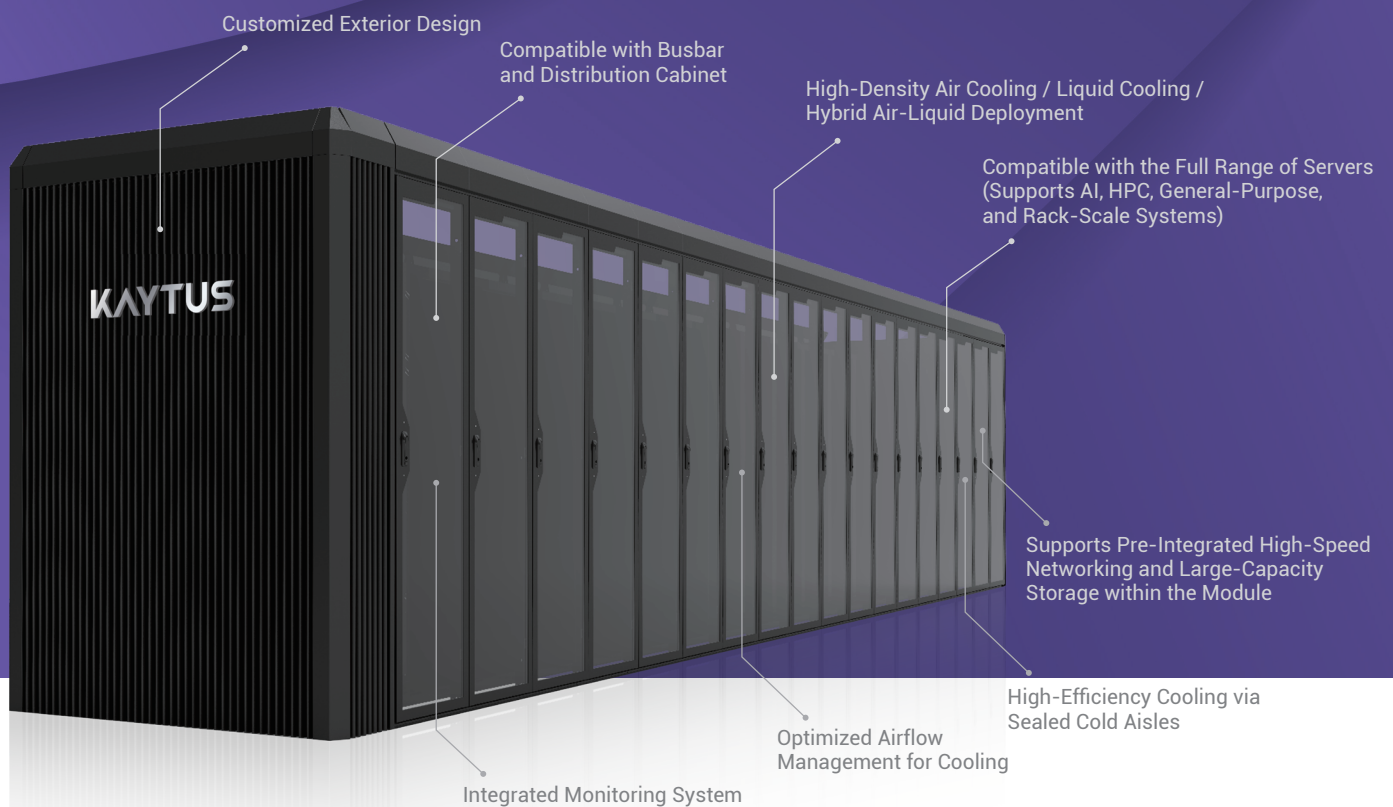


# KAYTUS

# Liquid-Cooled AI Computing Pod



## Product Overview

The Liquid-Cooled AI Computing Pod integrates computing, storage, and networking functions. It supports various computing nodes and is compatible with mainstream CPUs as well as heterogeneous acceleration chips. The system can be applied across multiple applications, including autonomous driving, biopharmaceuticals, AIGC, and intelligent manufacturing. The modular data center efficiently integrates systems such as cabinets, power distribution, UPS, air conditioning, monitoring, and fire protection. It is designed based on principles of standardization, de-engineering, optimization of operational efficiency, and intelligent management. It features phased investment, rapid deployment, environmental protection and energy efficiency, safety and reliability, and ultra-high density. A single air-cooled cabinet can support a maximum load of 50 kW, while a liquid-cooled cabinet can support up to 130 kW.

This solution is primarily deployed in large- and medium-scale high-density modular data centers to meet the construction requirements of intelligent computing and supercomputing platforms.

# Product Features

## ■ Compatible architecture

- > Supports 256/512 GPU card networking clusters, MDC can provide a maximum computing power of 256P.
- > Supports high-density deployment of high-performance servers and is compatible with air and liquid architecture.
- > IB networking is completed within the module, which greatly reduces the cost of IB cables and the difficulty of operation and maintenance.

## ■ Fast delivery

- > Highly integrated system equipment, modular design, and building-block construction of data centers.
- > The installation without engineering requirements only needs to reserve the site, cooling capacity and power, and the deployment can be completed within a week.

## ■ Green

- > High-density air cooling/liquid cooling deployment simplifies the cooling system pipeline and reduces the system operation power consumption.
- > Airflow organization simulation + actual measurement optimization, sealed channels for efficient cooling, and intelligent frequency conversion optimization based on the output of IT equipment.

## ■ Safe & intelligent

- > Both power supply and cooling are redundantly designed to ensure the reliability of the system.
- > The dynamic environmental monitoring system has a high degree of integration, featuring full-chain intelligent monitoring, sound and light alarm, and fire linkage.

# Product Specifications

Item	Parameters
Overall Dimensions	L≤15000mm; W=1800mm/2000mm; H=2800/3000mm. Supports customization in other sizes
Cabinet Dimensions	W=600mm/800mm; L=1200mm/1400mm; H=2000/2200mm (42U&47U)
Power Supply	380/400/415V~/50Hz 3Ph
Air Conditioning System	<ul style="list-style-type: none"><li>• Supports fluorine-cooled air conditioning systems and chilled water air conditioning systems. Among them, fluorine-cooled air conditioners include multiple series of products such as rack-mounted air conditioners, base station air conditioners, row air conditioners, room air conditioners, and fluorine pump air conditioners</li><li>• The air conditioners support intelligent functions such as full frequency conversion operation, low-load dehumidification, and refrigerant leakage detection. The fans support online maintenance</li><li>• Standard modularization supports 350kWIT equipment heat dissipation. N+1/N+2 redundant design, which can be flexibly configured according to project requirements</li></ul>
Liquid Cooling System	<ul style="list-style-type: none"><li>• It includes secondary side CDU, liquid cooling pipelines and liquid cooling cabinet products. The CDU covers various forms of products such as air-liquid type, liquid-liquid type CDU (rack type, cabinet type), etc. The liquid cooling secondary side pipelines are fully prefabricated. The liquid cooling cabinets are compatible with various models such as GPU and high-performance ones.</li><li>• It has innovative product solutions such as fully liquid cooling servers and supports 100% fully liquid cooling operation</li></ul>
Power Distribution System	<ul style="list-style-type: none"><li>• The products cover intelligent busbars, integrated power cabinets, head cabinets, modular UPS, lithium batteries/lead-acid batteries, intelligent PDUs, etc.</li><li>• Supports dual power supply. The UPS is designed with an N+1/2N architecture, ensuring high system reliability</li></ul>
Environmental Monitoring System	<ul style="list-style-type: none"><li>• It adopts an integrated dynamic and environmental screen, which does not occupy U-space and supports the connection of temperature and humidity, smoke, temperature, water leakage, video, etc.</li><li>• The status of intelligent small busbars/distribution cabinets, air conditioners, UPS and other equipment can be viewed in real time through monitoring, improving operation and maintenance efficiency</li></ul>