EDGE - HPC DATA ROOM









Where it all starts.

At the heart of our KONNECT ecosystem stands the EDGE container, the HPC data room whitespace. Serving as the central hub, it links up to power, cooling and network resources.

Entering the data room, the focus is primarily on IT infrastructure. Our fully optimized configuration accommodates up to 564U of rack space, with an additional 25U dedicated to network patching.

Overhead, we have easily accessible cable trays, network trays and piping, all designed for straightforward maintenance. Power is supplied by two power cabinets (A+B) alongside an auxiliary cabinet, all pre-configured, pre-installed and ready for operation.

Other KONNECT products are effortlessly connected via feedthrough plates and flanges. Equipped with fire detection and Argonite-based extinguishing, smart locks and cameras, redundant power, cooling and network systems, you can manage your facility with complete peace of mind.



KEY FEATURES

High-density racks

Housed with racking to cool up to 80kW of power, leaving ample room for future hardware upgrades.

Shipped as a single unit

No hassle, just a single unit to handle it all. Differing for each location, keeping the unit mobile might also have a positive effect on building permits.

Plug-and-play

The plug-and-play solution ensures easy installation and enables a quick go-live process.

Scalable deployment

Our modular approach allows cost savings in both capital and operational expenses, accelerating business growth. KONNECT is designed with scalability in mind, facilitating future expansion. Specifically with the EDGE data room, expanding rack space in a later stage is possible without the need for system interruption.

Gas-based fire extinguishing

By reducing the amount of oxygen in the data room, fires get suppressed quickly without the need of water or any other agents that might cause damage to valuable equipment. These systems act quickly and leave no residue.

Featuring premium brands

The use of premium brands ensures that our products meet the highest standards of performance and reliability, providing our customers peace of mind.

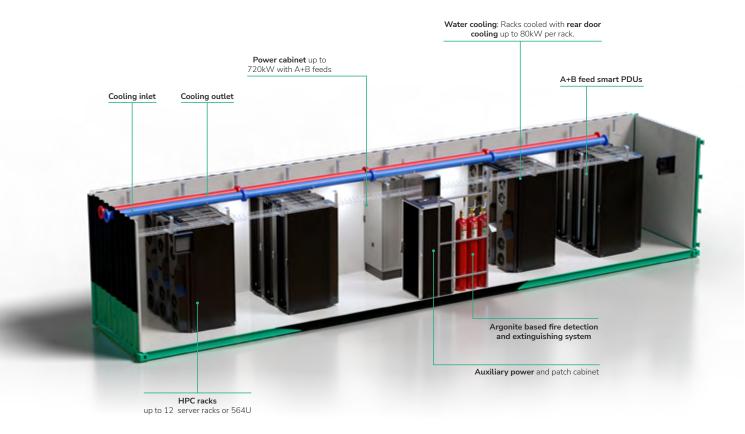
Lower CAPEX

Compared to any standard data center deployment, our data room has a drastically reduced CAPEX.



EDGE HPC DATA ROOM







Cooling system	ICE - cooling unit: water cooling, connected to dry cooler or chiller: Racks cooled with rear door cooling up to 80kW per rack. Hot air never leaves the racks, keeping the entire server area cold at all times Leak detection Hot swappable fans N+1 redundancy Environmental sensors Automatic flow control valves PPH piping, flanged				
	 Key advantages: Compact design Space in the back of the rack is not impacted, allowing for ample space for cabling and PDUs High cooling capacity for high compute density External cooling units allow for scaling for your sites climate 				
Power supply	A+B feed cabinet 3 x 400V + N Smart PDU (A+B per rack) metered + switched per socket 1 x auxiliary panel (lights, pumps, drycooler,) Auxiliary panel housed in a 19" cabinet. Lower half electrical, upper half is dedicated for network				
Housing	Container fully insulated LED Lights ESD floors Extra wide doorways to allow access for server lifts for easy mounting of server equipment: 1200 mm Cable feedthrough Piping flanges				
Fire safety	Argonite based fire detection and extinguishing system with controls and post-incident ventilation				



EDGE HPC DATA ROOM - SPECIFICATIONS

Security	Camera system with motion detection and night vision NFC locks for access control
Optional extras	Custom Branding Remote monitoring and control capabilities (DCIM / BMS) Outside security systems Client specific customization Scalable network design (100 to 800gb/s) Server hardware Liquid-to-chip cooling Server lift

KONNECT offers a wide range of EDGE models, all adjusted to different infrastructure needs and budgets. These modules vary in the number of racks and servers they accommodate, rack size and cooling capacity, allowing flexible choices.

EDGE models										
	# of racks	Rack size (w x d)	U / rack	# of U's	Max load / rack (kW)	Peak cooling / rack (kW)	Container type 2			
EDGE-150	3	600×1000 or 800 × 1000	47	141	50	60	20ft			
EDGE-350	6			282			30ft			
EDGE-450	9			423			40ft			
EDGE-600	12	600 x 1000		574			45ft			
EDGE-W160	2	800 x 1000 or 800 x 1200	48	96	- 80	90	20ft			
EDGE-W340	4			192			30ft			
EDGE-W500	6			288			40ft			
EDGE-W720	8			384			45ft			

- 1 Peak cooling at 20° inlet water temperature. Higher peak load possible with lower inlet water temperatures.
- If the racks are 1200 deep, the container length may be longer.

