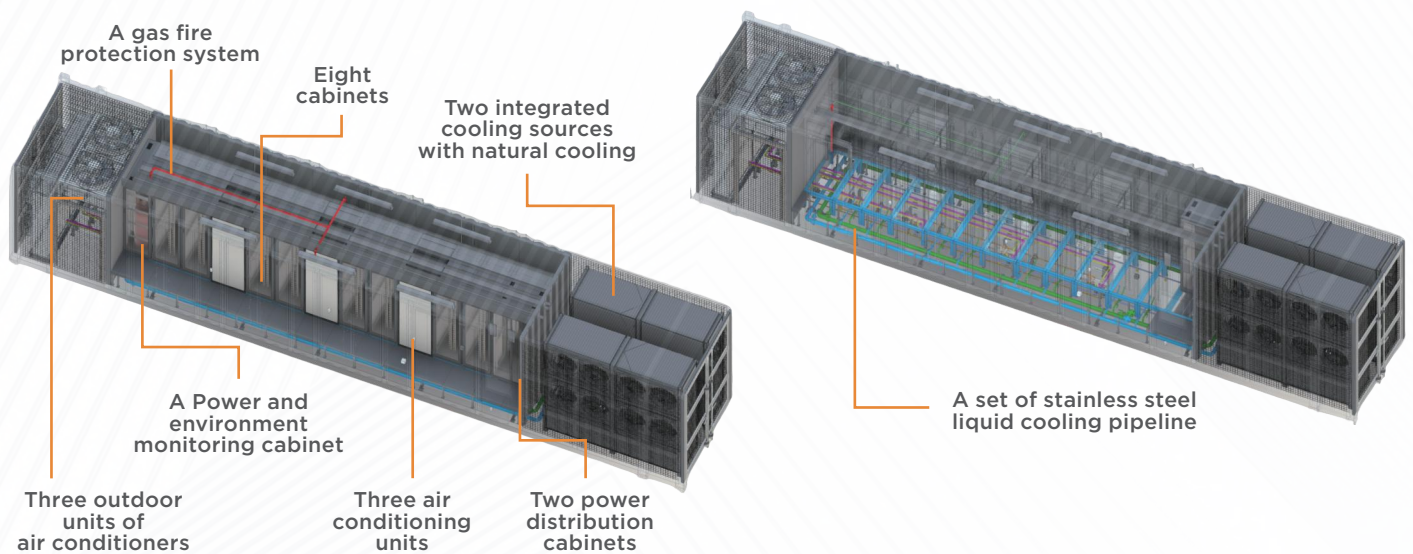


Fabricated container data center 45feet AI all-in-one

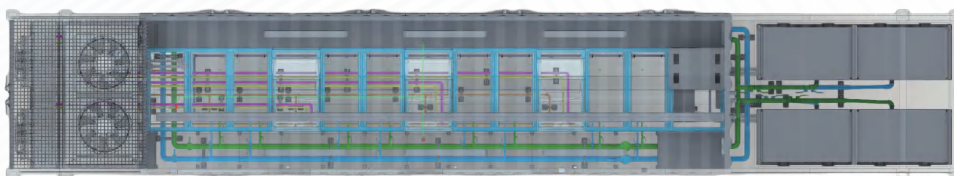
Product Introduction

Prefabricated outdoor integrated computing center infrastructure solution, integrating functions such as power supply and distribution, integrated cooling source, air-cooled row-based air conditioning, cabinets, environmental monitoring, fire protection, and lightning protection, providing a stable, reliable, and energy-efficient infrastructure environment for AI equipment.

Layout introduction



Top view



Side view



End view



Application Scenarios

Enterprise: Small and medium-sized computing centers

Government: Smart city and safe city computing centers

Education: University/research institution computing centers

Energy: Production/exploration site computing centers

Finance: Business production computing centers

Transportation: Airport/rail transit/port scenarios without dedicated rooms

Operators: Edge computing centers

Features

Rapid Deployment

Fully prefabricated infrastructure in the factory, 1 container = 1 data center

No need for new buildings, on site installation completed in 1 day, plug-and-play

Supports flexible deployment and rapid expansion

Green

Servers adopt cold-plate liquid cooling with air cooling as a supplement, achieving overall low PUE

Chillers utilize integrated cooling sources with natural cooling, maximizing natural cooling and achieving high COP

The entire data center adopts a water-free solution, with WUE of 0

Intelligence

Comprehensive monitoring system enabling remote surveillance, Proximal pad management, unmanned equipment room operation

Intelligent operation and maintenance, reducing costs and improving resource utilization

Security

Enclosure protection rating IP55, Comprehensive video and access control monitoring, Automatic gas fire suppression system

Parameter Table

System	Unit	Parameter Description
Operating environment	Altitude range	≤1000 meters
	Ambient temperature	-15-55℃, if the ambient temperature is ≤-15℃ or ≥55℃, AC and integrated cold source need to be customized separately.
	Ambient humidity	5%-95%RH
Enclosure	External dimensions	13716mm L * 2438mm W * 2896mm H, 45 foot standard container size, with classification society certification, meeting maritime and land transportation standards.
	Protection level	IP55
Cabinet	Cabinet power density	40KW/cabinet
	Cabinet dimensions	Standard 19" cabinet (600mm x 1200mm x 2000mm), 42U
	Cabinet usable height (U)	336
	Number of cabinets(units)	8
	Cabinet front and rear doors	None
	Enclosed aisle	Hot and cold aisle isolation
Power distribution	Row header cabinet	2-way mains power input via ATS switching + 2-way U-power independent supply, 380V/415V/50Hz
	Power distribution capacity	Mains power 2*630A/U-power 2*630A
	PDU	A/B dual circuit, 40A/3P
	Modular UPS	None
	Backup power supply time	None
Cooling	Cooling method	Liquid cooling (cold plate) + air cooling (row-based air conditioning)
	Load air/liquid ratio	Liquid: 70% Air: 30%
	Liquid cooling source	Integrated cooling source with natural cooling, cooling capacity 175kW/unit, 2 units, component redundancy, outdoor ambient temperature 55℃, natural cooling activated at 24℃.
	Secondary side piping	SUS304 stainless steel
	Secondary side medium	25% concentration, propylene glycol
	Air-cooled row-based air conditioning	Cooling capacity 50KW/unit, 2+1 redundancy, outdoor ambient temperature 55℃, indoor return air 37℃/25%RH
	Air conditioning outdoor unit	Flat type, 3 units, suitable for high-temperature regions
Firefighting	Automatic detection system	Equipped
	Automatic fire extinguishing device	HFC-227ea heptafluoropropane
Power and environment monitoring	Temperature and humidity	Equipped
	water leakage	Equipped
	video	Equipped
	Access control	Equipped
	power distribution system monitoring	Equipped
	air conditioning system monitoring	Equipped
	integrated collector	1U, Linux system, multiple standard interfaces, WEB remote access, can connect to the centralized management platform via northbound interface
	industrial tablet	Windows, 15.6 inches, touch screen, resolution 1920x1080, with RJ45 Ethernet port and HDMI interface