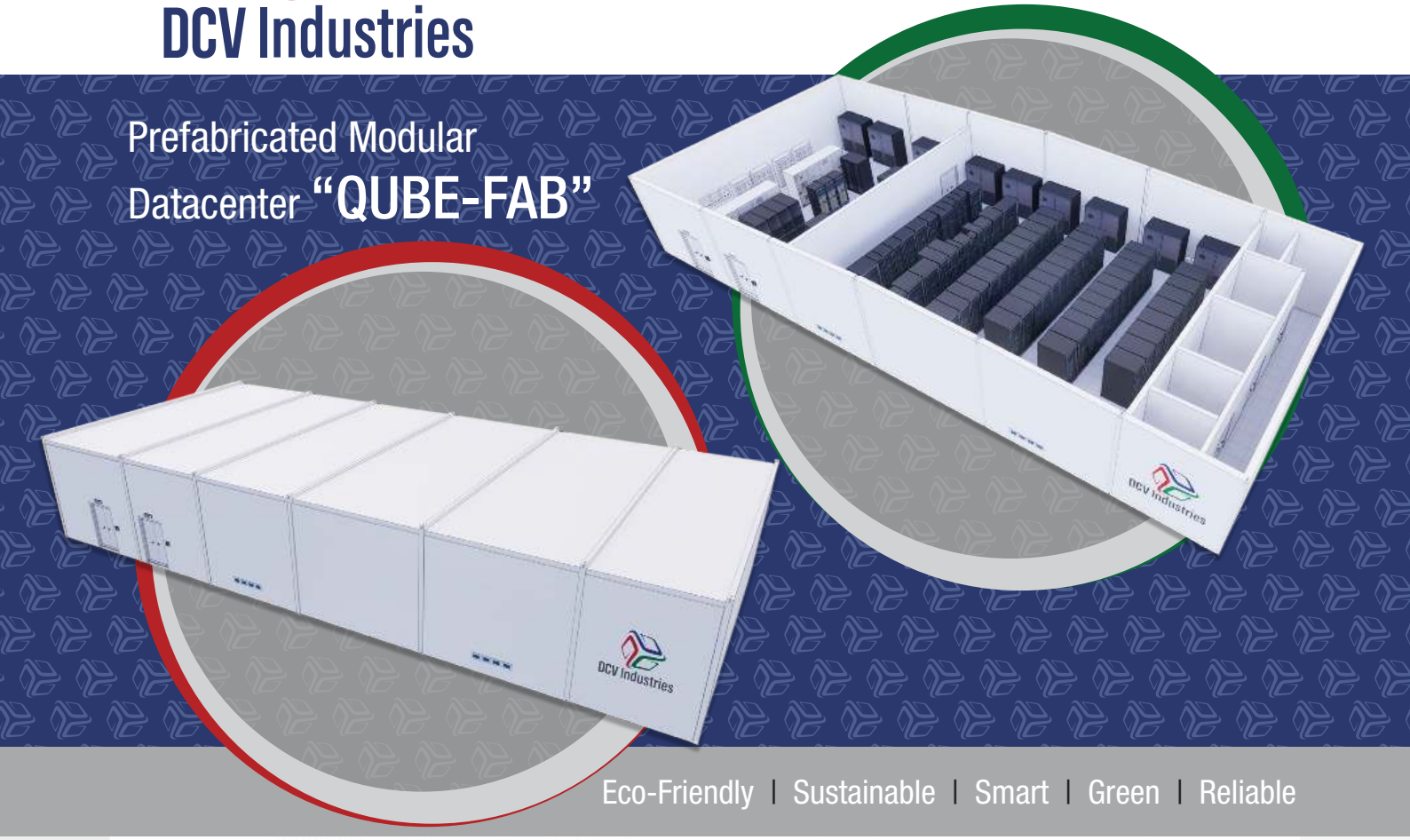
DCV Industries

Prefabricated Modular Datacenter "QUBE-FAB"



Eco-Friendly | Sustainable | Smart | Green | Reliable

DCV strives to create business value for its customers through its broad range of services, including consulting, systems development and integration, managed services, and technology solutions. Our Data Centers infrastructure solutions is a holistic approach to create the Next-Generation Data Center, from design, build, Operate, Monitoring to Management.

Our diversified portfolio of the best in the industry and services solutions delivers consistent highly secured and reliable datacenters.

DCV presents "QUBE-FAB", is a prefabricated modular data center that adopts the modular design, that offers a strong, secure and environment friendly solution with high agility for transportation and deployment across any location, any environment, and any application. The solution is eco-friendly, sustainable, green, smart, and reliable.

Features & Benefits

Reduced Waste: "QUBE-FAB" modular Datacenters are completely manufactured in factories in a controlled environment produces less wastages and less pollution. This makes its energy efficient and green.

Right-sizing: "QUBE-FAB" Prefabricated modular data centers provides right-sizing, so the data centers run at peak efficiency.

Quick Deployment: "QUBE-FAB" modular Datacenters are completely manufactured in factories according to the predefined design which simplifies the field construction and reduces the overall deployment timelines.

End-of-life Reuse: Prefabricated modular data centers can last a long time, but everything reaches its end of life at some point. Prefab modular data centers can be taken off-site and the components recycled or disposed of in an environmentally friendly manner. And there are also circumstances in which changing business conditions might render a modular data center expendable. In this case, the data center could be reused somewhere else.

Scalability: "QUBE-FAB" prefabricated Datacenters are truly modular which enables used to scale their data center footprint in a modular, pay-as-you-need model.

Applications:

“QUBE-FAB” solution offers five types of modules based on the applications:

IT Module:

IT Modules comprises of modules prefabricated at factories and assembled on-site to form DataHalls of desired sizes.

- Each Module is 28-40 SqM. Joined to form Datahalls of desired size to accommodate 20-200+ Racks
- Each Module accommodate 9-14 Racks @ 5-15KW per rack
- Supported Cabinet Dimension (mm): 600/800(W) 1000/1100/1200(D) x 2000/2200(H)
- Floor – With/Without Raised Floor





Cooling Module:

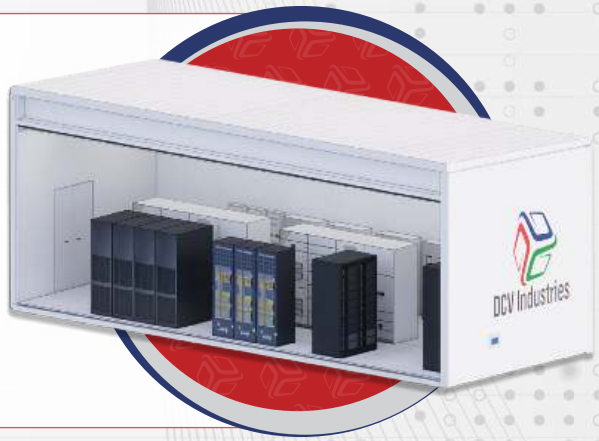
Cooling Modules comprises of modules prefabricated at factories with Cooling units designed as per Datahall requirements and assembled on-site and attached to the IT Module/DataHall

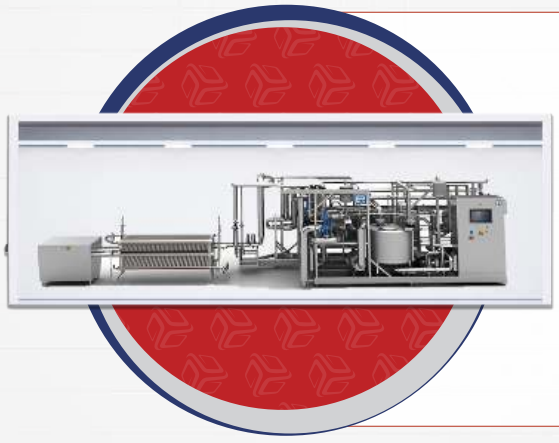
- Supported equipment: CRAC Units, CRAH Units, Wall Mount Units, as desired by the design
- Option of Fanwall units preinstalled in the module.
- Pre-installed piping with the cooling system for on-site connection

Power Module:

Power Modules are prefabricated at factories with UPSs, Batteries, Switchgears, Monitoring Systems, Fire Suppression and Control. The model can be easily attached to the IT Module on-site to make it an integrated Hall

- Supported equipment: UPSs, batteries, Power Distribution, etc.
- LV Switchgear and control Panels
- Pre-installed control and monitoring panels with tap-points for on-site connection





Skids (Valves & Pumps):

Skids are prefabricated at factories for preconfigured and preassembled Valve packages, Pumps, HV/LV Panels and controls that can be easily connected to the systems on-site within no time.

- Power Skids comprise of HV/LV Panels and Controls with Fire Suppression & monitoring.
- Mechanical skids comprise Pumps, valves, drives, and controls.
- Pre-installed modules with tap-points for on-site connection



Aux Module:

Aux Modules are prefabricated at factories designed for multipurpose use . The model can be easily attached to the other Module on-site to make it an integrated building. Aux Modules are pre-fitted with all interiors as needed.

- Aux Modules comprise of office space, Reception, MMRs, Meeting Rooms, NOC, Corridor, Washroom, etc.

Prefab Design Parameters

System	Parameters	Description
General	Environment	Altitude ≤ 4,000 m; The operating temperature ranges from –20°C to +45°C.
	Tier	As desired, I, II, III
	Prefab Life	25- Year Standard
	Load Capacity	IT Module : 12 kN/m2; Power Module: 15 kN/m2; Cooling Module: 15 kN/m2; Skid Module: 15 kN/m2; ; Aux Module: 5 kN/m2; Ceilings: 2.4 kN/m2; Rooftops: 0.75 kN/m2
Electrical	Power System	380/400/415V 50/60Hz 3P+N+PE
Cooling	Temperature	20-28°C indoor
	Humidity	Aux Module : 20%~80%, Other Module : 35%~60%,
	U Value	Total heat transfer coefficient ≥ 0.47 W/(m*K)
Fire Protection	Fire Resistance	Standard: 90 minutes. Customizable as desired
	Fire Suppression	HFC227ea or NOVEC1230 as desired
	Fire Detection	Standard: Smoke Detectors. VESDA as optional
Monitoring	Temperature	Yes. Customizable as desired
	Humidity	Yes. Customizable as desired
	Leak	Yes. Customizable as desired
	Power	Yes. Customizable as desired
	Hydrogen	Yes. Customizable as desired
	Access Control	Yes. Customizable as desired
	CCTV	Yes. Customizable as desired
	DCIM	Yes. Customizable as desired

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