



## Huawei IDS1000 Container Data Center Solution



The traditional data center is troubled in long construction period, high energy consumption, high initial investment, and it is difficult for the rapid business nowadays and future expansion. To solve the troubles, Huawei launched CloudPower IDS1000 container data center, which highly integrated power supply and distribution system, environmental monitoring, cooling systems, racks, cabling, fire control, security and other infrastructure facilities in standard shipping containers. It complies with customers' diverse business needs.

Huawei CloudPower IDS1000 series container data center solutions include two types: IDS1000C (Cluster) and IDS1000A (All-in-one), providing more than 10 solutions for customers.

### **Complete series of products, flexible expansion, suitable for data center of different scale and construction level**

- 20/40ft All-in-one single container and multi-container cluster solution, covering small, medium and large data centers (30 ~ 1000kW) with different rated power consumption (3.5kW~21kW).
- Independent power and cooling containers for flexible configuration, could be update from Tier3 construction level to Tier4.
- Customized multi-function ICT containers, making outdoor data center suitable for living and office needs.

### **Highly integration, 1-week fast deployment and mobile data center**

- One stop solution, integrating racks, monitoring, cabling, power, fire control and air-conditioning systems.
- Pre-engineering design, 1-week fast deployment, no building required, only construction field, power and network connection needed.
- High impact shock absorption system to meet needs of mobile scenes such as the military, disaster relief, exploration, field operations.

### **High environmental adaptability, applicable in different extreme environments**

- Operation temperature: -40°C~55°C, applicable in extreme high and low temperature regions; closed-loop cooling system, no more water tower required, suitable for arid areas.
- IP55 dustproof and waterproof design, application in a dusty mining area; enhanced bulletproof design, applicable in special high-risk scenes like prison.
- Special anti-corrosion treatment to meet the seaside and corrosive environment needs, service life up to 15 years.

### **Energy saving, significant save of investment on ancillary facilities and operation cost**

- Shorten the construction time by 1~2 years, in advance to put into use, increase ROI (Return On Investment).
- Horizontal air supply, efficient UPS, hot and cold aisle containment, free cooling, PUE can be reduced to 1.25, OPEX can be cut greatly.
- Spacing saved more than 30%.

### **Smart interaction, automatic management**

- Monitoring the container temperature, humidity, smoke, door magnetic detector, water leakage, air conditioning running state; NetEco system provides unified and centralized management of all resources; Smart interaction between L1 and L2.
- Automatic processing of unexpected events to improve data center availability; No need for on-site management, improving management efficiency and reducing operating costs.

IDS1000C Series

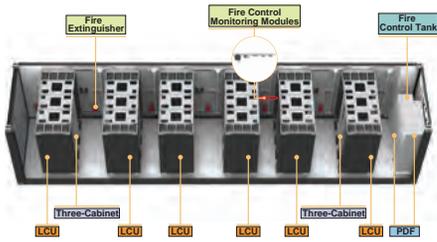
Cluster Container Data Center Solution



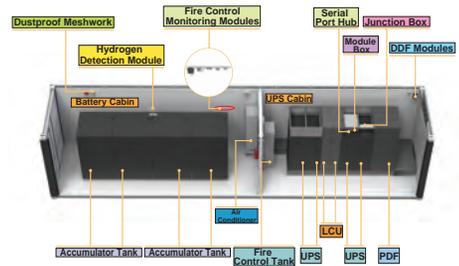


Huawei IDS1000C series container data center solution includes independent IT, power and cooling containers for standard configuration. Meanwhile, control container and 20ft-power container are optional.

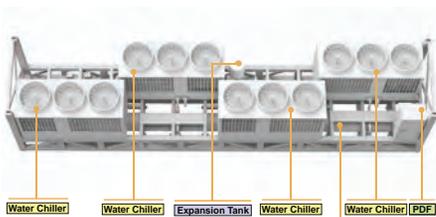
### Equipment container



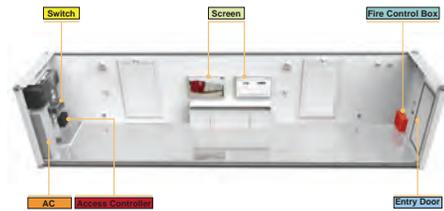
### Power container (40ft)



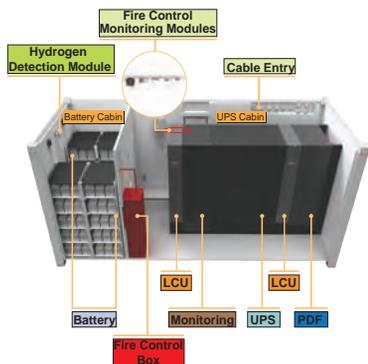
### Cooling container



### Center control container



### Power container (20ft)





Huawei IDS1000C solution provides 3 typical configurations, and supports flexible combination of different modules to meet customers' diverse requirements. Also, customized solution is available.

### Standard 3-containers solution



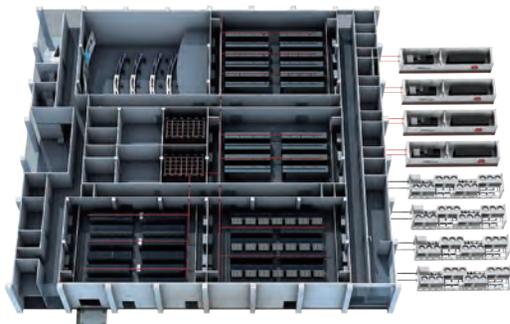
Equipment container	1
40'power container	1
20'power container	0
Cooling container	1
Control container	0
Rack quantity	18
Tier level	III
Application Scenarios	Education /Hospital/Government cloud computing, Disaster recovery

### 2N Cooling+power supply, Multi-containers

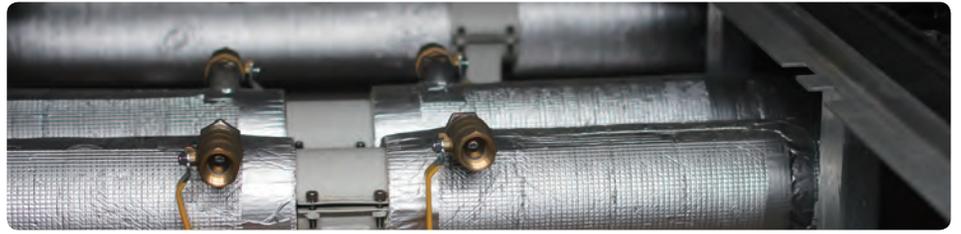


IT equipment container	1<N≤5
40'power container	0
20'power container	2
Cooling container	2
Control container	1
Rack quantity	18-108
Tier Level	IV
Application Scenarios	High reliability, financial industry, IDC hosting

### Combination of power and cooling containers with building



IT equipment container	0
40'power container	N
20'power container	0
Cooling container	N
Control container	0
Rack quantity	-
Tier level	III / IV
Application Scenarios	Provide independent power and cooling for building



## IDS1000C Series Specifications

### IT equipment container

Items	Specifications
Dimension (H x W x D)	9.6' x 8' x 40' (2896 mm x 2438 mm x 12192 mm)
Weight	18t
Power	3-phase-4-line+PE AC 380V
Rated IT power	400kW**
Cabinet quantity	18/24 racks
Space for equipment installation	45U
Operation temperature	-40°C ~ +55°C

\*\* Consider IT load factor 0.67

### Power container

Items	40' power container Specifications	20' power container Specifications
Dimension (H x W x D)	9.6' x 8' x 40' (2896mmx2438mmx12192mm)	9.6' x 8' x 20' (2896mmx2438mmx6068 mm)
Weight	18t	9.5t
Power	3-phase-4-line+PE AC 380V	3-phase-4-line+PE AC 380V
Operation temperature	-40°C ~ +55°C	-40°C ~ +55°C
UPS	Tower: 200/300/400kVA optional Modular: max 480kVA	Tower: 200/300/400kVA optional
Backup time	≥15min	≥10min

### Cooling container

Items	Specifications
Dimension (H x W x D)	9.6' x 8' x 40' (2896mmx2438mmx12192mm)
Weight	12t, Full of water: 18t
Power	3-phase-4-line+PE AC 380V
Operation temperature	-40°C ~ +55°C
Chiller	4 sets of air-cooled scroll chiller (3+1 backup), cooling capacity 100kW/set
Cooling backup	Water tank: 5300L, 15min cooling backup



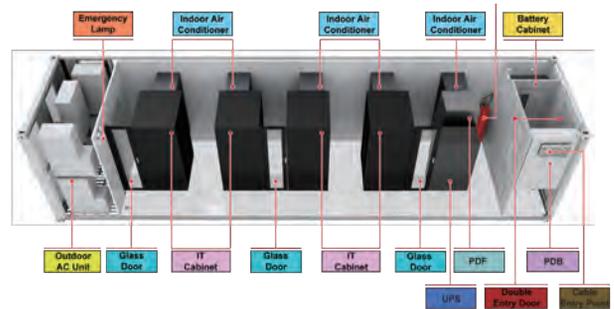
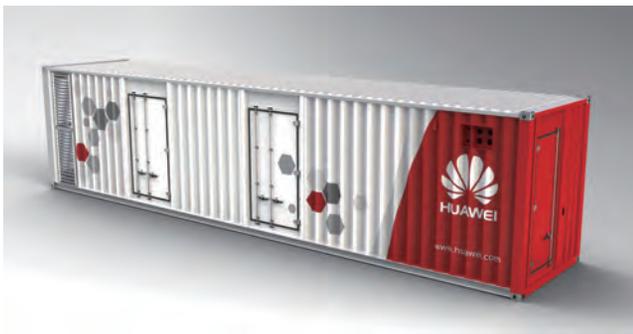
**IDS1000A Series**

**All-in-one Container Data Center Solution**



Huawei IDS1000A All-in-one container data center is a one stop infrastructure solution integrating power, cooling, cabinet, fire-control, cabling, monitoring, grounding and lightning system. Its two standard products includes 40ft and 20ft.

## IDS1000A-40 container data center



### IDS1000A Series Specifications

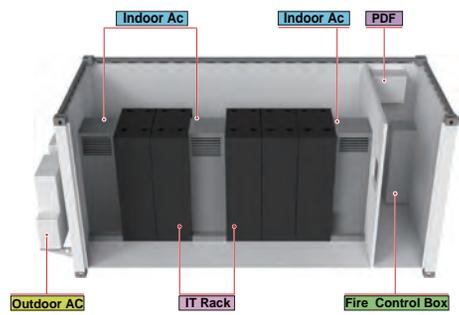
Items	IDS1000A 40ft Specifications
Dimension(HxWxD)	9.6' × 8' × 40' (2896 mm × 2438 mm × 12192 mm)
Power	3-phase-4-line+PE AC 380V
Operation temperature	-40°C ~ +55°C / Supporting T1 and T3 condition
Cooling	Row-level air conditioner horizontal air supply
Cabinet quantity	8
Equipment installation space	360U (45U/Rack)
Rated IT power	60kW
UPS	120kVA modular UPS, N+1 backup
UPS backup time	10min
Application scenarios	Fast and movable deployment small data for field work, military maneuver and outdoor photography etc.

Above configuration can be partially customized according to customer needs.



Huawei IDS1000A solution can fully support T1 and T3 condition. 4-10 racks can be customized according to customer's requirement.

## IDS1000A-20 container data center



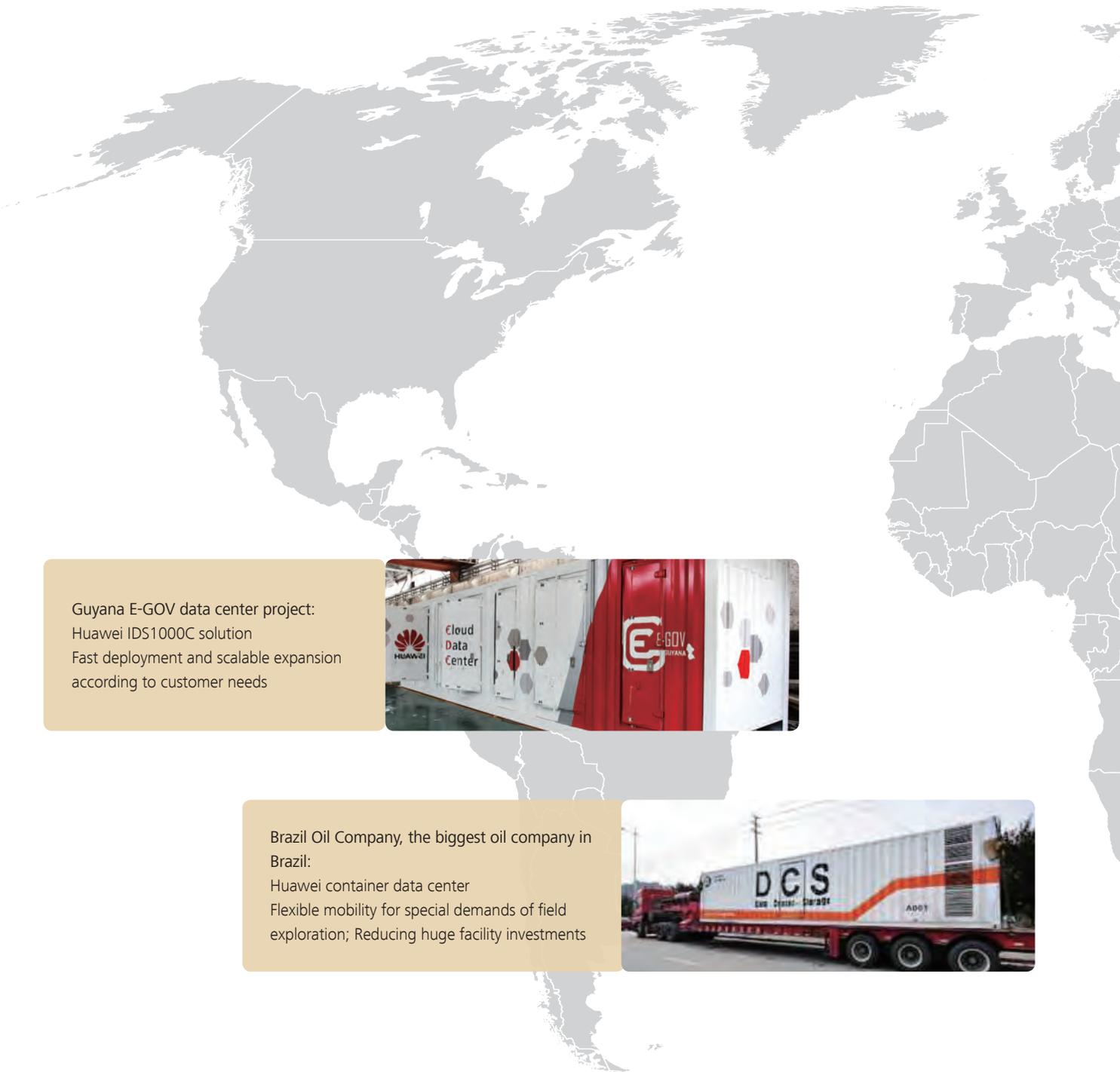
### IDS1000A Series Specifications

Items	IDS1000A 20ft Specifications
Dimension(HxWxD)	9.6' × 8' × 20' (2896 mm × 2438 mm × 6058 mm)
Power	3-phase-4-line+PE AC 380V
Operation temperature	-40°C ~ +55°C / supporting T1 and T3 condition
Cooling	Row-level air conditioner horizontal air supply
Cabinet quantity	4
Equipment installation space	180U (45U/Rack)
Rated IT power	30 kW
UPS	60kVA rack-mounted UPS, 2+1 backup
UPS backup time	10min
Application scenarios	Fast and movable deployment small data for field work, military maneuver and outdoor photography etc.

Above configuration can be partially customized according to customer needs.



Huawei CloudPower IDS1000 all-series container data center solutions have been successfully used in Guatemala MIC cloud IDC, Togo Lome University, Guyana government E-Gov project, Russia Megapolis, Ghana E-Gov project, Venezuela CANTV, the Brazil oil company, McKinsey University, China Mobile northern base, Huawei K3 desktop cloud project, etc.



Guyana E-GOV data center project:  
Huawei IDS1000C solution  
Fast deployment and scalable expansion  
according to customer needs



Brazil Oil Company, the biggest oil company in Brazil:  
Huawei container data center  
Flexible mobility for special demands of field exploration; Reducing huge facility investments





- 10 + years of experience in data center services, more than 210 data centers worldwide, 20 cloud data center
- 30 + global mainstream data center integration partners, providing service for world's top carriers

Megapolis, Russia's biggest cigarette distributor  
Huawei container data center,  
Fast deployment, customer's Christmas sales increased by 14.7%



China Mobile, China's biggest carrier,  
Northern base data center  
Huawei container data center,  
Finishing deployment in 2 months, high IT density, 30% more than traditional DC



Huawei, the world's 2<sup>nd</sup> largest ICT solutions provider, K3 park VDI data center:  
Huawei IDS1000C solution  
Delivery in 3 months, high/medium IT density, supporting 20,000 desktop, PUE1.4





## About Network Energy of Huawei

Based on the deep understanding about telecommunication in a long term of 20 years, and the construction and maintenance experience of more than 1.5 million global telecommunication sites, Huawei network energy product line adheres the '4S' concepts of 'Simple, Scalable, Smart, Saving', and commits to providing customers the world's leading network energy solutions.

The network energy product line has two main businesses of site energy and data center energy. We are making stable, green energy and infrastructure for customers in ICT field, building a solid foundation for excellent networks, protecting customers' long term investment on energy and infrastructure.

## About Huawei

Huawei is a leading global ICT solutions provider. Through our dedication to customer-centric innovation and strong partnerships, we have established end-to-end capabilities and strengths across the carrier networks, enterprise, consumer, and cloud computing fields. We are committed to creating maximum value for telecom carriers, enterprises and consumers by providing competitive ICT solutions and services. Our products and solutions have been deployed in over 140 countries, serving more than one third of the world's population.

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