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General Introduction

South Sichuan Data Center is located at Lingang Economic Development Zone, Yibin, Sichuan. The overall planning of the data center park has a service capacity of 10,000 cabinets, with a total broadband access of 5T-10T. The park covers an area of 112 acres.

The construction area is about 200,000 square meters, with 1,250 cabinet service capabilities and 1T bandwidth support for the telecom backbone network.

The data center complies with the China GB50174-2018 Class A construction standard and conforms to the international Tier 3+ standard.
Data Center Pictures

- External Water Tower
- Interior Data Hall
- Interior Oil Engine Room
- Security Monitoring Room
Civil, Structural & Infrastructure

- South Sichuan data center adopts energy-saving and environmental protection technology to create a “Green & LC(low carbon) " data center.
- The building wall adopts 55mm thick cement-based foam insulation board for external insulation; the curtain wall adopts 6+12A+6LOW-E tempered hollow glass. The floor is insulated with 25mm rubber-plastic insulation board with aluminum foil layer.
- Phase 1 is a framed 4-story single-floor data hall with a construction area of 12,000 square meters. The date center has a structural safety level of Class I and a degree of 7-degree earthquake-resistant measures; the frame has a Class II seismic rating. The floor bearing capacity of the Data Center is 1000KG/m², and the floor load of the power battery room is 1600KG/m².
- Data Center adopts cold aisle enclosed technology. The headroom of the Internet area is 7 meters, the headroom of the standard data hall is 4.3 meters, and the anti-static floor is 80 cm. Each data hall is divided into functional areas.
Power Supply

The data center provides multiple power guarantees, and the power supply of important equipment adopts a 2N+ backup power supply system.

- The power access method is a dual-circuit 110kv substation outgoing ring network power supply.
- The UPS system adopts 2N configuration, a total of 24 600KVA UPS and 4 200KVA UPS. The backup battery of the UPS system can supply power continuously for more than 30 minutes.
- The power distribution room is equipped with a total of 4 sets (8) of 2500KVA transformers, meet international T3+ Standard.
- The generator room is equipped with an imported generator group, which consists of 5 high-voltage generators with a power of 2000kW to form a 4+1 redundant parallel system. The diesel engine supports automatic switching, and the switching starts normally to provide electricity within 10 minutes.
- Data Center is equipped with an automatic fuel supply system and a 25 cubic meter underground oil tank. When the generator set is operating at full load, the system can provide 12 hours of long-term fuel supply guarantee.
Cooling System

• The cooling center is to provide chilled water at 15-21 degrees Celsius for the chilled water precision air conditioner in the entire data center to ensure the computer room's 18-27 degrees Celsius constant temperature and 30% to 70% constant humidity environment requirements.

• The refrigeration station is equipped with 3 sets of 3516KW water-cooled centrifugal units, with 2 mains and one standby redundant configuration, and the main air-conditioning design capacity is 7032kW.

• Date Center also equipped with a plate heat exchange system, which uses natural cold sources to cool down to ensure that the PUE value of the data center reaches the international leading level of 1.4.

• The air-conditioning terminal equipment adopts UPS plus mains dual-circuit power supply, a total of 1 400KVA UPS and 3 200KVA UPSs.
Fire Protection System

• Data center uses the building-linked IG541 gas fire-fighting and pre-installed Heptafluoropropane fire-extinguishing system.

• Date center fire protection system complies with the "Code for Fire Protection Design of Buildings" (GB50016-2006 and later versions) and "Code for Design of Automatic Fire Alarm Systems" (GB50116-2006 and later versions).

• Data Center is equipped with portable dry powder fire extinguishers, portable carbon dioxide fire extinguishers, and cart-type carbon dioxide fire extinguishers.

• Two safety exits and located at both ends of data center. The door opens in the evacuation direction, and the corridors and stairwells are unblocked and have obvious evacuation signs.

• Date Center is equipped with special smoke-proof stairs, and safety signs are set up in the corridors and eye-catching positions.
Security System

• Data center use Weidun access control system at the main exits in the data hall by swiping cards.

• The remote monitoring system can monitor the identity of the personnel, the time of entering and leaving the data hall, and information can be stored in time.

• The access control system can set different access permissions for different personnel. The access control system log records the status of each access 7*24 hours for more than one year.

• Data center is equipped with video monitoring cameras. The cameras are arranged according to the number of rows in the cabinet and cover all channels and equipment inside and outside the data hall.

• Data center use dynamic detection video to perform 7*24 hours real-time monitoring and save more than 3 months of video data.
Building Automation, Monitoring and Control System

Cooling System Monitor
Central Control Screen
Video Surveillance
Power Distribution Monitor
Air conditioning monitoring
BA System
Advantage and Features

- Global Star Evaluation Standard
- Carrier Neutral Fast Internet with 3C
- Intelligent Management System
- Dual Redundant Backup System
- Powerful Security System
- Location Advantage Southwest China Center
- Abundant Power Resources Low Operating Costs
- Cheap & Professional Managed Services
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