



## Centrin Kunshan data center

192MW facility

## Introduction

Centrin Kunshan data center focuses on providing quality data center and cloud computing services to finance, government, large enterprises and Internet leading enterprises in Shanghai financial center and Yangtze River Delta Economic Zone. The Kunshan facility has been awarded with Uptime Tier IV, Uptime M&O, ISO9001, ISO14001, ISO 20000, ISO 22301, ISO 27001, ISO 45001, GB 50174-A certification, and won the 2020 National Green Data Center & Carbon Neutral Innovator.

## Green design

Recognized for its sustainability and winner of the National Green Data Center and Carbon Neutral Innovator award, the Kunshan facility was built and is operated reduce the carbon footprint. With an outstanding PUE of  $\leq$ 1.3 the data center reduces the total cost of ownership for our customers.

## **Convenient location**

Located in Huaqiao Economic and Technological Development Zone, Kunshan City, Jiangsu Province, which is only one step away from Shanghai.

Convenient transportation, close to the city expressway.

34 minutes to Shanghai Hongqiao Railway Station.

36 minutes to Shanghai Hongqiao Airport.

## Advanced design

Centrin Kunshan Data Center is a mega data center campus in East China, covering an area of  $165,744m^2$ , with a total land size of about  $300,000m^2$ . The campus has built its own 220KV substation with 600MW power capacity and 192MW critical IT load with an annual average PUE  $\leq 1.3$ .

Find out more





## Specifications at a glance

### **Facility features**

Mega data center campus, covers an area of 165,744m<sup>2</sup> 1x 5-story and 4x 6-story buildings. Availability: 99.995%

### Data hall features

Up to 32,000 standard racks 192MW critical IT load Support rack density range of 4-25kW The average load in the equipment room is greater than 1200 kg/m<sup>2</sup> Floor to floor height of 5.8m

## Seismic grade

Seismic fortification intensity: 7 degrees Seismic fortification category: B (key fortification) Seismic grade of frame: level 1

# Utility power and generators

Double power supply system A dedicated 220KV substation, dual mains, 600MW Diesel generator N+ 1 redundancy, self-start within 60 seconds, oil storage for 12 hours



### IT power

N + N dual UPS/HVDC >15 minutes backup time of a single battery >30 minutes backup time of the dual battery

### Cooling

Water cooling and natural cooling Water cooled pipes N+1 redundancy, continuous cooling for 15 minutes End precision air conditioner N+X (X≥20%N) Redundant pipeline mode: Dual loop Energy saving measures: HV variable speed centrifugal chiller, waste heat recovery, column air conditioning, building automatic control etc.

### Connectivity

Multiple routing, 12 MMR per building Provides access to multiple ISP providers Telecom, unicom, mobile and other operators four route access Supports bare fiber, BGP, SDH/MSTP, DDN, ATM, ISDN, and frame relay

### Monitoring and security

Electronic fence perimeter system Video surveillance system Burglar alarm systems Entrance security system Anti trailing device 24/7 hours security guards Two way access control and biometric identification system

## **Fire protection**

IG541 or HFc-227ea gas fire extinguishing system Aspirating smoke detectors and early fire detection system Automatic fire alarm and linkage control system Electrical fire monitoring system Fire equipment power supply monitoring system Fire door monitoring system

### Grounding

Common grounding devices include protection grounding, working grounding, lightning protection grounding and information system grounding. The combined grounding resistance is  $\leq 1 \ \Omega$ .

### **Other services**

Customer office buildings, catering buildings and apartment buildings Equipped with freight elevator, warehouse, parking lot