



Integrated Data-Center Unit (IDU)

Design Features

- Perfect solution for simple, efficient, scalable, flexible and secure, super-fast processing, and uninterrupted power availability
- Combinations of IT racks, cooling (air-conditioner), power distribution, monitoring, security, fire detection and suppression
- Space saving and electricity cost savings
- Suitable for small to medium data centers in which power is less than 20KVA



Data Center



Industry



Medical



Telecom



E-Business



Industrial Processes



Servers



Traffic

3KVA ~ 20KVA

One Row Intelligent IDU



Configuration with air conditioner



Configuration without air conditioner



Single cabinet configuration

General introduction

IDU integrate with cabinets, monitoring, power supply and distribution system, batteries, inrow air conditioner and other infrastructure; IDU can support one row sealed cold/hot aisle, battery packs can be configured inside or outside the cabinets.

Application

IDU is better to be used in the small to medium data center of which power is less than 20KVA and space is less than 50m², computer room of large enterprises branch, financial service network, school, hospital, retailing, government department and so on.

Value to customer

Ease of Use

- Modularization component, standardization interface, quick installation on site
- Prefabricate assembly, plug and play, simple setting
- Centralized monitor, intelligent management, remote monitor

High efficiency

- Flexible configuration by high-efficiency power modules
- Short distance of cooling path, sealed aisle, cold air and hot air separation, avoid hot spot, total PUE is less than 1.5

Safety

- Sealed micro environment, dust-proof, noise-proof, little affected by the environment, lifetime lengthens 1 to 2 times.
- Key subsystem can be configured as N+1/N design and enhance the stabilization of the system.

Recommendation for the minimal configuration of IDU

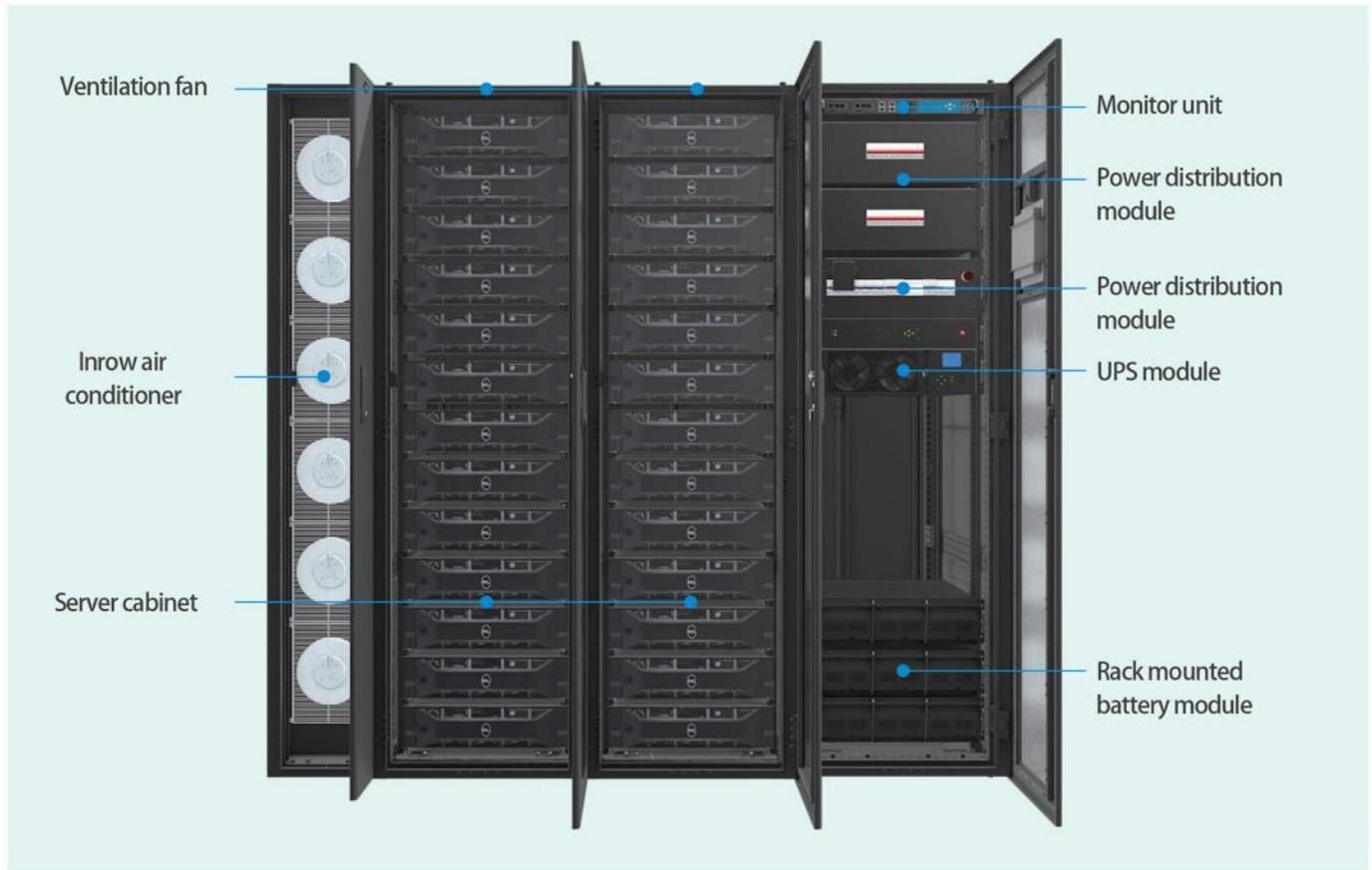


Recommendation for the maximum configuration of IDU

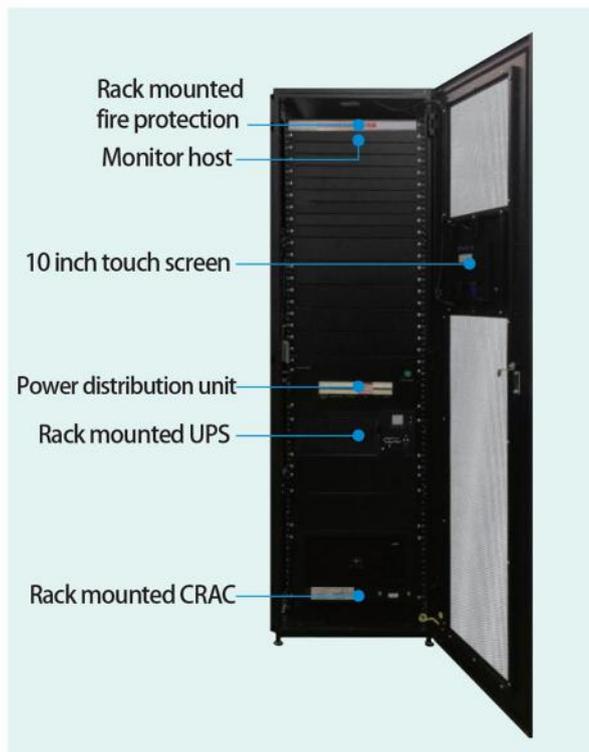


One Row Intelligent IDU

Internal layout of one row intelligent IDU



Internal layout of one cabinet intelligent IDU



Cabinet

Dimension (W×D×H) mm	600×1400×2000
Available space(U)	25 (Not contain battery inside)

UPS

UPS Power (kVA)	3/6
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Rack mounted CRAC

Rated cooling capacity(kW)	3.8
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Power distribution

Input voltage(V)	220 / 230 / 240
Input phase (Ph)	1
Input frequency (Hz)	50
Power cable in	Top/bottom cable in

Optional

Fire protection	Optional
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Monitor

Display on site	10 inch touch screen
Temperature/humidity sensor	Yes
Smoke sensor	Yes
Water leakage detection	Yes
UPS	Yes
Precision power distribution monitor	Yes
Emergent ventilation	Yes

One Row Intelligent IDU

Internal layout of one cabinet intelligent IDU



Specification

Mode	IDU-03AN	IDU-06AN
	One integrated cabinet	
Physical features		
Appearance	Full sealed design, flexible configuration	
Dimension	600 × 1400 × 2000	
Power distribution		
Dimension (W × D × H) mm	600 × 1400 × 2000	
Input	220/230/240Vac, 50/60Hz, 1ph+N+PE	
Power cable in	Top/bottom cable in	
Input breaker	63A/1P	
UPS Power(KVA)	3	6
Available space	23	20
Backup time (min)	30	15
CRAC(Rack mounted and without outdoor unit)		
Rated cooling capacity(KW)	3.5	
Dimension (W × D × H) mm	440 × 940 × 356	
Number	1	
Monitor		
Display on site	10 inch touch screen	
Temperature/humidity sensor	Yes	
Smoke sensor	Yes	
Water leakage detection	Yes	
UPS	Yes	
Precision power distribution monitor	Yes	
Air conditioner	Yes	
Emergent ventilation	Yes	
Fire fighting		
Fire protection(rack mounted)	Optional	

IDU Subsystem



One Row Intelligent IDU

Typical Configuration

MODEL	IDU-06	IDU-10	IDU-15
Power Cabinet	<i>UPS Module</i> Support single UPS running or working in parallel, nominal capacity ≤ 6KVA		
	<i>Power Distribution Unit</i> Power Input + Power Output + C Level Lightning Module + External Maintenance Bypass		
	<i>Monitor Host</i> Monitor the intelligent equipment in the IDU in real time		
Inrow CRAC	High efficiency inrow air conditioner Air supply method: front supply and back return		
	Cool capacity: 5.5KW	Cool capacity: 7.5KW	Cool capacity: 12.5KW
	Cooling capacity: air cooling Optional low temperature kit, drainage pump, etc		
Server Cabinet	High strength server cabinet 2 PDU 1 set emergent ventilation		
Environment	Recommended space 15~50m ² Recommended height ≥ 2.4m Sealed aisle design, noise proof and sound proof		
Optional	Fire protection module		
Dimensions (W x D x H) (mm)	1500 x 1400 x 2000		2100 x 1400 x 2000

Note: Product specifications are subject to change without prior notice.

One Row Intelligent IDU

Technical Specifications

Power Module		3~10KVA	10~20KVA
UPS			
Input / Output		220/230/240Vac, 50/60Hz, 1ph+N+PE	380/400/415Vac, 50/60Hz, 3ph+N+PE
Output Power Factor		≥0.9	
Nominal Capacity		3~10KVA, Support single UPS running or working in parallel	15~20KVA, Support single UPS running or working in parallel
Maintenance Bypass		Support	
Efficiency		≥92%	≥94%
Cooling System			
Cooling Capacity		3.8 (Rack-mounted), 5.5 / 7.5 (Inrow)	7.5 / 12.5 (Inrow)
Dimension (W x D x H) mm	Inrow	300 x 1200 x 2000	
	Rackmount	466 x 720 x 266 (3.8KW)	
Cooling Type		Air Cooling	
Carbinet			
Air Supply Method		Front supply, Back return, Total sealed	
Dimension (W x D x H) mm		600 x 1200 x 2000	
Available Space		42U	
Optional		Blind plate, L bracket, Movable / fixed tray, Cable management arm, Sealed module	
IP Level		IP20	
Power Distribution			
Input		220/230/240Vac, 50/60Hz, 1ph+N+PE	380/400/415Vac, 50/60Hz, 3ph+N+PE
Number of Input Terminal		Single input / Dual input	
Number of Output Branch		2~8	2~14
Lightning Protection		C level lightning protection	
Monitor System			
Alarm		Sound and light alarm, Phone call alarm, SMS alarm, E-mail alarm	
User Interface		Remote web interface, 10 inch touch screen, APP, Wechat	
User Interface		Centralized management (UPS/CRAC/Power distribution etc), Entrance guard management CCTV management, Alarm management Environment management (temperature and humidity, smoke sensor, water leakage)	
Fire Protection (Optional)			
Fire Protection Module		FM200	

Note: Product specifications are subject to change without prior notice.