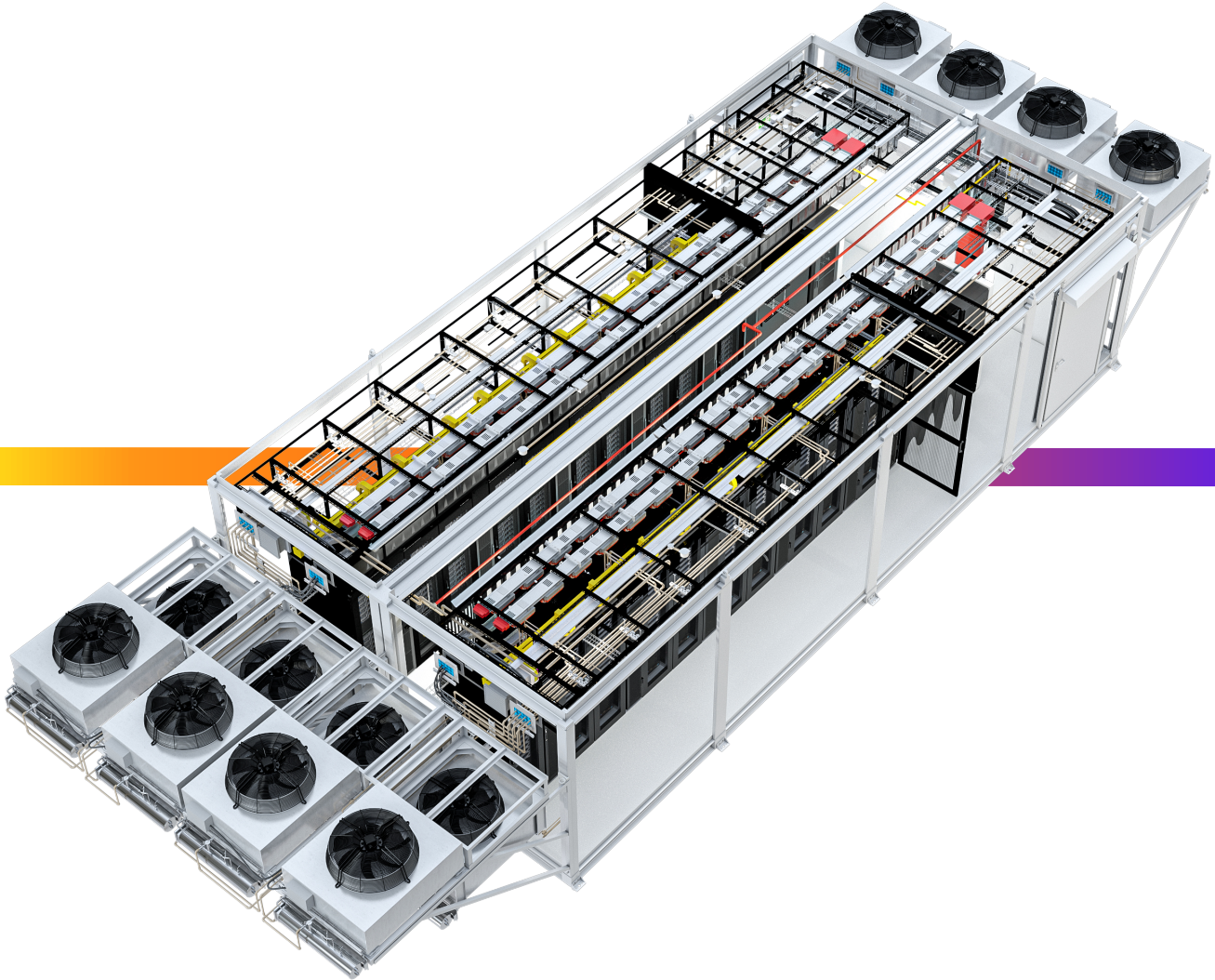




# Vertiv™ SmartMod™ Max

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 DX*

Vertiv™ SmartMod™ Max is a simple, configurable system that extends the capability of the SmartMod™ platform to larger deployments. For IT deployments up to 210kW and up to 26 IT racks, 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 overspend 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/APM Plus, or the space-saving Liebert EXM2
- In-row Liebert thermal management units with intelligent 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
- Overhead structure, including piping, electrical distribution, and fiber ducts
- Clean agent fire suppression and aspiration smoke detection (as optional items)
- Vertiv Critical Insight™ real-time monitoring and visualization for critical infrastructure (as optional item)

Based on preferred cooling option, SmartMod Max is available in two versions:

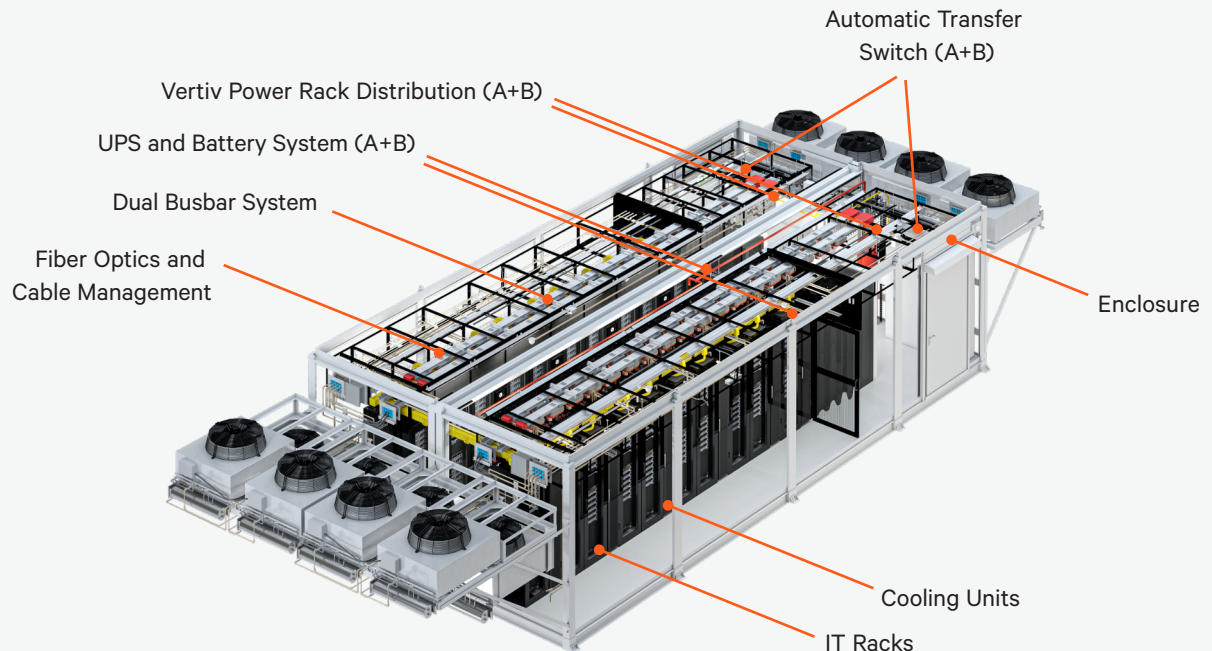
- **SmartMod Max DX**, featuring direct expansion based cooling units
- **SmartMod Max CW**, featuring chilled water based thermal management units.

SmartMod Max is not a one size fits all system. It is designed to be configurable to right-size to your rack footprint, IT load, desired redundancy, location, and other additional options to you can achieve the optimal solution based on a specific need.

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.

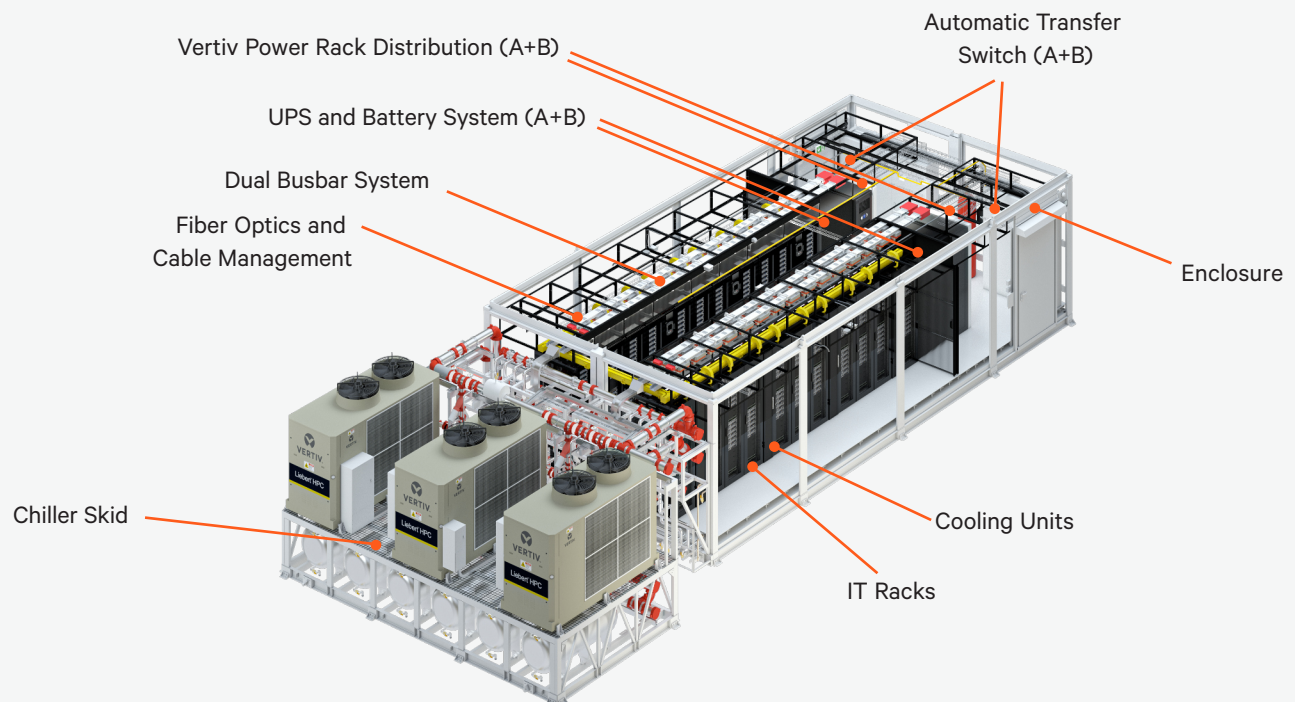
Configuration options are available to provide desired functionality and battery runtime. In addition, when deploying multiple units or at multiple locations, having a common look and feel, layout, and equipment kit simplifies maintenance and operations activities. Vertiv backs it all up with the proven service and support network.

## Component Overview of SmartMod Max DX



Enclosure Cut-Out view of SmartMod Max DX

## Component Overview of SmartMod Max CW



Enclosure Cut-Out view of SmartMod Max CW





*Interior view of SmartMod Max*

# SmartMod™ Max

Standard Design Specifications	SmartMod Max DX	SmartMod Max CW
<b>Enclosure External Dimensions</b>		
Enclosure Length (mm)	8010, 9594, 11178 or 11970	
Single Module Width (mm) <sup>1</sup>	2900	
Enclosure Width (mm)	5810	
Enclosure Height (mm)	3333	
Module Overall Length (mm) <sup>2</sup>	8010 - 13670 (@ 8010) 9594 - 15254 (@ 9594) 11178 - 16838 (@ 11178) 11970 - 17630 (@ 11970)	8830 (@ 8010) 10415 (@ 9594) 12100 (@ 11178) 12790 (@ 11970)
Chiller Skid Dimensions (WxL) (mm)	-	3440 x 6865
Lifting Weight <sup>3</sup>	Up to 17000 kg per module	Up to 17000 kg per module Up to 8000 kg per chiller skid <sup>4</sup>
<b>Input AC Parameters</b>		
Region	EMEA	
Voltage/Frequency	400 VAC, 50 Hz	
<b>IT Racks</b>		
Rack Height	42U (2000 mm) 47U (2200 mm) 48U (2265 mm)	42U (2000 mm)
Rack Depth	1100 mm	
Rack Width	600 mm and/or 800 mm	
Rack Load	8 kN	
<b>Electrical</b>		
Electrical Distribution Board	2	
Automatic Transfer Switch	1 or 2	
UPS Model	APM150, APM Plus or EXM2	
UPS Cabinet	2	
UPS Module Redundancy	N/N+1 for APM or N for EXM2	
UPS Rating	Up to 150kVA (@ APM150) or 250kVA (@ APMPPlus or EXM2)	
Battery Backup Time	1 - 10 min	1 - 15 min
Busbar System	Two per row	
Rack Load	Up to 17 kW	
PDU	Two per rack	
PDU Capacity (max)	3x32A @ 230/400V-3ph	
PDU Type	Basic, Monitored (unit level), or Switched (unit level)	
<b>Mechanical (HVAC)</b>		
Air Conditioning Type	In-row, direct expansion	In-row, chilled water
Air Conditioning Redundancy	N+1	
Air Conditioning Units	up to 12x CRD25	up to 8x CRC60
Cooling Capacity for IT Load (35°C)	up to 200 kW	up to 210 kW
Exterior Ambient Operating Range	-30°C to +52°C	-25°C to +52°C

<sup>1</sup> SmartMod Max enclosure consists of two (2) modules.

<sup>2</sup> Length presented is the maximum transport length. For SmartMod Max DX it includes an enclosure with attached condenser units.

For SmartMod Max CW it includes the piping extension attached to enclosure, while chiller skid is transported separately.

<sup>3</sup> Weight presented is the estimated weight of shipping/lifting the unit with empty IT racks and empty UPS battery cabinets.

<sup>4</sup> The lifting weight of chiller skid includes 3 chillers, 6 tanks and piping (water or glycol excluded).

