

Modular Data Center

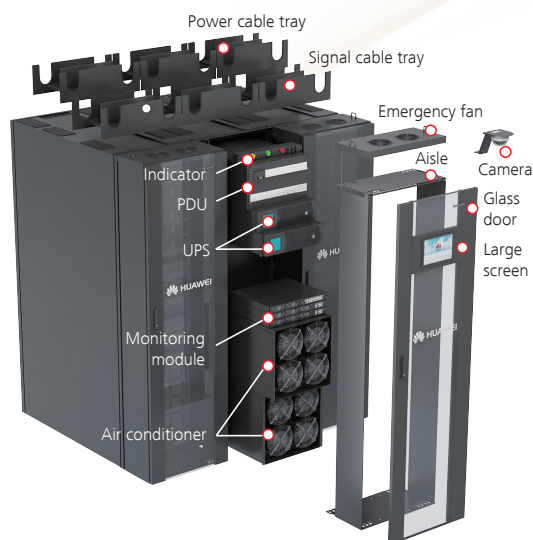
IDS800 Small-Sized Data Center

Introduction

Huawei IDS800 small-sized data center is a new-generation data center infrastructure solution. It integrates the PDU, UPS, rack air conditioner, and monitoring system in a comprehensive cabinet and allows flexible expansion of IT cabinets. A single module supports a maximum of eight cabinets, including zero to six IT cabinets. The IT load must be 15 kW or less, and the maximum power supported by a single cabinet is 5 kW/R. A 250 mm cold or hot aisle alongside single-row cabinets is configured.

Application Scenarios

- Recommend 10 m² DC room or bigger when cold aisle
- Recommend 30 m² DC room or smaller when hot aisle
- Tier I or Tier II construction
- Application in branch banks or their subsidiaries, education, medical, or public security organizations, small- and medium-sized enterprises, and retail merchandising



Three cabinets with contained cold aisle

Features & Value

Simple

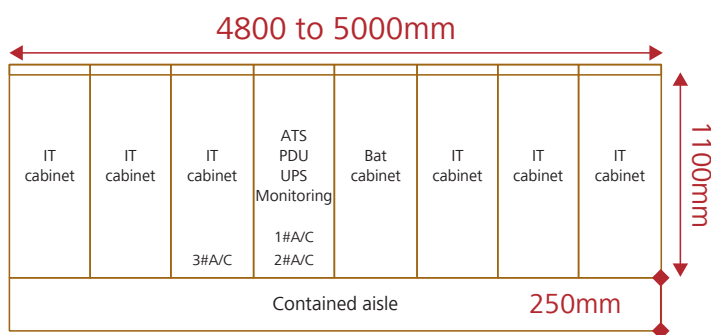
- PDU, UPS, monitoring and air conditioner are integrated in a cabinet, preassembly, only need cabinet combination. Deployment time only need 4 hours
- Mobile phone APP, SMS alarm, remote web platform control, Network centralized monitoring, realizing unattended operation

Efficient

- In-rack air conditioner, saving at least one cabinet installation space
- Frequency conversion refrigeration, aisle containment, superior PUE 1.37

Reliable

- Dehumidifying at min. 10% IT load, solving the condensation risk at low-load and high humidity situation
- Battery overheating intelligent shutdown to prevent the fire
- Key component redundancy design, improving reliability of the system



Top view of the module with maximum configuration

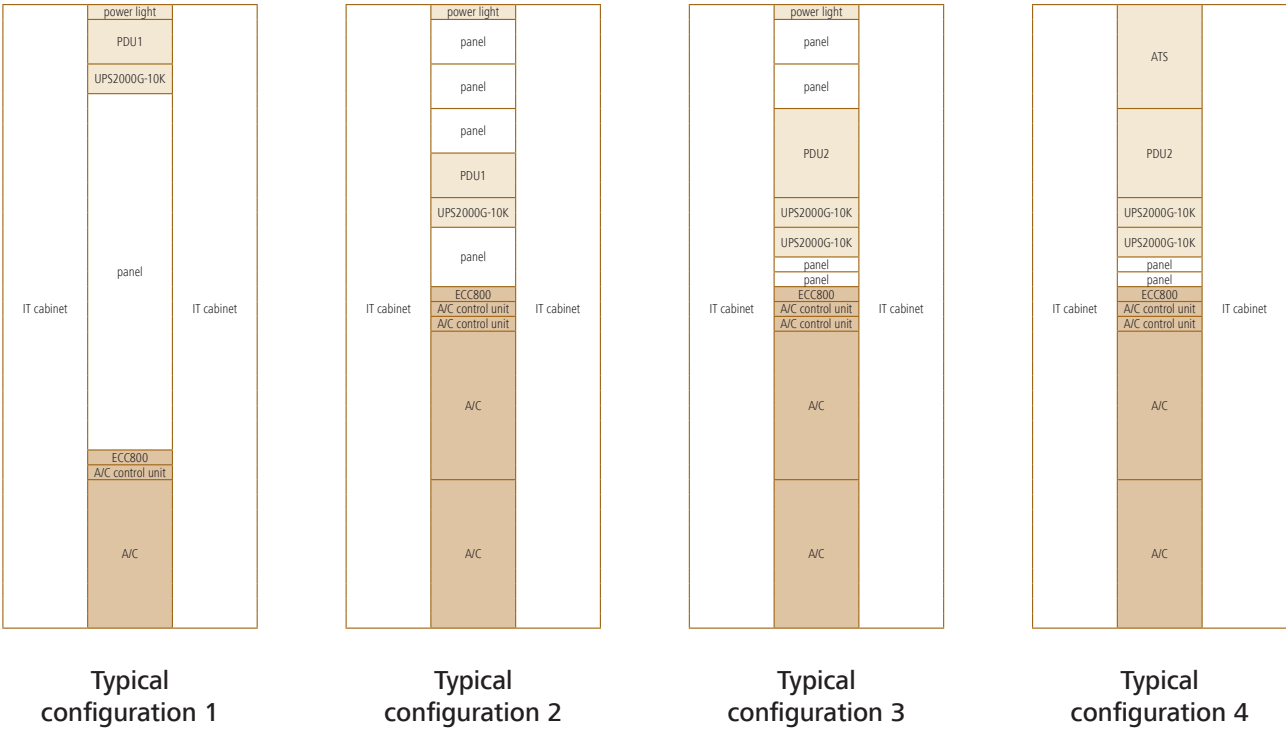


Specifications

| Overall Solution | | |
|--|--|--------------------------------|
| Maximum quantity of cabinets supported by a single module | 8 | |
| Quantity of IT cabinets | 0 to 6 | |
| Aisle type | Single-row hot/cold aisle | |
| Maximum IT power consumption | 15 kW | |
| Maximum power density of a single cabinet | 5 kW | |
| Battery deployment mode | Battery pack, battery cabinet, or battery rack | |
| Backup power | 15 min/30 min | |
| Installation mode | Concrete floor or raised floor | |
| Power system | 380/400/415Vac, 50Hz, 3Ph+N+PE | |
| System protection level | IP20 | |
| Ambient temperature | -20°C to 45°C | |
| Cooling System | | |
| Power supply mode | 220/230/240Vac, 50Hz, 1Ph+N+PE | |
| Refrigerating capacity of air conditioners | 11 kW | |
| Air conditioner configuration | 1+0, 1+1, 2+0, 2+1 | |
| Cooling mode | Direct expansion air-cooled | |
| Sensible heat ratio (sensible cooling capacity/total cooling capacity) | ≥ 0.99 | |
| Installation mode of the air conditioner | Mounted to a rack | |
| Air volume (of a single air conditioner) | 2600 m³/h | |
| Air supply mode | Front supply, rear return | |
| Air conditioner specifications | 11 U | |
| Power Supply and Distribution System | | |
| Lightning protection | Level C SPD | |
| Power input | Single or dual inputs | |
| UPS capacity | 10 kVA | 20 kVA |
| UPS configuration | N, N+1, 2N (N=1) | |
| UPS rated input voltage | 380/400/415Vac, 50Hz, 3Ph+N+PE | |
| UPS | 138~485Vac, 50Hz, 3Ph+N+PE | |
| UPS output power factor | 0.9 | |
| UPS rated output voltage | 220/230/240Vac, 50Hz, 1Ph+N+PE | 380/400/415Vac, 50Hz, 3Ph+N+PE |
| UPS system efficiency | 94.5% | 95% |
| UPS language | Chinese and English | |
| Maintenance bypass support | Supported | |
| Monitoring System | | |
| Monitoring system host | Remote access to the Web UI | |
| Local UI | 10-inch large screen display | |
| Water detection cable | Supported | |
| Smoke sensor | Supported | |
| Door status sensor | Supported | |
| UPS/Air conditioner monitoring | Supported | |
| Temperature and humidity sensor | Supported | |
| On-spot Wi-Fi communication | Supported | |
| Mobile O&M | Mobile APP | |

Typical Configurations

IT load ≤ 7.5 kW

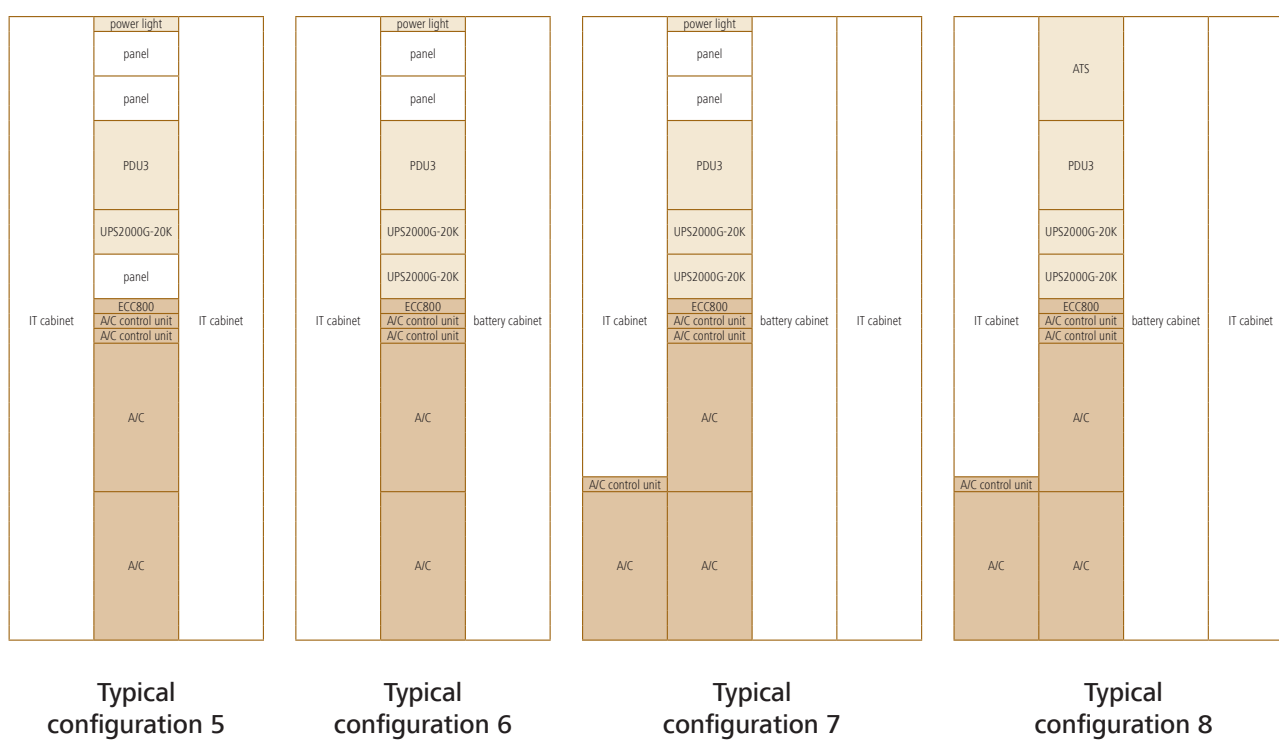


| IT load | IT load7.5KW | | | |
|-------------------------|--|-------------------------|-------------------------|-------------------------|
| Typical configuration | Typical configuration 1* | Typical configuration 2 | Typical configuration 3 | Typical configuration 4 |
| Aisle type | Cold aisle | | | |
| UPS configuration (KVA) | 10 | 10 | 10+10 | 10+10 |
| A/C configuration | 1+0 | 1+1 | 1+1 | 1+1 |
| Power input | single | single | single | dual |
| Rpdu quantity | 1 | 1 | 2 | 2 |
| IT output quantity | 4 | 4 | 14 | 14 |
| Standard configuration | Temperature and humidity sensor, smoke sensor, short message alarm, mobile phone APP | | | |
| Optional | Door magnetic switch, water sensor, video system, backup power | | | |

Note: Two to four cabinets are recommended.
Typical configuration 1 only can be used in Tier I construction level

Typical Configurations

7.5 kW < IT load ≤ 15 kW



| IT load | IT load15KW | | | |
|-------------------------|--|--------------------------|-------------------------|-------------------------|
| Typical configuration | Typical configuration 5* | Typical configuration 6* | Typical configuration 7 | Typical configuration 8 |
| Aisle type | Cold aisle | | | |
| UPS configuration (KVA) | 20 | 20+20 | 20+20 | 20+20 |
| A/C configuration | 2+0 | 2+0 | 2+1 | 2+1 |
| Power input | single | single | single | dual |
| Rpdu quantity | 1 | 2 | 2 | 2 |
| IT output quantity | 14 | 14 | 14 | 14 |
| Standard configuration | Temperature and humidity sensor, smoke sensor, short message alarm, mobile phone APP | | | |
| Optional | Door magnetic switch, water sensor, video system, backup power | | | |

Note: four to eight cabinets are recommended.

Typical configuration 5 and Typical configuration 6 only can be used in Tier I construction level