densities enable the end-user to configure optimal solutions based on the required application.

