

#### **BL-iBLOCK**

#### **Row-Level Smart Modular Data Center**

Acson BL-iBlock Row-Level Smart Modular Data Center integrates the power distribution, refrigeration, UPS, batteries, cabinets and airflow management, monitoring and management facilities of the traditional computer room basic equipment into sub-module systems, and becomes a row-level rack-type modular date center.

BL-iBlock row-type modular data center is one of the best practices for small and medium data centers. It simplifies the construction complexity of those data centers, and offers several user-friendly solutions for issues with specialization, standardization, construction speed, scalability, etc.

#### **Application**

- Small-medium size data room
- Computer room and data center
- · Communication base center
- UPS and battery room
- Substation equipment room

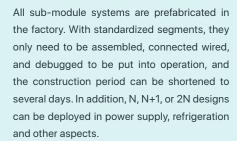




#### **Product Value**



#### Time Saving: Rapid Deployment





## **Money Saving:** Reducing costs

It can be constructed in batches by module, flexibly deployed and scaled as operating, reducing the initial one-off investment and subsequent maintenance and operation costs.



## Effort Saving: Inteligent Management

Use an integrated monitoring and management platform to manage multiple subsystems in the module such as refrigeration, UPS, power supply and distribution, fire protection, and access control. They are plug and play.



### Power Saving: High Efficiency and Energy Saving

Multiple modes are used to enclose cold and hot asisles to avoid mixing of hot and cold airflows, which will improve the utilization of refrigerating capcity. Use efficient precision air conditioners close to the equipment. They can provide high energy efficiency ratio and sensible heat ratio.

It adopts the high efficiency and high frequency UPS, which is featured by high efficiency and high power factor.



**Loading System** 



**PDU System** 



Uninterrupted Power System



Rack-Mounted Battery Packs (Optional)



**Key Components** 







**Smart Management System** 



**Precision Air Conditioners** 



Lighting and Visualization System



Emergency Fan

#### **Loading System**

- Cabinet and structural parts
- Cabling troughs
- Aisle components
- Airflow enclosure components

#### **Power Distribution System**

- $\bullet$  Multiple power distribution architecture qrades: N, N+1, and 2N.  $\bullet$
- Power distribution includes UPS input and output, air conditioning, lightning protection and PDU branch circuit

#### **Monitoring System**

- 10-inch colour touch screen
- Clear 3D interface display
- Micromodule: provide comprehensive real-time management of UPS, air conditioners, temperature and humidity, door status, water leakage, emergency fans, SMS, mobile app, etc. also can be used to realize easy operation and maintenance management.

#### **Air Conditioning System**

- High energy efficiency ratio precision air conditioner
- 7.5-25kW cooling capacity
- Support various refrigeration modes
- Innovative and energy-saving unit solution
- Support N and N+1

#### **Uninterrupted Power System**

- High efficiency UPS
- High power factor 10-40kVA power section
- Support battery pack or battery cabinet

#### **Safety System**

- LED lighting management
- Ambient light warning
- Emergency fan management
- Water leakage detection device
- Fire-fighting device
- Smoke sensing acoustooptic device

#### Features of BL iBlock Row-Level Smart Modular Data Center



#### **Modular Solution**

All subsystems of iBlock BL system micromodule are modular, standardlized and prefabricated. Easy installation which can be quickly deployed and put into use. Installation only takes 1 to 2 days.



#### Simple to Read

10 inch colour touch screen with user friendly 3D humanmachine interface to monitor the BL equipment's operational conditions in real-time, record events, alarms, and other functions. User micromodule management is simple and easy to use.



#### **Intelligent Management**

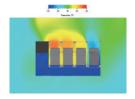
Dual power supply provides stability and reliability. Comprehensive monitoring of the system, with configurable video, voice calls, SMS components and mobile APP to keep up with the dynamic information.

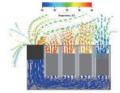


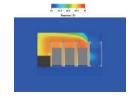
#### **Flexible Layout**

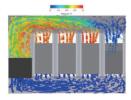
iBlock BL single-row cabinets: Contain 2-8 cabinets, with various combinations such as 1 driving N and 2 driving N, which can meet the needs of small and medium-sized data rooms, new construction, expansion, transformation, and capacity increase. It also provides a number of micromodule combination solutions.











Uninterrupted power supply: TLC & energy saving dual certification, high output power factor, and improving load capacity and UPS efficiency by 95%

High efficiency refrigeration: Utilize load following technology with the cooling capacity 'changing on demand', which saves 30% - 50% energy compared to standard computer rooms.

Airflow management: Use aisle enclosing mode (isolation of hot and cool aisles) to only cool the equivalent, but not the environment. That will increase the return air temperature of the unit, while improve the energy efficiency ratio of the unit and result in energy saving.

Energy saving technology: Provide a variety of innovative refrigeration energy-saving solutions to meet customized needs. PUE can be lower than 1.4.

#### Safe and Reliable

Safe and dependable system: Power distribution system with N, N+1, or 2N power supply and the air conditioning system with N or N+1 refrigeration. Emergency fans are provided: The emergency fan is activated to reduce the rise in cabnet temperature when the air conditioner or electric power fail. Warning ambient lights: Change colors according to the normal operation and alarm of the equipment, and can give clear and intuitive display. Aisle is completely enclosed and each row has a high protection level, which can be used in relatively harsh environments such as warehouses and factories. Can be equipped with a fire-fighting subrack to prevent fire hazards.

# Economize - Space Saving

Compact design: Single cabinet only takes up 0.84 square meters. The computer room occupies an area ranging from 10 square meters to 100 square meters.

Supports installation with cement floor: Simplifies the decoration of the computer room to utilise all of the usable area in the computer room.

### **Technical Specification**

### BL iBlock Row-Level Smart Modular Data Center

				BL iBlock Row-Level Smart Modular Data Center				
Specification				1 drives N (2-6) 2 drive N (3-8)				
Aisle Enclosure Mode				Fully enclosed / enclosed cool aisles are available for selection				
Voltage System				380V	50Hz			
	UPS Capacity I		kVA	10	20/30	40	2*20	
	Output Power Factor	Output Power Factors			0.	9		
Power Distribution	UPS Voltage System			3-phase input 1-phase output 3-phase input 3-phase output				
System	Power Distribution C	Power Distribution Capacity A			80 125 16			
	Lightning Protection			Class C lightning protection				
	Power Distribution Architecture				Support N, N+1 or	2N configuration		
	Width		mm	900 - 6000				
	Micromodule Dimensions	Depth	mm	1400				
		Height	mm		20	00		
	Cabinets Include Auxiliary Materials			L-shaped guide	e rails, blind plates, lig emergenc		xiliary materials,	
Cabinet System		Width	mm	800				
	Network Cabinet	Depth	mm	1400				
		Height	mm	2000				
	Cooling Capacity	Cooling Capacity kW			7.5			
	Dimensions	Width	mm	520	600	3	00	
Air Conditioning		Depth	mm	1400	1400	14	-00	
System		Height	mm	2000	2000	20	000	
	Refrigeration Architecture			Support N or N+1 configuration				
	Display Interface			10-inch colour touch screen				
Monitoring System	Monitoring Scope			UPS, air conditioners, cabinet temperature and humidity, door status, emergency fans, water leakage, smoke detectors, etc.				
	Optional			SMS component / mobile app / voice alarm / video / access control, etc.				
	Emergency Fans			Standard configuration				
0.61.0	Warning Ambient Lights			Standard configuration				
Safety System					Standard configuration			
	Fire-fighting Subrack			Optional (only when the micromodule is fully enclosed)				
	Battery Packs			Support (only for Taihang UR series UPS)				
Battery System	Height			3U				
	Specification			240V 9AH				
	Quantity Available for Selection			Up to 8 battery packs				
	Battery Cabinets			Support (in row or stand alone)				
		Width	mm	600 / 800				
	Dimensions	Depth	mm	1400				
		Height mm		2000				

# **Typical Configuration**BL iBlock Row-Level Smart Modular Data Center

One Drive Three Technical Solution						
Refrigeration Unit		ABL07CS13	ABL12CS13	ABL12CR13		
Cooling Capacity kW		7.5	12.5	12.5		
UPS Capacity kVA		10 / 20	10 / 20	10 / 20		
IT Equipment Available Space		84U	84U	84U		
Cool Aisle Containment				•		
(Glass door in front, mesh door at back)		Support	Support	Support		
Fully enclosed hot and cool aisles				2		
(Glass door in front, sheet metal door at back)		Not support	Not support	Support		
Module Size (W*D*H)	mm	2320*1400*2000	2400*1400*2000	2100*1400*2000		

One drive Four Technical Solution						
Refrigeration Unit		ABL07CS14	ABL12CS14	ABL12CR14		
Cooling Capacity kW		7.5	12.5	12.5		
UPS Capacity kVA		20/30	20/30	20/30		
IT Equipment Available Space		126U	126U	126U		
Cool Aisle Containment				•		
(Glass door in front, mesh door at back)		Support	Support	Support		
Fully enclosed hot and cool aisles		Notes	Notes	0 .		
(Glass door in front, sheet metal door at back)		Not support	Not support	Support		
Module Size (W*D*H)	mm	2920*1400*2000	3000*1400*2000	2700*1400*2000		

One drve Six Technical Solution						
Refrigeration Unit		ABL07CS16	ABL12CS16	ABL12CR16		
Cooling Capacity kW		7.5	12.5	12.5		
UPS Capacity kVA		20/30	20/30	20/30		
IT Equipment Available Space		210U	210U	210U		
Cool Aisle Containment		Support	Support	Support		
(Glass door in front, mesh door at back)						
Fully enclosed hot and cool aisles						
(Glass door in front, sheet metal door at back)		Not support	Not support	Support		
Module Size (W*D*H) mm		2920*1400*2000	3000*1400*2000	2700*1400*2000		



# **Typical Configuration**BL iBlock Row-Level Smart Modular Data Center

Two drive Four Technical Solution						
Refrigeration Unit		ABL07CS24	ABL12CS24	ABL12CR24		
Cooling Capacity kW		7.5 (1+1 redundancy)	12.5 (1+1 redundancy)	12.5 (1+1 redundancy)		
UPS Capacity kVA		2*20 (1+1 redundancy)	2*20 (1+1 redundancy)	2*20 (1+1 redundancy)		
IT Equipment Available Space		126U	126U	126U		
Cool Aisle Containment (Glass door in front, mesh door at back)		Support	Support	Support		
Fully enclosed hot and cool aisles  (Glass door in front, sheet metal door at back)		Not support	Not support	Support		
Module Size (W*D*H)	mm	3440*1400*2000	3600*1400*2000	3000*1400*2000		

Two drive Six Technical Solution						
Refrigeration Unit		ABL07CS26	ABL12CS26	ABL12CR26		
Cooling Capacity kW		2*7.5	2*12.5	2*12.5		
UPS Capacity	kVA	2*20/40	2*20/40	2*20/40		
IT Equipment Available Space		210U	210U	210U		
Cool Aisle Containment		Support	Support	Support		
(Glass door in front, mesh door at back)						
Fully enclosed hot and cool aisles						
(Glass door in front, sheet metal door at back)		Not support	Not support	Support		
Module Size (W*D*H)	mm	4640*1400*2000	4800*1400*2000	4200*1400*2000		

Two drive Eight Technical Solution						
Refrigeration Unit		ABL07CS28	ABL12CS28	ABL12CR28		
Cooling Capacity kW		7.5	12.5	12.5		
UPS Capacity kVA		2*20/40	2*20/40	2*20/40		
IT Equipment Available Space		294U	294U	294U		
Cool Aisle Containment		Support	Support	Support		
(Glass door in front, mesh door at back)						
Fully enclosed hot and cool aisles		Not support		Support		
(Glass door in front, sheet metal door at back)			Not support			
Module Size (W*D*H) mm		5840*1400*2000	6000*1400*2000	5400*1400*2000		





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