

Containerised Data Centre (CDC)

Prefabricated All-in-one Data Centre



Introduction

LongXing Containerised Data Centre (CDC) is an advanced outdoor and prefabricated all-in-one data centre solution. The solution provides reliable, stable and green environment for IT equipment. It enables easy transportation and fast deployment. Several IT modules, power distribution modules, cooling modules and other functional modules are integrated into one basic single independent operating unit. The solution can be applied to multiple industries and scenarios.

Applications



Features & Value

Simple

- Enclosure, power, cooling, firefighting and DCIM system are prefabricated. All facilities are pre-installed and pre-tested before delivery. It minimizes the engineering work and the on-site installation only takes one day.
- Moveable design make relocation easy and deployment flexibly.

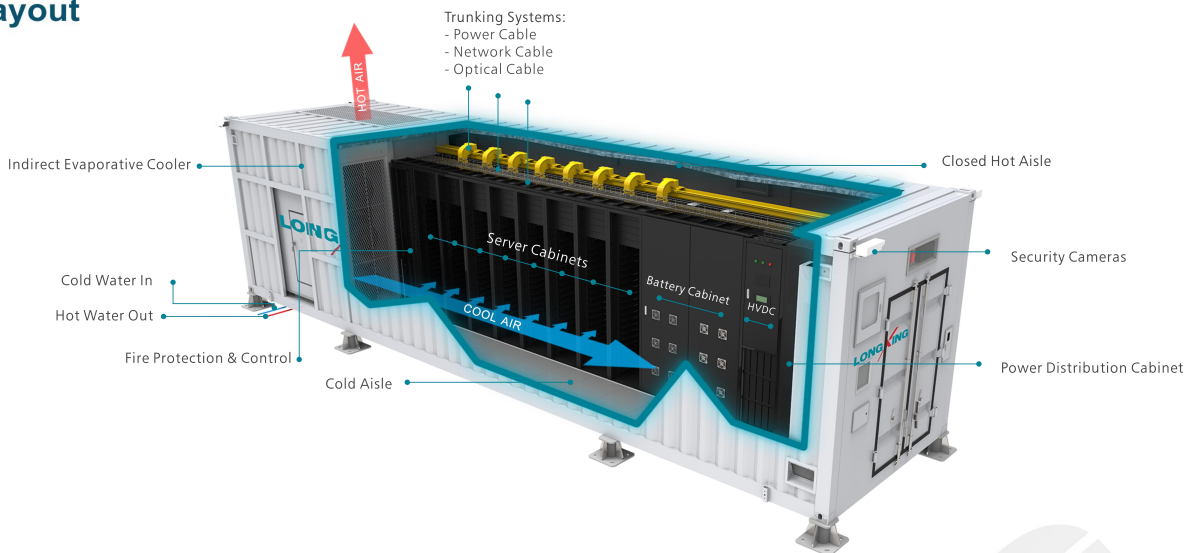
Efficient

- High-efficiency modular UPS, indirect evaporative cooling system, hot aisle containment, enclosure of low heat transfer coefficient, industry-leading PUE.
- O&M anytime and anywhere through online system on web.

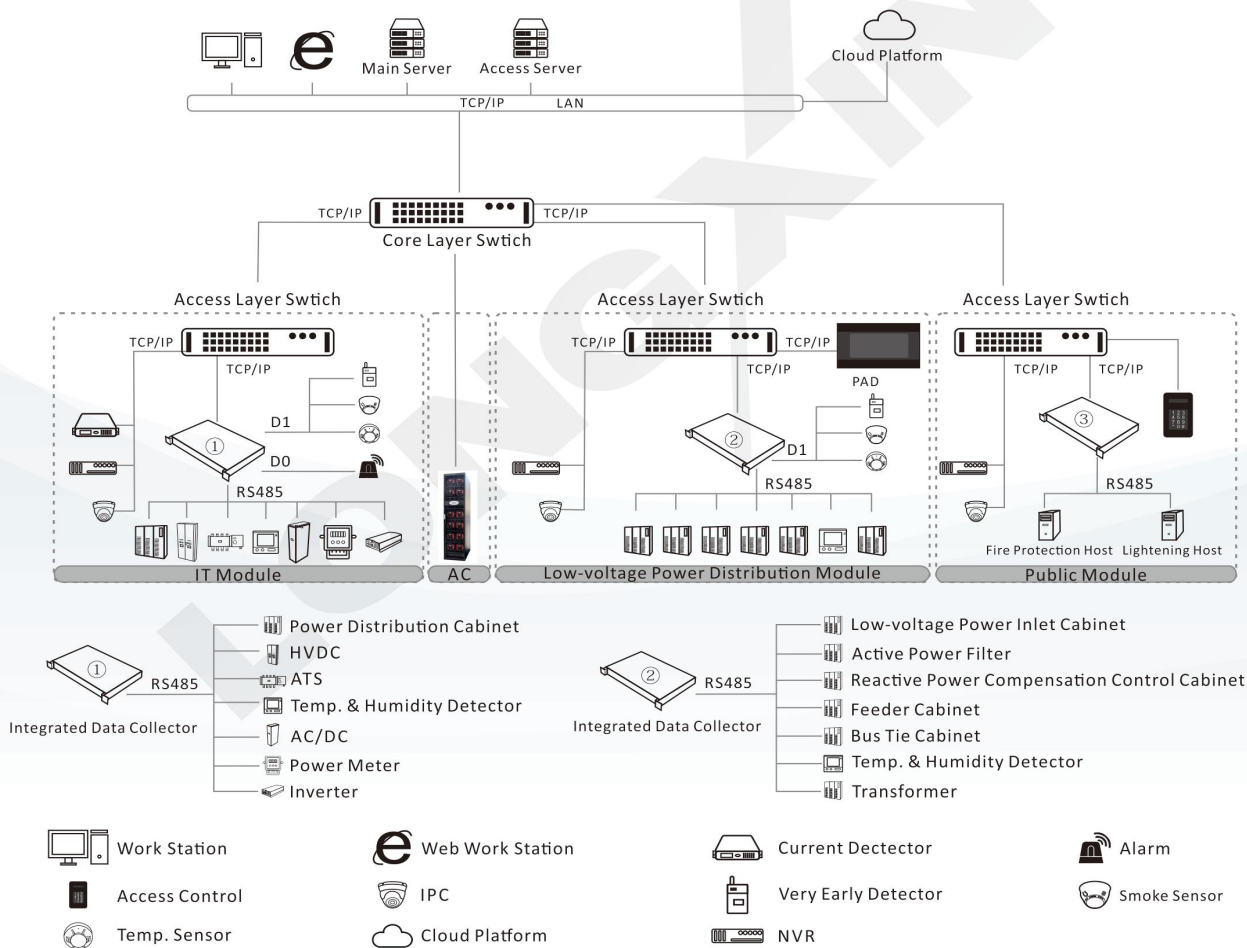
Reliable

- IP55 protection and VIII degrees anti-seismic.
- Durable enclosure, EN 1627~EN 1630 Class 3 anti-theft, multiple access control and video surveillance protect the asset.

Layout



Management System



Specifications

System	Sub-item	Containersied Data Centre	
Power	Total IT load	≤ 96kW	≤ 120kW
	Power density per rack	≤ 10kW	≤ 13.2kW
	Input mode	380V mains electricity input 240V DC input from HVDC cabinet	
	Integrated HVDC cabinet size (H×W×D)mm	2500×600×1200	
	HVDC capacity	120kVA	
	Number of rectifier module	7+1	
	BAT backup time	20min under full loads	
	PDU	A route: IEC320 11×C13+11×C13+11×C13 B route: IEC320 16×C13+16×C13	
	Surge protection	Level-3	
Rack	Rack capacity	8×52U IT rack	
	Rack distribution	8×10kW/rack	8×13.2kW/rack
	Size (H×W×D) mm	2500×600×1200	
Cooling	A/C type	Indirect evaporative cooling	
	Sensible cooling capacity	120kW	
	Coolant	R410A	
	Fan type	EC fan	
	Compressor	2/1 variable-frequency+1 fixed-frequency	
	Temp. range	+18~+27°C	
	Humidity range	20%~80%	
Hot/cold aisle	Hot aisle containment		
Fire protection	Auto fire protection system	Automatic fire detection & suppression system c/w emergency release function	
	Alarm	Automatic monitoring and detection, support sound and light alarm	
	Gas	HFC-227ea	
Monitoring	Module access	Password	
	Rack access	Customization	
	Monitoring management	Real-time monitoring of temperature and humidity control, fire control, access control and cooling system	
	In-module display	PAD	
	Remote O&M	Web	
Enclosure	External size (H×W×D)mm	3200×3000×12192 (Typical)	
	Aisle width	Hot aisle of 650-700mm; cold aisle of 850-900mm	
Protection	Dustproof and waterproof	IP55	
	Anti-seismic	VIII degrees (horizontal acceleration: 0.25g; vertical acceleration: 0.125g)	
	Anti-theft	Meet requirements of EN 1627~EN 1630 Class 3	
	Filth rating	IV (climb: 3.1cm/kV, by maximum operating voltage meter)	
Operating Environment	External humidity (RH)	5% ~100%	
	Internal humidity (RH)	20% ~80%	
	External temp	-40°C~+55°C	
	Internal temp	Cold aisle temp: +18°C~+27°C	
	Altitude	≤ 1000m	
	Solar radiation intensity	1120 W/m ²	