DCVI

QUBE -AI FLEXI

Flexible AI rack infrastructure for high-density compute environments



QUBE-AI^{Flexi}

AI-Ready High-Density Rack Infrastructure Solution

QUBE-AI^{FLexi} is a modular, high-density rack infrastructure solution designed for modern AI, GPU, HPC, and enterprise computing environments. It combines rack-level cooling, power protection, monitoring, access control, environmental sensing, and fire safety into a ready-to-deploy platform for high-performance IT workloads.

As AI workloads continue to increase rack power density, traditional rack designs are no longer sufficient. QUBE-AI^{FLexi} is engineered to support high-density IT loads with flexible cooling options, integrated monitoring, and scalable infrastructure configurations for edge, enterprise, and data center deployments.



Solution Overview

QUBE-AI^{FLexi} is available in multiple variants to suit different site conditions and deployment requirements. Customers can select a complete All-in-One Rack with integrated UPS and power distribution, or a higher-capacity chilled-water rack infrastructure designed for facilities that already have centralized UPS and external power distribution.

The solution is ideal for organizations deploying GPU servers, AI inference workloads, AI training clusters, HPC platforms, private cloud infrastructure, and mission-critical enterprise systems.

KEY FEATURES

/ 01

AI-Ready Rack Design

Built for high-density AI, GPU, HPC, and enterprise compute workloads.

/ 02

Quick Installation

Pre-engineered rack infrastructure enables faster deployment and shorter lead times than site-built infrastructure.

/ 03

Modular & Scalable

Modular architecture supports easy expansion as AI processing and GPU workload demand grows.

/ 04

Tailored Configurations

Flexible options adapt the platform to specific workload, power, cooling, monitoring and site requirements.

/ 05

Easy Retrofit

Designed for simple integration into existing data center environments with minimal disruption.

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Flexible Cooling

Available in DX-based and chilled-water (CW-based) cooling configurations.

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High IT Load Capacity

Supports 25 kW, 35 kW and 45-65 kW rack-level capacities across the range.

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All-in-One Options

DX-25 and CW-35 variants include UPS and integrated power distribution.

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High-Capacity CW Option

CW-45/65 variant supports 45–65 kW for sites with external UPS and power distribution

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Integrated Monitoring

DCIM-ready monitoring for cooling, power, environment, access, and alarms

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Smart Power Management

Intelligent PDU and UPS monitoring available in All-in-One variants

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Secure Access Control

Electronic rack lock with RFID/PIN access and audit logging

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Environmental Monitoring

Temperature, humidity, leak detection, door status, and fire alarm monitoring

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Fire Safety Integration

Fire detection and clean-agent suppression interface for IT environments

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BMS/NMS Integration

Supports SNMP, Modbus TCP, dry contact, and API integration options

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Sustainable Deployment

Prefabricated and modular design helps reduce construction waste and can lower the carbon footprint compared with traditional data center build-outs

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DLC-Ready Option

Optional rack manifold available for CW-45/65 to support Direct Liquid Cooling, DLC-based AI GPU servers

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Scalable Deployment

Suitable for edge AI, enterprise IT rooms, data centers, and large GPU clusters

PRODUCT SPECIFICATIONS

CATEGORY	DX-25	CW-35	CW-45/65
Part Number	DCV-QAI-1R-N-N-R-25KW (DX)	DCV-QAI-1R-N-N-R-35KW (CW)	DCV-QAI-1R-N-DC-0-R-65KW (CW)
Product Type	AIO AI-ready rack	AIO AI-ready rack	AI-ready rack infrastructure without UPS and power distribution
Cooling Technology	DX based cooling	Chilled water, CW based cooling	Chilled water, CW based cooling
Total IT Load	25 kW	35 kW	45–65 kW
Recommended Use Case	Edge AI, enterprise IT room, GPU server rack	High-density data center AI rack	Large-scale AI, GPU and HPC rack environments
Ideal For	Edge AI, enterprise server room, compact AI deployment, GPU workload up to 25 kW	High-density AI/GPU racks, enterprise data centers, chilled-water-ready facilities	Large GPU clusters, HPC, AI training racks, and data centers with centralized UPS and power distribution
Rack Cabinet	Included	Included	Included
Rack Height	42U or 48U	42U or 48U	42U or 48U
Rack Depth	Minimum 1200 mm	Minimum 1200 mm	Minimum 1200 mm
Rack Load Capacity	Minimum 1500 kg	Minimum 1500 kg	Minimum 1500 kg or higher based on server load
UPS System	Included	Included	Not Included
UPS Type	Online double-conversion	Online double-conversion	N/A
Recommended UPS Capacity	Minimum 30 kW	Minimum 40 kW	N/A
Battery Backup	Included, 5-10 minutes typical at design load, scalable as required	Included, 5–10 minutes typical at design load, scalable as required	N/A
Type of Battery system	Li-Ion	Li-Ion	N/A
Power Distribution	Included	Included	Not Included
Rack PDU	Dual intelligent rack PDUs, A/B feed ready	Dual intelligent rack PDUs, A/B feed ready	Dual intelligent rack PDUs, A/B feed ready

CATEGORY	DX-25	CW-35	CW-45/65
PDU Rating	3-phase 32A minimum; 63A preferred	3-phase 63A preferred	3-phase 63A preferred
Cooling Capacity	25 kW with recommended design headroom	35 kW with recommended design headroom	45–65 kW cooling capacity
Cooling Medium	Refrigerant-based DX system	Chilled water (onsite)	Chilled water (Onsite)
Rack-Level Cooling	DX RDHx	CW RDHX	High-capacity CW RDHX
Rack Manifold for DLC	N/A	Optional, subject to project requirement	Optional item for Direct Liquid Cooling, DLC-based AI GPU servers
Environmental Monitoring	Included	Included	Included
Temperature Monitoring	Rack inlet/outlet temperature	Rack inlet/outlet temperature	Rack inlet/outlet temperature
Humidity Monitoring	Included	Included	Included
Leak Detection	Condensate/leak monitoring as applicable	Water leak detection required	Water leak detection required
DCIM Monitoring	Included	Included	Included
DCIM Monitored Points	UPS, PDU, cooling, environmental sensors, ACS, and fire alarm	UPS, PDU, cooling, environmental sensors, ACS, and fire alarm	Cooling, environmental sensors, ACS, and fire alarm; external power systems if integrated
External Power Integration	Not required; integrated power architecture included	Not required; integrated power architecture included	Can be integrated with site-level UPS, switchgear, busway, or external power distribution system
Access Control System, ACS	Included	Included	Included
ACS Features	Electronic lock, RFID/PIN access, audit log	Electronic lock, RFID/PIN access, audit log	Electronic lock, RFID/PIN access, audit log
Fire Detection	Included	Included	Included
Fire Suppression Interface	Included (optional)	Included (optional)	Included (optional)
BMS/NMS Integration	SNMP, Modbus TCP, dry contact, or API	SNMP, Modbus TCP, dry contact, or API	SNMP, Modbus TCP, dry contact, or API
Security	Electronic rack access control with audit log	Electronic rack access control with audit log	Electronic rack access control with audit log

STANDARD FEATURE MATRIX

FEATURE	DX-25	CW-35	CW-45/65
AI-ready rack cabinet	■	■	■
DX cooling	■	⊘	⊘
CW cooling	⊘	■	■
RDHX / rack-level cooling	■	■	■
UPS	■	■	⊘
Battery backup	■	■	⊘
Intelligent PDU	■	■	■
DCIM monitoring	■	■	■
Environmental sensors	■	■	■
Access Control System, ACS	■	■	■
Fire detection	■	■	■
Fire suppression interface	■	■	■
Optional rack manifold for DLC-based AI GPUs	⊘	OPT	OPT
BMS/NMS integration	■	■	■
Installation and commissioning	■	■	■

LEGEND

■ Included as standard ⊘ Not applicable for this variant **OPT** Optional

Engineered for AI. Designed for density. Built for performance.



CONTACT US

Reach out to us for inquiries or support. We're here to help.

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