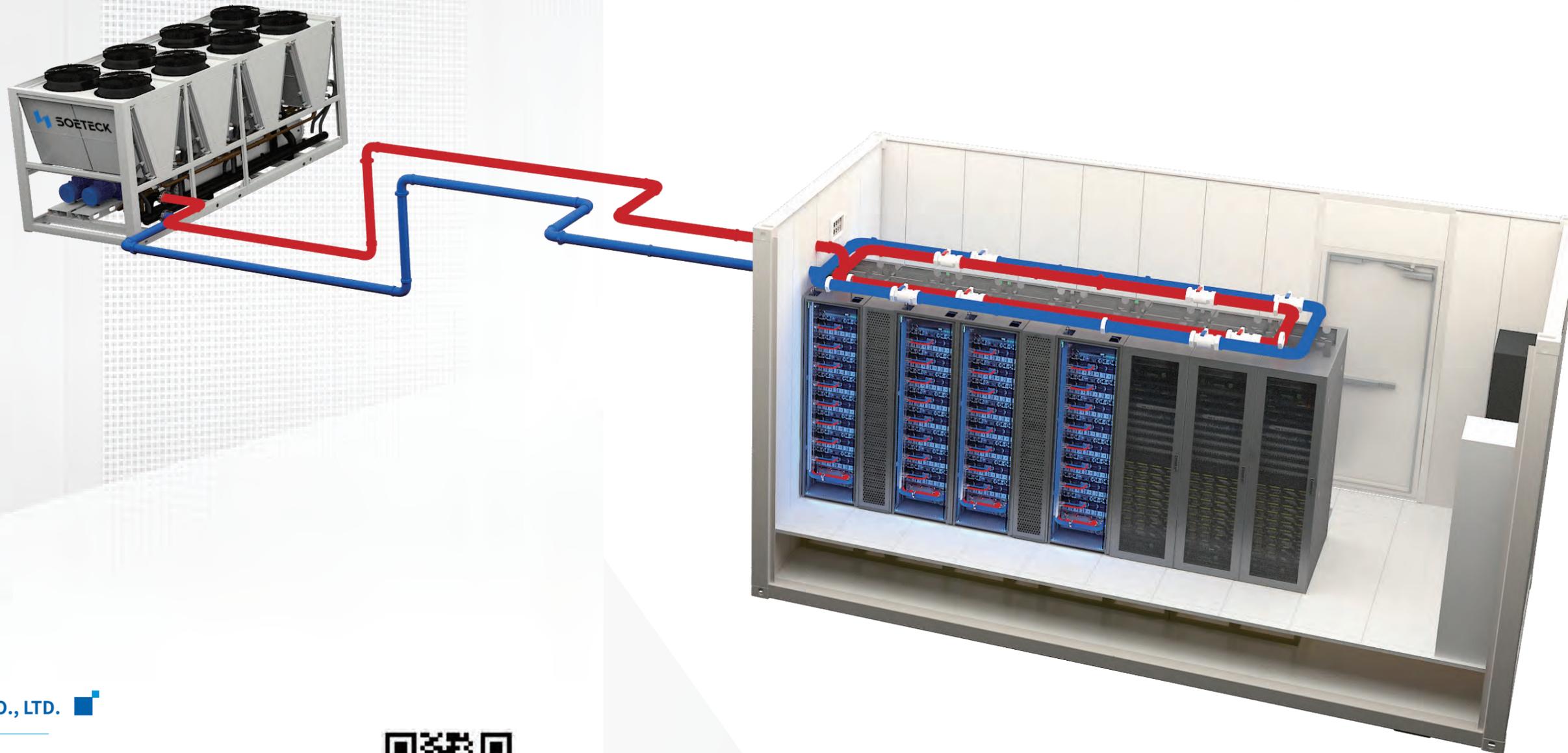


# AICoolit

## Prefab & Rapid-Deployment Liquid Cooling Solution



**HEFEI SHUYI DIGITAL POWER CO., LTD.**

**TEL** +86-551-65172597  
**Email** sales@shuyipower.com  
**Address** Building 8#, China Speech Valley, Xiyou Road, High-tech Zone, Hefei  
**Web** soeteck.com





## COMPANY PROFILE

Shuyi digital power, based on the core technology of power electronics, integrates innovative digital technology, provides comprehensive solutions for data center, high-end power supply and clean energy, promotes the transformation and development of digitalization and low-carbon energy in government, finance, industry, communication, transportation, Internet and other industries.

≥ **11** years  
Industry experience

**500** million  
Global sales revenue

≥ **120**  
Employees

≥ **80**  
Covering countries and regions



## AI Coolit™ Series

# LIQUID COOLING FOR AIDC

Empowering High-Density Computing Power, Leading Efficient Cooling

A full-stack liquid cooling solution combining exceptional performance, ultimate safety, and efficient delivery capabilities. It provides stable and reliable cooling support for high-density computing scenarios such as AI and data centers.



### Ultimate Safety: Full-Chain Prevention



#### Redundant Design

Core components feature N+1 redundancy.



#### Sealing & Leak Prevention

Multi-layer sealing + sensors for real-time online monitoring and warning.



#### Safe Maintenance

Supports hot-swapping. Quick connectors feature bidirectional self-sealing.

#### Insulation Safety

Uses non-conductive coolant, ensuring no short circuits upon direct contact.

#### Reliable Materials

Corrosion-resistant materials preventing aging and leakage risks.



### Efficient Delivery: Rapid & Out-of-the-Box



#### Prefabricated Modularization

Factory pre-assembly and testing for rapid on-site assembly.



#### Intelligent Self-Commissioning

One-key completion of leak detection, balancing, and verification.



#### Worry-Free After-Sales

7×24 exclusive expert service combined with remote diagnosis for rapid root cause identification.

#### Standardized Interfaces

Unified quick connectors reduce installation complexity.

#### Flexible Expansion

Scale-on-demand capability allows rapid connection to existing loops.

# AICOOLIT SERIES PRODUCTS

- Liquid Cooled Modular Data Center



Rack CDU



InRow CDU



Room CDU



Tank



Air-Liquid Hybrid CDU



Liquid to Air



AI Liquid-cooled DC Container

- Liquid Cooled Modular High-density Computing Power Center



Cold Water Drainage



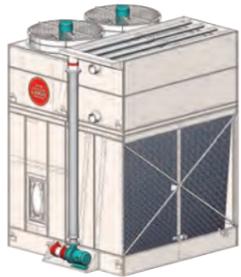
Computing power container



- Modular Primary Side Cooling Source



Dry Cooler



Cooling Tower



Cold Station



# INTEGRATED SOLUTION FOR LIQUID COOLED CONTAINERS

## ● Container Introduction

The "AICoolit" liquid container solution from Soetek adopts a full chain integrated delivery mode of "factory prefabrication+on-site quick connection+intelligent operation and maintenance", deeply integrating liquid cooling and auxiliary air cooling systems, intelligent power supply and distribution, intelligent monitoring, and cold aisle/hot aisle containment, This builds a full-stack infrastructure from the "computing heart" to its "heat-dissipating blood vessels."

## ● Efficient Delivery Capability: Out of the box, quickly launched

We are committed to transforming complex liquid cooling systems into standardized products for end-to-end, worry-free delivery. Our delivery capability runs through the entire liquid cooling chain components, and its core advantages are reflected in the following three aspects:

- 1, Full-stack component integration and prefabrication
- 2, Efficient delivery guarantee throughout the entire process
- 3, Worry free operation and maintenance throughout the entire lifecycle

## ● Solutions

### ● High-Density Cluster Module

- 40 Feet
- Cold Plate Liquid Cooling + Rack-Mounted CDU+UPS + External Batteries



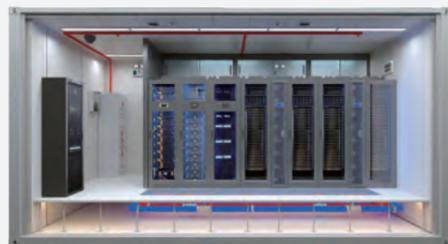
### ● Integrated Standard Module

- 40 Feet
- Cold Plate Liquid Cooling + In-Row CDU+UPS + Internal Batteries



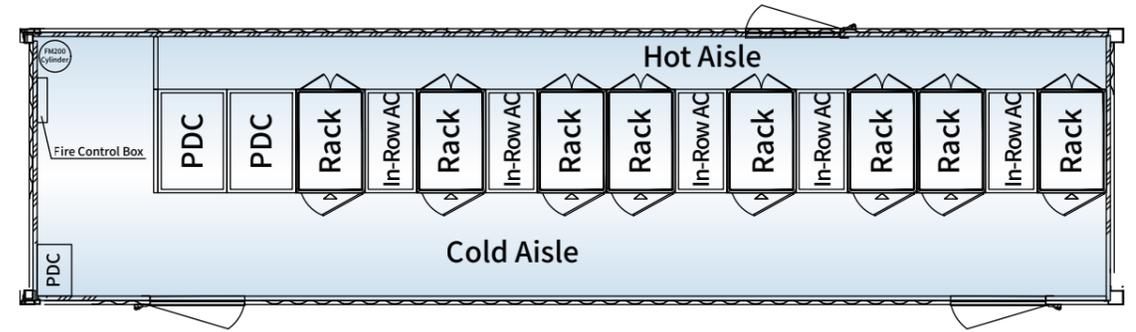
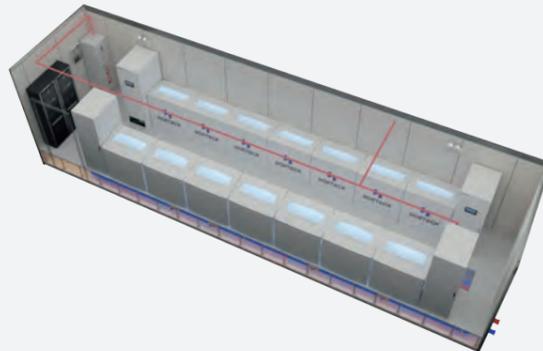
### ● Edge Compact Module

- 20 Feet
- Cold Plate Liquid Cooling + Rack-Mounted CDU+UPS + Internal Batteries

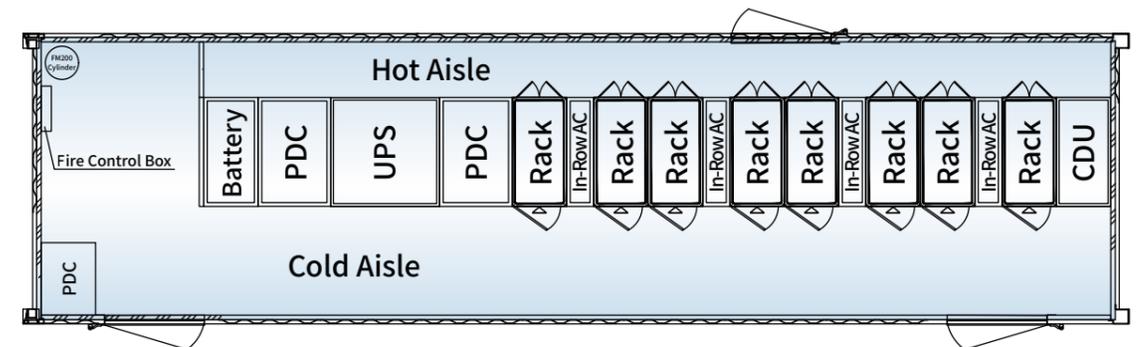


### ● Immersion Cooling Module

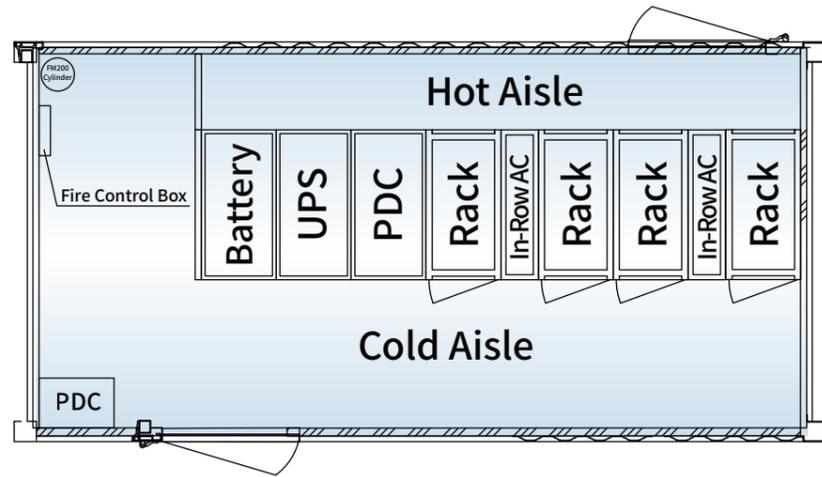
- 40 Feet
- Immersion Liquid Cooling + In-Row CDU+UPS + External Batteries



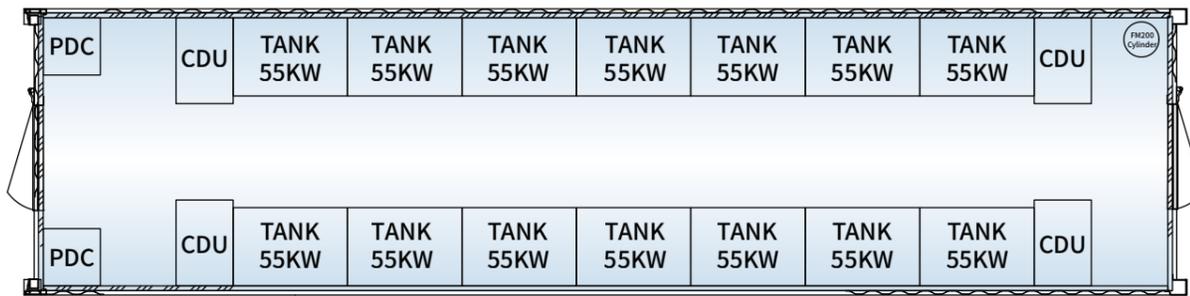
Product Name	High-Density Cluster Module
External Dimensions	12800*3200*3800
Single cabinet power	100KW
Rack-mounted CDU	8*80KW
Heat dissipation method	Dry cooler or closed-circuit cooling tower
Air-to-liquid ratio	2 : 8
Air Conditioning	In-Row , 5*50.5KW
UPS	≥1000 KVA
Battery	Configure according to requirements



Product Name	Integrated Standard Module
External Dimensions	12192*3200*3800
Single cabinet power	50KW
InRow CDU	350 KW
Heat dissipation method	Dry cooler or closed-circuit cooling tower
Air-to-liquid ratio	2 : 8
Air Conditioning	In-Row , 4*31.5KW
UPS	600 KVA
Battery	1 set of 512V 100AH lithium batteries, ≥5-minute delay



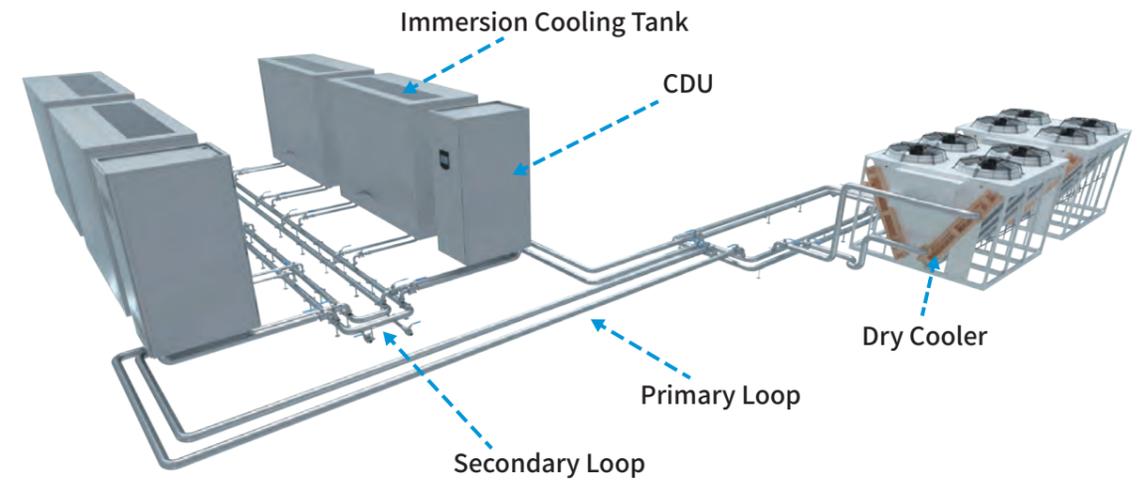
Product Name	Edge Compact Module
External Dimensions	6500*3200*3500
Single cabinet power	50KW
Rack-mounted CDU	50KW * 4
Heat dissipation method	Dry cooler or closed-circuit cooling tower
Air-to-liquid ratio	1 : 9
Air Conditioning	In-Row , 2*30KW
UPS	Modular UPS 300KVA Host
Battery	1 set of 512V 100AH lithium batteries, 15-minute delay



Product Name	Immersion Cooling Module
External Dimensions	12192*3200*3800
Single cabinet power	55KW
In row CDU	400KW*4
Heat dissipation method	Dry cooler or closed-circuit cooling tower
UPS	Modular UPS 1000KVA host
Battery	Configure according to requirements

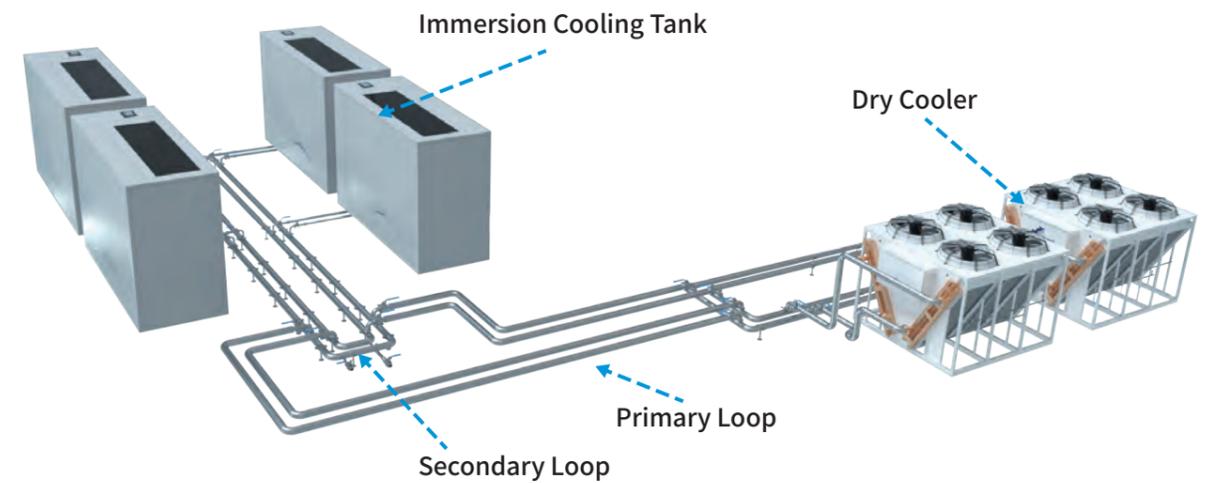
# IMMERSION FULL CHAIN LIQUID COOLING SOLUTION

## ● Modular Liquid Cooling System



- Modular liquid cooling system: composed of CDU and tank
- The CDU integrates the coolant circulation pump, heat exchanger, filter, controller and sensors, realizing the intelligent control of the liquid cooling system
- The quantity of CDU, tank, and dry cooler can be flexibly matched to different application scenarios
- Suitable for single-phase immersion liquid cooling system applications

## ● Integrated Liquid Cooling Tank



- Various functions of CDU are integrated in the tank
- Integrated tank module is relatively independent, flexible deployment and convenient for later expansion
- Suitable for single-phase or phase-transition immersion liquid cooling systems
- Integrated design, highly productized, greatly reducing on-site construction and realizing rapid deployment
- Suitable for single-phase immersion liquid cooling system applications
- Suitable for applications such as small data centers, edge nodes, and communication base stations

# DUAL-TANK IMMERSION SYSTEM

## ● Introduction

A highly integrated, plug-and-play "turnkey" solution that adopts an integrated design of liquid cooling CDU and tank.

## ● Application scenarios

- Medium and small-scale clusters
- Edge and high-density sites
- Fast-deployment projects

## ● Feature

- Extreme compactness with high space utilization
- Plug-and-play functionality for minimalist deployment
- No secondary side piping, zero leakage risk



Item	Dual-tank immersion liquid cooling products
Space capacity	20U*2
Configuration	Immersion liquid cooling tank*2 + Outdoor cooling cabinets*1
External dimensions	(1 200mm X 700mm X 1140mm) *2
Heat exchange rate	15kW
Coolant operating temperature	≤ 45°C (Adjustable)
Maximum power	1.7kW
Power distribution	AC220V
Coolant input	520L
Full reset	≈ 580kg*2
Circulating pump	Flow rate: 4-10m <sup>3</sup> /h
	Height: 10-40m
	Power: 1100W
Equipment noise	Operating noise 55-60dB
Mounting method	Indoor floor-standing installation
End-user cooling method	Dry cooler/cooling tower options available
Application scope	5G BBU, IDC etc.
PUE	< 1.2

# MULTI-TANK IMMERSION SYSTEM

## ● Introduction

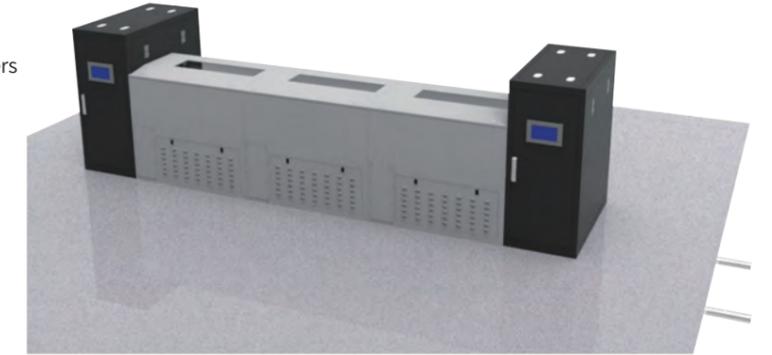
Adopts two independent CDU systems to form "active-standby" or "active-active" redundancy.

## ● Application scenarios

- IDCs, cloud data centers, supercomputing centers
- Core businesses meeting Tier IV standards (e.g., finance, telecommunications)

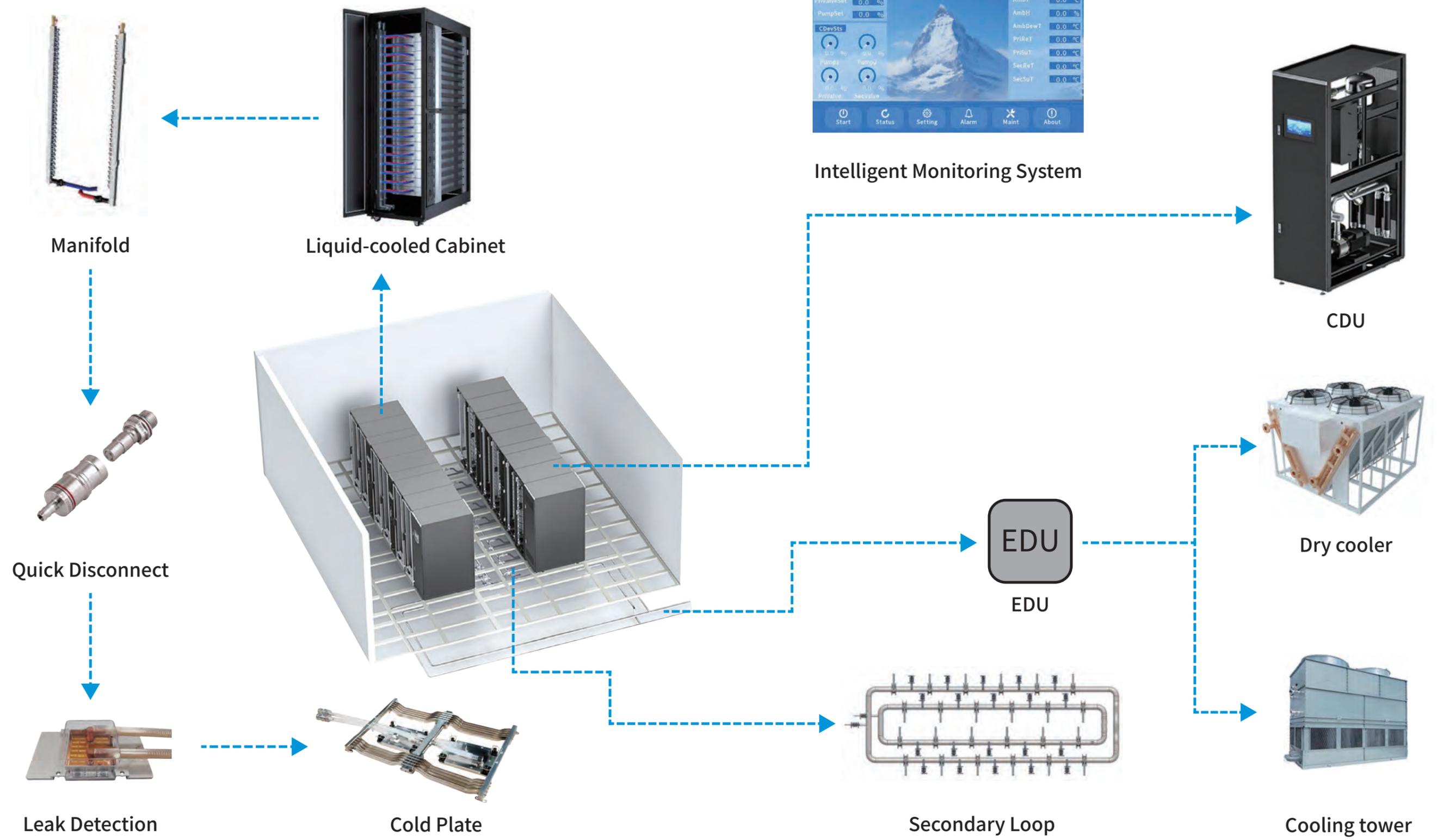
## ● Feature

- High availability and redundant design
- Strong scalability
- Supports high power density for large-scale clusters



Item	Multi-tank immersion liquid cooling products
Space capacity	52U*n
Configuration	Immersion liquid cooling tank*n + CDU*2
External dimensions	≥ 2600mm X 820mm X 1200mm
Heat exchange rate	50kW-300kW
Coolant operating temperature	≤ 45°C (Adjustable)
Maximum power	≤ 7kW
Power distribution	AC380V
Coolant input	Synthetic oil or nitrating liquid
CDU Circulating pump	One main, one backup
Equipment noise	Operating noise 55-60dB
Mounting method	Indoor floor-mounted installation
End-user cooling method	Dry cooler/cooling tower options available
Application scope	5G BBU, IDC etc.
PUE	< 1.2

# LIQUID COOLING SYSTEM ARCHITECTURE DIAGRAM



# RACK-LEVEL LIQUID COOLING SOLUTION

FLEXIBLE EXPANSION, HIGH-DENSITY HEAT DISSIPATION, EDGE EMPOWERMENT

## ● Applicable Scenarios

Small to medium-sized data centers, suitable for small-scale or distributed liquid-cooled computing scenarios (suitable for scales of 1 or more liquid-cooled racks).

Edge computing facilities, in space-constrained but high-performance liquid-cooled edge computing environments.

Applications requiring flexible expansion of cold-plate liquid-cooled computing power, allowing for single-rack capacity scaling to the smallest granularity.

## ● Product Features

Multi-scenario compatibility, offering both 19-inch and 21-inch sizes.

High thermal density deployment, standard rack power density supports 50-200kW.

High redundancy design, critical sensors and pumps in the CDU employ redundant design to maximize operational safety.



Model			SY-CDU-RK-50	SY-CDU-RK-80
Heat exchange		kW	50	80
Primary side	Circulating medium	/	Cooling water	Cooling water
	Inlet and outlet liquid design temperature	°C	35/45	35/45
	Circulation flow	m <sup>3</sup> /h	4.32	6.91
	Interface size	mm	φ31.8*1.5	φ38.1*1.5
	Water pressure drop	kPa	≤100	≤100
	Secondary side	Circulating medium	1	25% ethylene glycol
Inlet and outlet liquid design temperature		°C	50/40	50/40
Brush back holder		°C	35-50	35-50
Available head		kPa	2120	2150
Circulation flow		m <sup>3</sup> /h	4.56	7.29
Interface size		mm	φ31.8*1.5	φ38.1*1.5
Rated power		kW	0.8	1.4
Net weight		kg	75	85
External dimensions WDH		mm	450*850*175	536*900*175

# IN-ROW LIQUID COOLING SOLUTION

HIGH-DENSITY COMPUTING POWER, FLEXIBLE DEPLOYMENT, AND INTELLIGENT TEMPERATURE CONTROL

## ● Applicable Scenarios

Cold plate liquid cooling data center, suitable for modular deployment of single row cabinets and above. (Suitable for scales of 10 or more liquid-cooled cabinets)

HPC (high-performance computing) clusters, CPU/GPU-intensive scientific research calculations (such as meteorological simulation and gene sequencing), etc.

Intelligent computing center, medium-to-large-scale GPU cluster, for AI large and small model training scenarios.

## ● Product Features

High cooling capacity: With a cooling capacity of 200 kW to 500 kW, it is compatible with various cabinet sizes.

High system reliability: Redundant configuration of key components such as pumps, control sensors, filters and independent leakage monitoring systems ensures continuous cooling in the event of maintenance or failure.

Online maintenance: Real-time online water quality monitoring and online coolant replacement ensure the system operates in the best condition.

Remote management: Integrates industrial communication protocols such as Modbus and BACnet to support remote data monitoring and fault warning, improving data center management efficiency.



Model			SY-CDU-RW-350	SY-CDU-RW-600	SY-CDU-RW-900
Heat exchange		kW	350	600	900
Primary side	Circulating medium	/	Cooling water	Cooling water	Softened water or ethylene glycol
	Inlet and outlet liquid design temperature	°C	35/45	35/45	Return liquid temperature ≤ 45 °C
	Circulation flow	m <sup>3</sup> /h	30.387	52.26	≥90
	Interface size	mm	φ76.2*2.0	φ89*2.0	/
	Water pressure drop	kPa	≤120	≤120	/
	Secondary side	Circulating medium	/	25% ethylene glycol	25% ethylene glycol
Inlet and outlet liquid design temperature		°C	50/40	50/40	Liquid supply temperature ≤ 40 °C
Liquid outlet temperature range		°C	35-50	35-50	/
Available head		kPa	≥120	≥120	/
Circulation flow		m <sup>3</sup> /h	31.867	55.49	≥86
Number of water pumps		set	2	1	2
Interface size		mm	φ76.2*2.0	φ89*2.0	/
Rated power		kW	4.8	11.6	12kW(Max)
Operating weight		kg	600	550	≤800
Dimensions WDH		mm	600*1200*2200	600*1200*2200	900*1200*2200

# LIQUID-COOLED IN-ROOM CDU

## ● Applicable Scenarios

Medium and large-scale liquid-cooled data centers, scenarios where cold-plate liquid-cooled servers are deployed on a large scale with high reliability requirements. HPC (High-Performance Computing) clusters: CPU/GPU-intensive scientific research computing (such as meteorological simulation, gene sequencing), etc. Intelligent computing centers, large-scale GPU clusters, used for AI large model training scenarios

## ● Product Features

- Wide refrigeration range
- High Efficiency and Energy Saving
- high reliability
- Easy maintenance



Model		SY-CDU-RM-1000	SY-CDU-RM-1350	SY-CDU-RM-2000	
Heat exchange capacity		kW	1000	1350	2000
Overall parameters	Circulating medium	/	Cooling water	Cooling water	Cooling water
	Design temperature for inlet and outlet fluid	°C	35/45	35/45	35/45
	Circulating flow	m³/h	86.86	117.78	173.73
	Interface dimensions	mm	φ125×2.0	φ133×2.0	φ159×3.0
	Water pressure drop	KPa	<100	<100	<100
Secondary side parameters	Circulating medium	/	25% ethylene glycol	25% ethylene glycol	25% ethylene glycol
	Design temperature for inlet and outlet fluid	°C	50/40	50/40	50/40
	Discharge temperature range	°C	40~50	40~50	40~50
	Available lift	KPa	≥120	≥120	≥120
	Circulating flow	m³/h	95.39	128.89	190.78
	Number of water pumps	PCS	2	≥0.42MPa	≤41502kg
Liquid supply temperature	mm	φ125×2.0	φ133×2.0	φ159×3.0	
Rated power	kW	18.5	26	33	
Net weight	kg	1000	1200	1500	
Dimensions(W*D*H)	mm	1000*1200*2200	1396*1200*2245	1396*1200*2245	
Power supply system		380V 3Ph 50hz	380V 3Ph 50Hz	380V 3Ph 50Hz	
Contact method		Modbus/SNMP	Modbus/SNMP	Modbus/SNMP	

# MANIFOLD

Manifold is mainly used to connect the main circuit between the liquid cooling source CDU and the cold plate. It has the characteristics of strong corrosion resistance, high strength and easy processing. It is widely used in military and civil field. According to the needs of use, there are single pipe and double row pipes. The single pipe is mainly used for quick-plug connection, whereas double-row pipes with welded structure are used for blind plug connection. The position accuracy of the two pipes is ±0.15mm, which belongs to ultra-precision manufacturing.

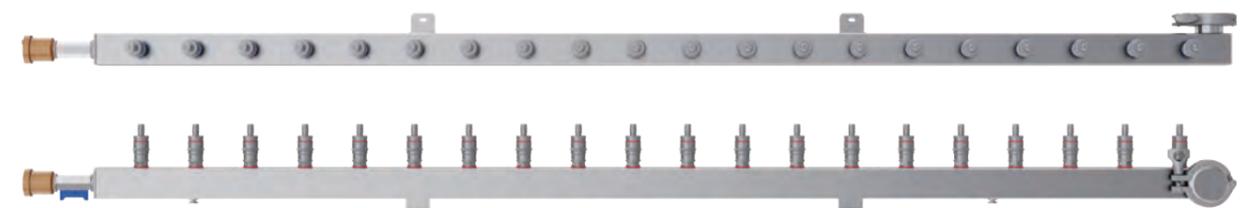
## ● Features

- Strict control process, MES control system
- Dust-free workshop, high cleanliness
- High reliability, double pressure test of gas and liquid
- Uniform flow distribution
- Optional self fastening type and blind connection type



## ● Technical Specification

Model	Specifications	Material	Connection Mode	Working Temp.	Working Medium
SY-MFQ	30X30 (mm)	SUS304 SUS316L	Quick connect	-180°C -400°C	Ethylene glycol, propylene glycol, deionized water
	40X40 (mm)				
	50X50 (mm)				
SY-MFB	30X30 (mm)	SUS304 SUS316L	Blind connect	-180°C -400°C	Ethylene glycol, propylene glycol, deionized water
	40X40 (mm)				
	50X50 (mm)				



# SECONDARY LOOP

The secondary loop is made of stainless steel, belongs to modular prefabricated loop, easy to use and can be assembled quickly. Connect the secondary loop of the waterway system, and control the flow of the branch pipe through the valve.

## ● Features

- Modular production, connected with quick chuck, quick assembly
- No cutting and welding needed on-site
- High reliability
- Uniform flow distribution
- Easy maintenance



## ● Valve



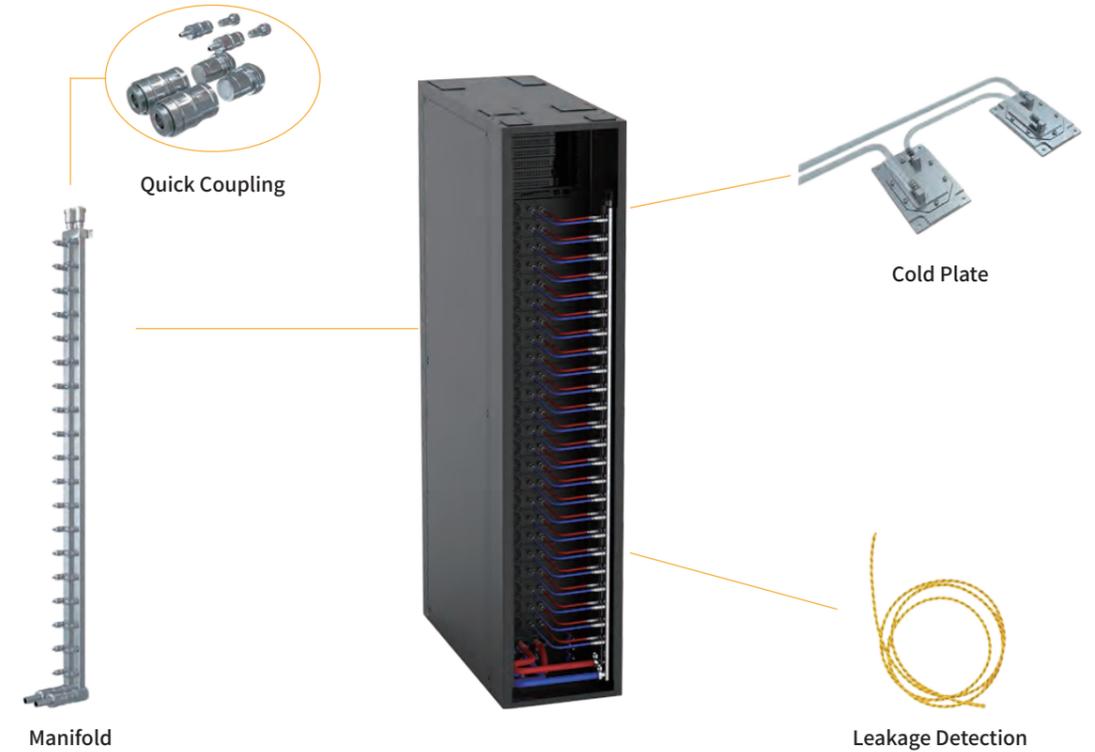
SS304 Ball Valve



Butterfly Valve

# CABINET

The liquid cooling cabinet is mainly composed of cabinet, manifold pipeline, power distribution system, exchange board and internal equipment; as the carrier of liquid cooling equipment, each equipment is connected with a special liquid cooling hose to ensure the heat dissipation effect.



## ● Technical Specification

NO.	Cabinet Dimension			Available Installation Space 1U = 44.45 (mm)
	Width (W)	Depth (D)	Height (H)	
1	600 mm	1200 mm	2000 mm	42 U
2	600 mm	1200 mm	2200 mm	47 U
3	800 mm	1200 mm	2000 mm	42 U
4	800 mm	1200 mm	2200 mm	47 U

## ● Features

Upwards pipe, downwards pipe, dual power supply, water leakage alarm, water tray.

# AIR-LIQUID FUSION SOLUTION

## ● Applicable Scenarios

Small-to-medium data centers that need a simple,highly- reliable architecture.  
 Hybrid data centers where air cooling dominates but liquid cooling must also be supported.  
 A smart computing data center utilizes cold plate liquid cooling for deploying large-scale models.

## ● Product Features

Single-source cooling:no need to build separate air-and liquid-cooling infrastructures;architecture is simpler and complexity is reduced.  
 Lower CapEx:eliminates one complete cooling system compared with stand-alone air +liquid solutions,cutting cost by~20%.  
 Dynamic balance: automatically adjusts the air-to-liquid cooling ratio in real time according to the actual load split.  
 Flexible deployment:accommodates both liquid-cooled and air-cooled servers,enabling step-wise upgrades or smooth transition.  
 Easier O&M:only one cooling system has to be managed, removing the operational headaches of running two parallel technologies.



## ● Model Specifications

Model	SY-ALI 190	SY-ALI 140	SY-ALI 100
Liquid cooling capacity	150 kW	100 kW	60KW
Air cooling capacity	40 kW		
Air sensible heat ratio	100%		
Airflow	9500 m <sup>3</sup> /h @10 Pa		
Power supply	380 V-3 ph-50 Hz		
Rated input power	22.3 kW	21.8 kW	21.5kw
Max.input current	82 A		
Evaporator type	Fin-and-tube		
Compressor type	DC-inverter scroll		
Air filter	G4 high-efficiency		
Primary/secondary connection	Quick-clamp 77.5 mm		
Refrigerant	R410A		
Dimensions W×D×H	600×1200×2000 mm		
Weight	500 kg		
Outdoor operating range	-40°C ~ +45°C		

# INTELLIGENT COOLING SOLUTION

## ● Applicable Scenarios

Applicable Scenarios: For small-scale deployment of liquid-cooled servers in existing air-cooled data centers, the air-liquid adaptive solution requires no modifications to the existing server room, solving the deployment challenges of liquid-cooled servers in air-cooled server rooms with zero modifications.Air-cooled and liquid cooled servers can be installed simultaneously in the same air-cooled rack, meeting the needs of high performance computing, AI applications, and general computing requirements

## ● Product Features

High-Efficiency Heat Dissipation: The air-liquid CDU provides efficient heat dissipation in high heat density environments, ensuring stable equipment operation. It conforms to standard rack dimensions, requiring no modifications to existing server rooms and can be quickly installed and deployed in existing standard racks. It is suitable for users with existing air-cooled server rooms but no space for modification or those leasing server rooms.  
 Energy Saving and Consumption Reduction: Through the application of liquid cooling technology, the air-liquid CDU can reduce data center energy consumption, improve energy efficiency ratio, and reduce operating costs.



## ● Model Specifications

Model		SY-AL CDU-RK-20	SY-AL CDU-RK-120	
Heat exchange	kW	20	120	
Wind side	°C	25	25	
Water side	Design air volume	m <sup>3</sup> /h	3600	15000
	Cooling medium	/	Deionized water	Deionized water
	Inlet temperature range	°C	51/45	51/45
	Outlet temperature range	°C	35 ~ 50	35 ~ 50
	Water pressure drop	KPa	≥120	≥120
	Circulation flow rate	m <sup>3</sup> /h	2.88	17.26
Interface size	mm	φ31.8*1.5	φ63.5x2.0	
Rated power	kW	1.6	7	
Operating weight	kg	85	400	
Maximum operating pressure	bar	5	5	
DimensionsWDH	mm	536*900*445	600*1200*2000	

# 40FT Crypto Mining Container 2/3 MW

## ● Product Features

It is an efficient cryptocurrency mining cooling system designed specifically for outdoor mining rigs. It can operate directly using electricity without requiring additional equipment. The system can be equipped with a dry cooler or a closed water tower, flexibly adapting to various mining configurations. The entire system utilizes top-tier international electrical components, ensuring safe and reliable design.

Dry cooler solution: suitable for dry, water-scarce, and extremely cold regions. Closed cooling tower solution: higher efficiency, lower cost, characterized by continuous water consumption.



Product name	40FT Crypto Mining Container 2MW	40FT Crypto Mining Container 3MW
Typical application scenarios	Supercomputing Center & AI Training Cluster, High-Density GPU Server Cluster, 5G Base Station BBU with Liquid Cooling	
Core advantage	Large heat dissipation capacity, modular expansion, high-density deployment	
Unit capacity	336 units	480 units
Cabinet dimensions (L*W*H)	12196 * 2438 * 2896mm	
Supported power	2MW	3MW
Cooling method	Dry cooling tower or closed-circuit tower	
Water distributor material	304 stainless steel	
Maintenance items	Remote APP monitoring	
Display screen	10-inch siemens touchscreen display	
Control system language	Chinese & English	
Inlet/Outlet pipe diameter	DN100PN16 standard flange	/

# WATER COOLING RADIATOR

## ● Product Introduction

The water cooling radiator for mining machines can be equipped with a water-cooled mining machine. The radiator can automatically adjust the fan speed according to temperature, ensuring the normal operation of the water-cooled mining machine

## ● Product Features

Specially designed for hydroelectric miners: perfectly compatible with Hydro series mining machines, ensuring optimal performance and efficiency.

Dual transmission mode: Provides automatic and manual transmission modes to effectively manage temperature differences between day and night.

Low water consumption: Highly efficient, requiring only 100 milliliters of water per week, making it both economical and environmentally friendly.



Product Introduction	12KW Intelligent Temperature Control Water Cooling Radiator
Parameter	Parameter values
Water injection capacity	≈ 8L
Power interface types	C14 female connector *1 ; requires C13 power cord/220V
Water-cooled heat dissipation power consumption	0.5KW
Net weight	21KG
Including packaging weight	21KG
Pipe diameter	Inlet and outlet diameter 12mm (Standard configuration includes silicone tubing with an inner diameter of 12mm)
Product dimensions (manual measurements may have errors; please refer to the actual product for accuracy)	Length 75cm (Including water pump) * Thickness 22cm(including pagoda) * Height 58cm(including handle and base)
Test ambient temperature / °C	33°C
Server power consumption	11KW
Radiator operating noise	20 - 75 DB
Radiator cooling temperature	46.6°C
Speed adjustment range	0 - 6000
Water flow rate	11L/min

# INTEGRATED COOLING STATION

## ● Introduction to Container Integrated Cold Station

Container integrated refrigeration station is a complete refrigeration system module that is prefabricated, assembled, factory-tested. It highly integrates the dispersed equipment in traditional refrigeration systems, such as chillers, water pumps, plate heat exchangers, distribution cabinets, control systems, etc. into a closed box, forming a "plug-and-play" integrated system. After arriving at the site, only the pipelines and cables need to be connected, followed by simple debugging, allowing it to be quickly put into operation.



Magnetic Levitation Variable Frequency Centrifugal Chiller Unit



Variable Frequency Direct-Drive Centrifugal Chiller Unit



Variable Frequency Water-Cooled Screw Chiller Unit



Fixed Frequency Flooded Water-Cooled Screw Chiller Unit

- Customized according to different working conditions, cooling capacity requirements, and diverse customer needs

## ● Simple and Convenient

- Application is minimalist: it only requires connecting the inlet and outlet pipes, and there's no need to install complex cold source systems (e.g., refrigeration rooms, chilled water pumps, cooling towers, water treatment equipment, etc.).
- It can directly expand capacity via parallel connection.
- Equipped with a mobile maintenance platform, it can be easily assembled and put into use on-site.
- Open maintenance access.

## ● Save

- No refrigeration room required, with no additional initial investment, thus saving construction costs.
- The 1MW cooling capacity unit occupies only 20 square meters of land.
- The integrated design significantly reduces energy consumption for cooling water transportation.
- Adopts R134a, an environmentally friendly refrigerant.
- Boasts ultra-high comprehensive energy efficiency, with an energy-saving rate of up to 10%-60% compared to traditional cold sources.

## ● Intelligent

- An advanced intelligent management and control system can real-time monitor parameters such as temperature, pressure, and flow rate, automatically adjust the equipment's operating status, realize remote monitoring and fault alarms, thus reducing operation and maintenance difficulty and labor costs.
- It supports multi-group control and intelligent hydraulic balance monitoring.
- By comprehensively considering factors such as climate, water temperature, and load rate, it automatically adjusts its operating mode to achieve maximum energy efficiency.

## ● High space utilization rate

- It can be deployed on outdoor ground, rooftops, or unused areas — without occupying the building's internal computer room space — thus freeing up valuable space. It is especially suitable for land-constrained areas.

## ● Own machine room

The infographic consists of two rows of icons connected by a dashed line. The first row includes: a crossed-out server rack icon labeled 'No need for a computer room', a circular refresh icon labeled 'Reuse', a shield with a checkmark icon labeled 'Safe and reliable', a clock icon labeled 'Short installation period', and a bar chart icon labeled 'Low installation risk'. The second row includes: a clock icon labeled 'Short debugging time', a shield with a yen symbol icon labeled 'Save installation costs', a sound wave icon labeled 'Low noise', and a thermometer icon labeled 'Not afraid of high temperatures'.

Two 3D renderings of the containerized cooling station. The left view shows the side profile of the unit, which is a long, rectangular metal cabinet with multiple doors and a control panel. The right view shows the front of the unit, highlighting the large black grille for air intake or exhaust.

# MODULAR DRY COOLER

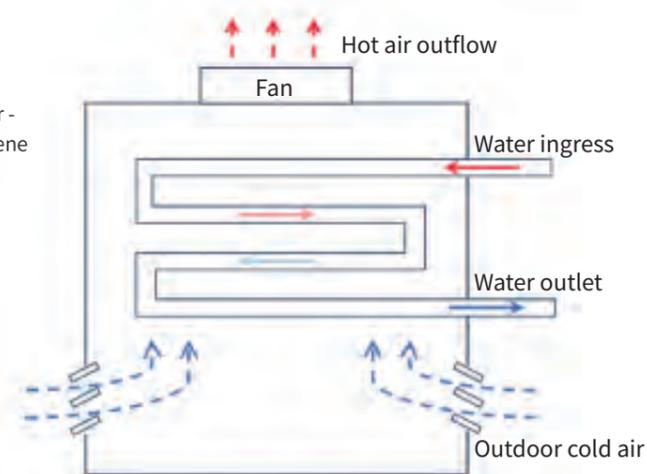
## ● Product Features

- Wide cooling capacity range: 10kW–2000kW
- Efficient V-shaped coil design: features low system air resistance, low medium pressure loss, and high heat transfer efficiency. It achieves a larger heat transfer area in a smaller unit size, significantly saving floor space.
- Modular structural design: supports on-site rapid assembly and disassembly, reducing on-site installation difficulty.
- Adopts high-efficiency, low-noise stepless speed-regulating fans: automatically adjusts speed in real time to reduce power consumption, being energy-saving and environmentally friendly. Additionally, it is easy to maintain, with main components accessible for disassembly and maintenance.
- The dry cooler's integrated control system has powerful control and communication functions: it automatically adjusts operation according to system requirements to ensure the system's water temperature stays within the design range.
- Standardly equipped with an RS485 monitoring interface: supports the Modbus communication protocol.
- Optional spray components: available to improve unit operational efficiency and enhance heat dissipation performance under extreme operating conditions.



## ● Operating Principle

- A dry cooler — also known as an air-cooled heat exchanger - operates by circulating a secondary refrigerant (e.g., ethylene glycol solution) through high-efficiency heat dissipation tubes. When the high-temperature secondary refrigerant flows through these tubes, fans or natural wind blows air over the tube surfaces to facilitate heat exchange.

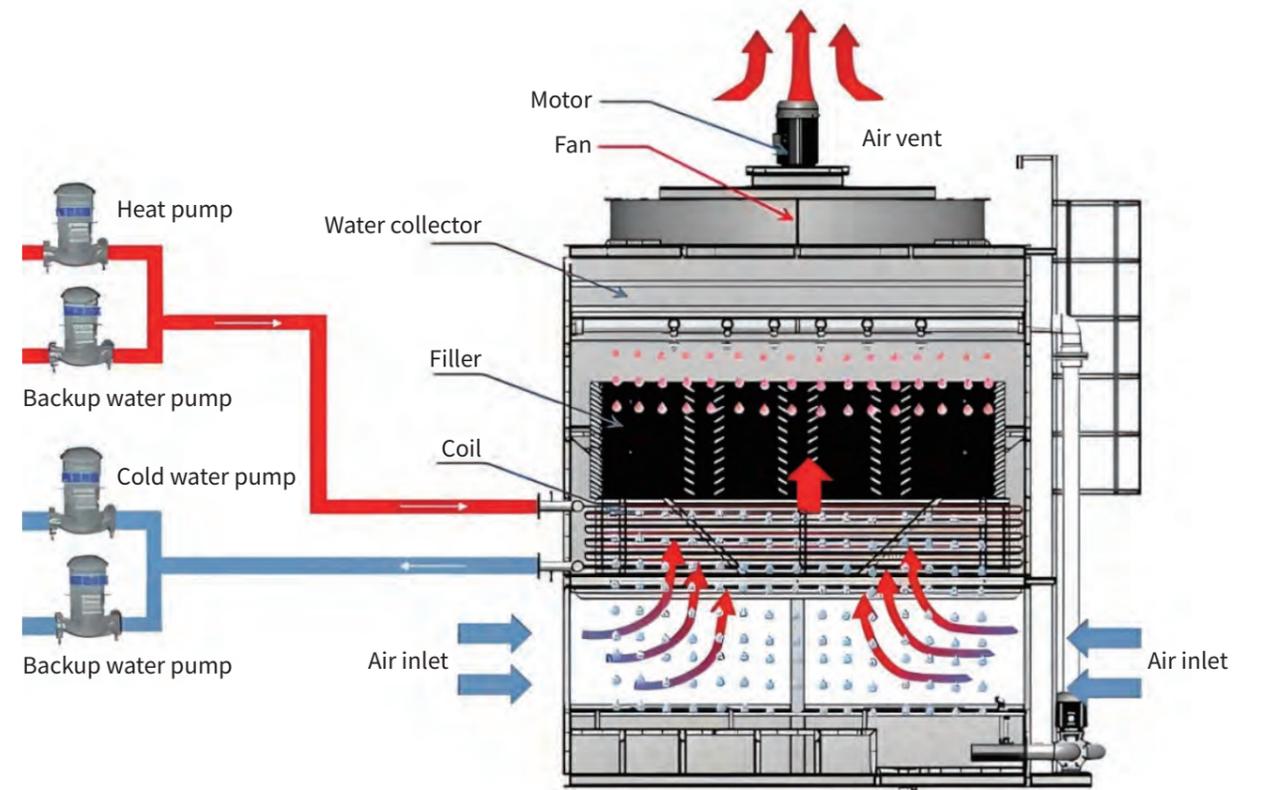


# COOLING TOWER

## ● Product Features

- Internal circulation: The cooled circulating medium circulates through a closed heat exchange tube bundle, which is completely isolated and sealed from the external environment with no direct contact.
- External circulation (also referred to as the spray system): Spray water is pumped from the top of the tower by low-head, high-flow spray pumps, then evenly sprayed onto the outer surface of the heat exchange tube bundle to form a thin water film. Heated by the high-temperature medium inside the tubes, the water film absorbs heat, converts it into latent heat of vaporization, evaporates into water vapor, and removes heat.
- Air exchange system: Dry, cool air enters from the lower section of the heat exchange tube bundle, flows rapidly through the tube bundle, and conducts convective heat exchange with the tube walls. Meanwhile, it carries water vapor to become high-enthalpy gas, which is then drawn by an axial flow fan and discharged outside the tower—thus transferring heat to the external environment.
- Auxiliary systems: Include air intake grilles, water collectors, water distribution systems, control systems, etc., to ensure the stable operation of the closed cooling tower. In particular, the control system automatically switches between air-cooling mode and air-cooling + spraying mode based on the outlet water temperature and process requirements. It enables full automatic operation without manual intervention, as well as energy and water efficiency.

## ● Operating Principle



# Enterprise Honor

## ● SOETECK Product Certificate



## ● SOETECK ISO Certificate



## ● SOETECK Soft Copyright Certificate



## ● Cooperative Enterprise

