Micro Data Centre

Overview of Micro Data Centre

With the rapid development of cloud computing and mobile Internet, traditional data centres are facing many challenges, such as long construction cycle, high initial investment, low efficiency under low load, difficult expansion under high load, low management efficiency and so on, which make it difficult to meet the high demand of rapid business growth.

With an efficient micro design, LongXing Micro Data Centre solutions integrate all subsystems of the data centre, including cabinet systems, power supply and distribution systems, cooling systems, integrated cabling systems and management systems, to provide customers with new data centre solutions that are rapidly arranged, energy efficient, compact and flexible to expand. This new solution effectively meets the demands of customers for efficient, reliable, fast, flexible and intelligent management of data centres in the cloud era.

Longxing Telecom
LongXing Telecom
LongXingTelecom
Anju Road, Beilun District, Ningbo, China
info@lxtelecom.com
www.lxtelecom.com
+86 574 87908988
+86 574 87908188
Ver: 231118
LONGXING
We Shape Solutions

Structure of Micro Data Centre

Dual-row Design

Single-row Design

Product Overview

The structure of LongXing Micro Data Centre can be customized based on the basic layout structure of dual-row cabinets + cold (hot) channel layout according to the user on-site conditions. Both structural layouts can be integrated with subsystems of cabinets, power supply and distribution, wiring, security, environmental monitoring and management according to user requirement, in order to provide customers with rapid arrangement, high efficiency, energy saving, compact space, flexible and scaling new data centre solution.

Suitable Situation

Single module solution:

Suitable for small and medium-sized data centres with a total power less than 12kVA and an area no more than 100 square meters. This solution is especially suitable for small and medium-sized companies and branch offices of large enterprise.

Multi-module solution:

A large data centre is built by copying a dual-row cabinet layout with a flexible and fast deployment approach. This solution is especially suitable for large data centres of IDC, large companies, financial centres, government, military, hyper-accounting centres, education, healthcare etc.

Advantages

Energy-saving and efficient:

Efficient power supply and distribution, refrigeration close to heat source, effective reduction of PUE value of module.

Isolate hot and cold airflow, eliminate invalid airflow cycle and eliminate hot spots.

Improve functional component performance through module integrated management and coordinated operation.

Fast Arrangement:

Standardized components, de-engineering, assembled delivery.

Timely matching to business development, rapid expansion of capacity.

Simple and reliable:

Data centre infrastructure product, reduce influence of construction process, improve system reliability.

Product Grade factory inspection, higher quality assurance.

Strong adaptability, suitable for users in a variety of on-site conditions.

Model Code Guide

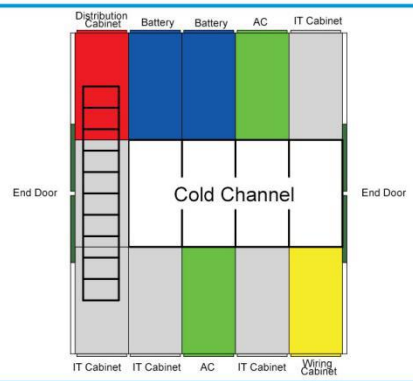
Model LXMD20-4-4; M: Module data centre; D: Dual row sealing channels; S: Single row sealing channels;

-: Connection character; 20: Main UPS capacity is 20kVA; 4: Number of server cabinets; 4: Single cabinet power is 4kW.

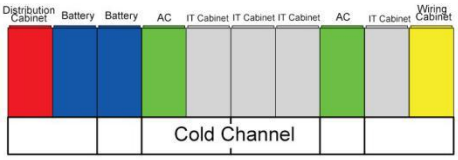
Longxing Telecom
LongXing Telecom
LongXingTelecom
Anju Road, Beilun District, Ningbo, China
info@lxtelecom.com
www.lxtelecom.com
+86 574 87908988
+86 574 87908188
Ver: 231118

Technical Parameters

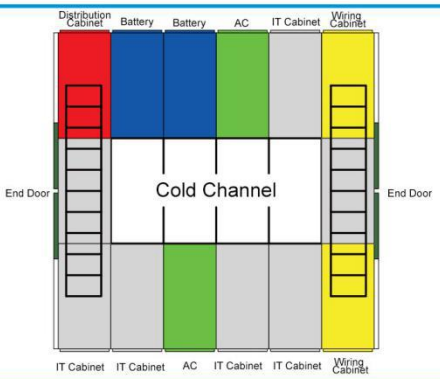
LXM 2017 Classic Products - 20kVA



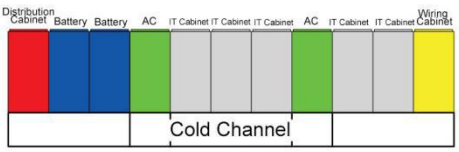
Model:	LXMS20-4-4
UPS/HVDC:	20kVA
Number of IT Cabinets:	4
Single Cabinet Power:	4kW
Redundancy:	N+1
Time of Power Preparation:	30 minutes
Dimension:	3.6m 3m



Model:	LXMS20-4-4
UPS/HVDC:	20kVA
Number of IT Cabinets:	4
Single Cabinet Power:	4kW
Redundancy:	N+1
Time of Power Preparation:	30 minutes
Dimension:	1.4m 6m



Model:	LXMS20-5-3
UPS/HVDC:	20kVA
Number of IT Cabinets:	Cabinets: 5
Single Cabinet Power:	4kW
Redundancy:	N+1
Time of Power Preparation:	30 minutes
Dimension:	3.6m 3m

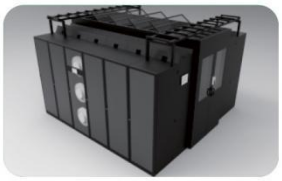


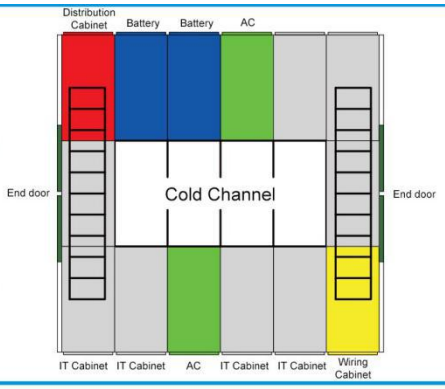
Model:	LXMS20-5-3
UPS/HVDC:	20kVA
Number of IT Cabinets:	Cabinets: 5
Single Cabinet Power:	3kW
Redundancy:	N+1
Time of Power Preparation:	30 minutes
Dimension:	1.4m 6.6m

Notes: Model LXMD 20-4-4; M: Module data centre; D: Dual row sealing channels; S: Single row sealing channels; -: Connection character; 20: Main UPS capacity is 20kVA; 4: Number of server cabinets; 4: Single cabinet power is 4kW

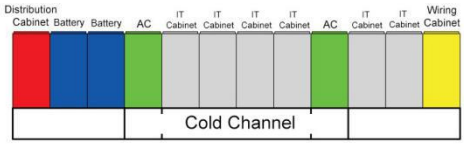
Longxing Telecom
Anju Road, Beilun District, Ningbo, China
info@lxtelecom.com
www.lxtelecom.com
LongXing Telecom
LongXingTelecom
+86 574 87908988
+86 574 87908188
Ver: 231118

LXM 2017 Classic Products - 30kVA

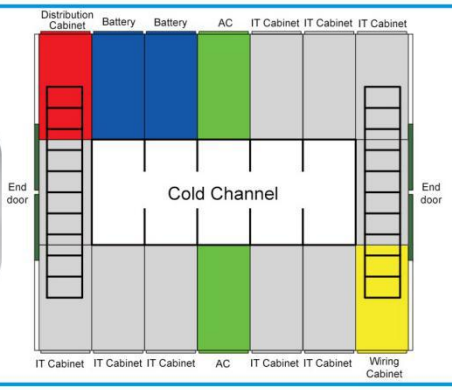




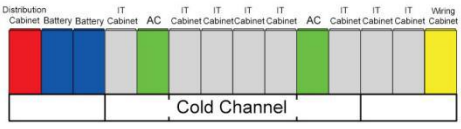
Model:	LXMS30-6-4
UPS/HVDC:	30kVA
Number of IT Cabinets:	6
Single Cabinet Power:	4kW
Redundancy:	N+1
Time of Power Preparation:	40 minutes
Dimension:	3.6m 3.6m



Model:	LXM D30-6-4
UPS/HVDC:	30kVA
Number of IT Cabinets:	6
Single Cabinet Power:	kW
Redundancy:	N+1
Time of Power Preparation:	40 minutes
Dimension:	1.4m 72.m



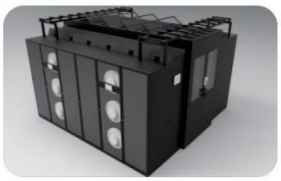
Model:	LXMS30-8-3
UPS/HVDC:	30kVA
Number of IT Cabinets:	8
Single Cabinet Power:	3kW
Redundancy:	N+1
Time of Power Preparation:	30 minutes
Dimension:	3.6m 42.m

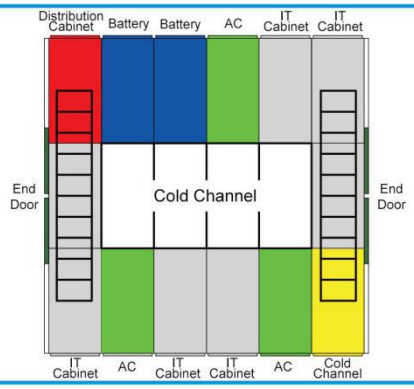


Model:	LXM D20-8-3
UPS/HVDC:	30kVA
Number of IT Cabinets:	8
Single Cabinet Power:	3kW
Redundancy:	N+1
Time of Power Preparation:	40 minutes
Dimension:	1.4m 8.4m

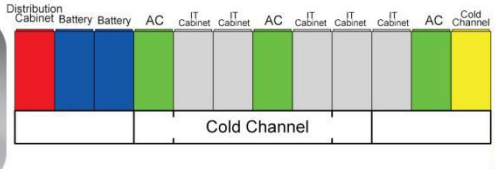
Longxing Telecom
LongXing Telecom
Anju Road, Beilun District, Ningbo, China
info@lxtelecom.com
www.lxtelecom.com
LongXingTelecom
+86 574 87908988
+86 574 87908188
Ver: 231118

LXM 2017 Classic Products - 40kVA and 60kVA

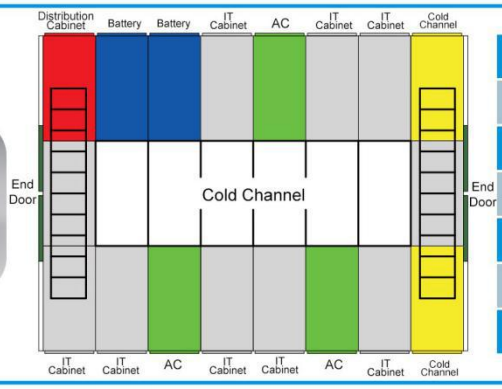




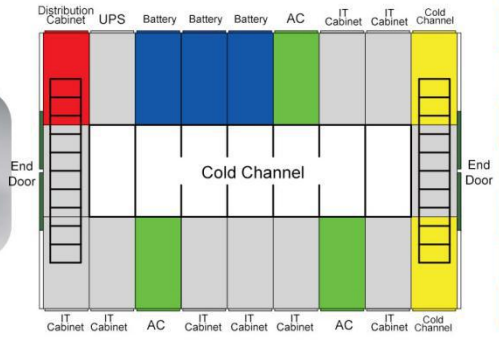
Model:	LXMS40-5-5
UPS/HVDC:	40kVA
Number of IT Cabinets:	5
Single Cabinet Power:	5kW
Redundancy:	N+1
Time of Power Preparation:	30 minutes
Dimension:	3.6m 3.6m



Model:	LXM D40-5-5
UPS/HVDC:	40kVA
Number of IT Cabinets:	5
Single Cabinet Power:	5kW
Redundancy:	N+1
Time of Power Preparation:	30 minutes
Dimension:	1.4m 72.m



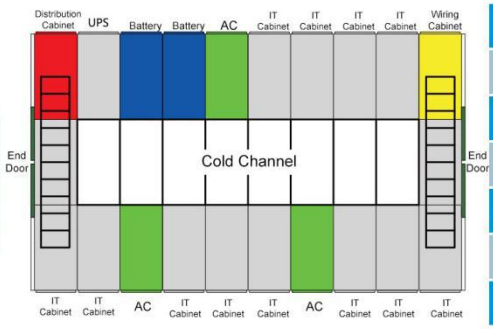
Model:	LXMS40-8-4
UPS/HVDC:	40kVA
Number of IT Cabinets:	8
Single Cabinet Power:	4kW
Redundancy:	N+1
Time of Power Preparation:	30 minutes
Dimension:	3.6m 4.8m



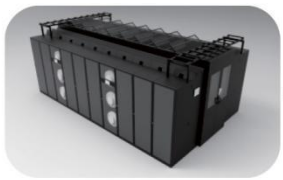
Model:	LXMS60-8-5
UPS/HVDC:	60kVA
Number of IT Cabinets:	8
Single Cabinet Power:	5kW
Redundancy:	N+1
Time of Power Preparation:	30 minutes
Dimension:	3.6m 5.4m

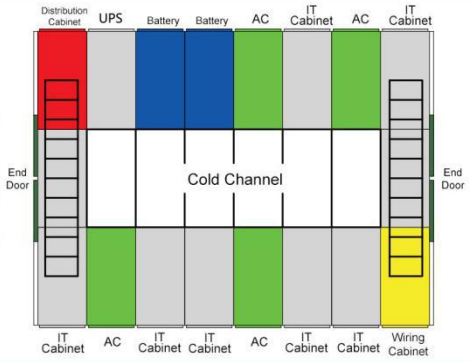
Longxing Telecom
LongXing Telecom
LongXingTelecom
Anju Road, Beilun District, Ningbo, China
+86 574 87908988
info@lxtelecom.com
+86 574 87908188
www.lxtelecom.com
Ver: 231118

LXM 2017 Classic Products - 80kVA and 120kVA



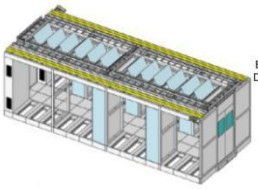
Model:	LXMS80-11-5
UPS/HVDC:	80kVA
Number of IT Cabinets:	11
Single Cabinet Power:	5kW
Redundancy:	N+1
Time of Power Preparation:	15 minutes
Dimension:	3.6m 6m

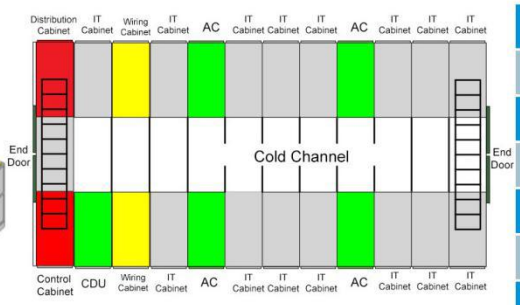




Model:	LXMS80-7-9
UPS/HVDC:	80kVA
Number of IT Cabinets:	7
Single Cabinet Power:	9kW
Redundancy:	N+1
Time of Power Preparation:	15 minutes
Dimension:	3.6m 4.8m

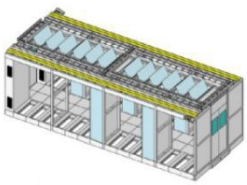
Tencent Customization
TMDC-R16

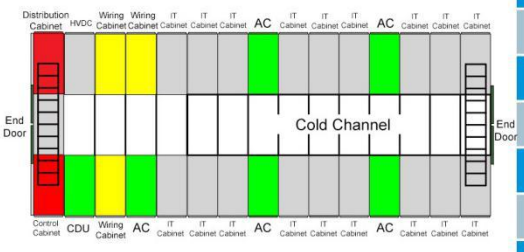




Model:	LXMS120-12-12
UPS/HVDC:	120kVA
Number of IT Cabinets:	12
Single Cabinet Power:	12kW
Redundancy:	N+1
Time of Power Preparation:	30 minutes
Dimension:	6.64m

Tencent Customization
TMDC-R18

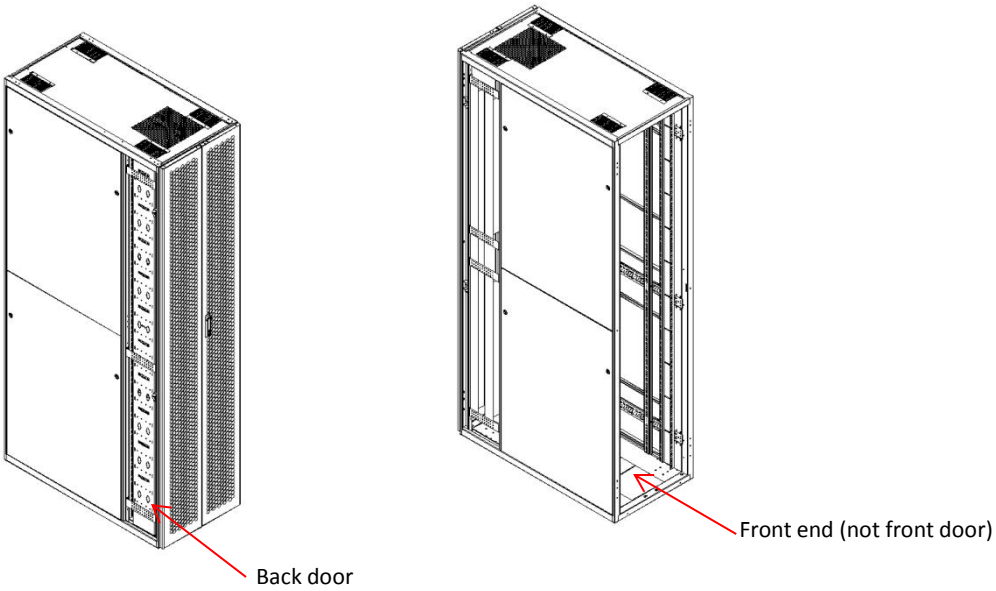




Model:	LXMS200-18-12
UPS/HVDC:	200kVA
Number of IT Cabinets:	18
Single Cabinet Power:	12kW
Redundancy:	N+1
Time of Power Preparation:	30 minutes
Dimension:	9.52m

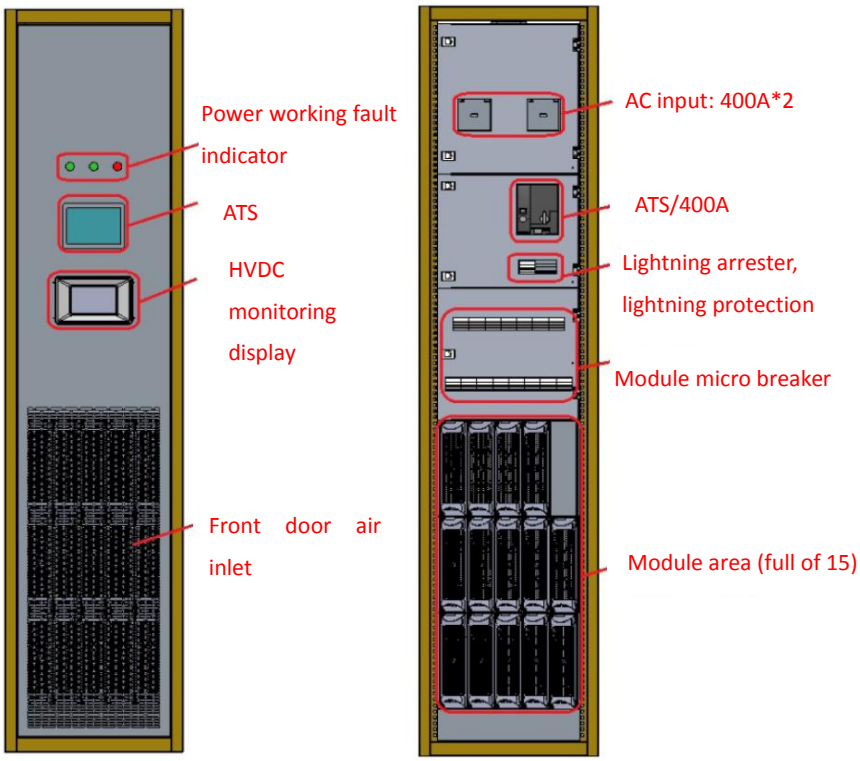
Longxing Telecom
LongXing Telecom
LongXingTelecom
Anju Road, Beilun District, Ningbo, China
info@lxtelecom.com
www.lxtelecom.com
+86 574 87908988
+86 574 87908188
Ver: 231118

Server Cabinets

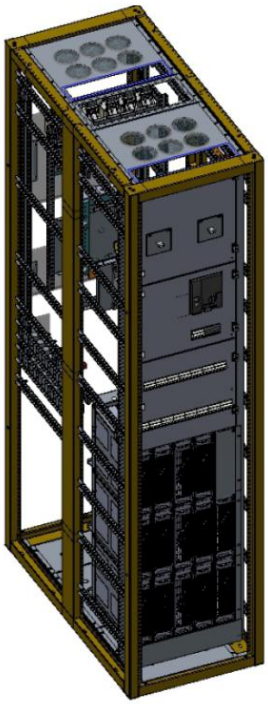


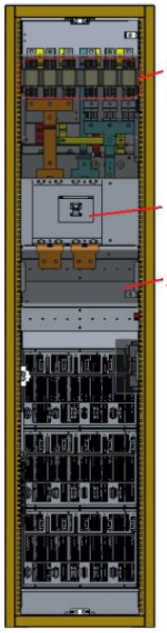
- 600*1200*2500
- Cabinet is not equipped with front door. Back door is flat six-angle meshed, split door with lock
- Cabinet contains standard EIA 19" square hole bar inside. The height of each unit is 46.5mm. Space for 52U is available
- Configuration: 26 pairs of L-type rails, 26 blocks of 1U airflow containment blind plate
- Server cabinets connected with air conditioners, distribution cabinets, support frames, etc. Side door panel is retained

DVDC System



Longxing Telecom
LongXing Telecom
LongXingTelecom
Anju Road, Beilun District, Ningbo, China
info@lxtelecom.com
www.lxtelecom.com
+86 574 87908988
+86 574 87908188
Ver: 231118
LONGXING
We Shape Solutions

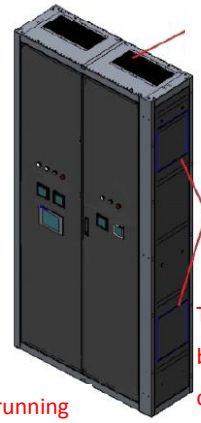


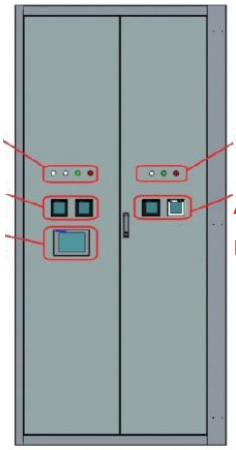


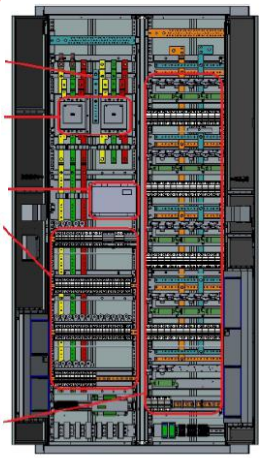
15K Module System

Module power factor	=0.99
Module efficiency	=95%
Module capacity	15kW
Rated output current	50A
System capacity	600A
Module size	316W*88H*372D
Monitoring size	262W*162H*61D

Integrated Power Distribution Cabinet

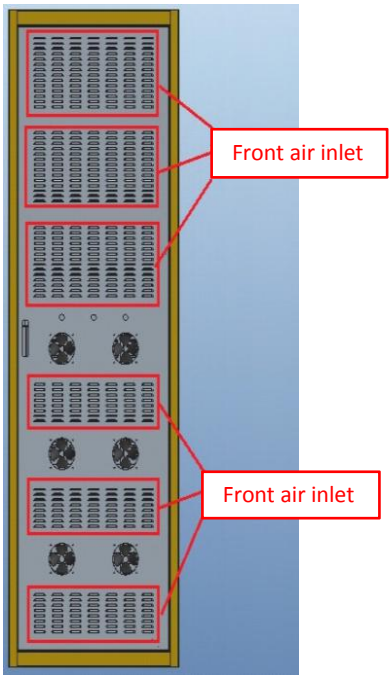


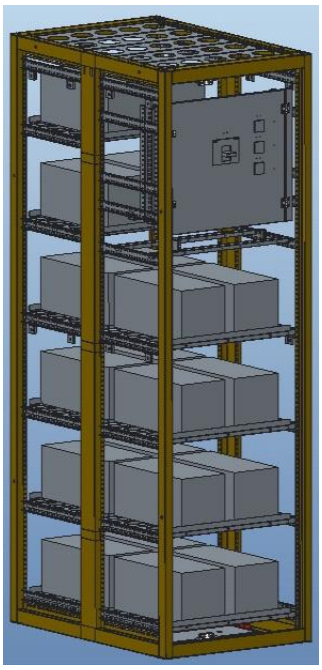




Longxing Telecom
LongXing Telecom
Anju Road, Beilun District, Ningbo, China
info@lxtelecom.com
www.lxtelecom.com
LongXingTelecom
+86 574 87908988
+86 574 87908188
Ver: 231118

Battery Cabinet



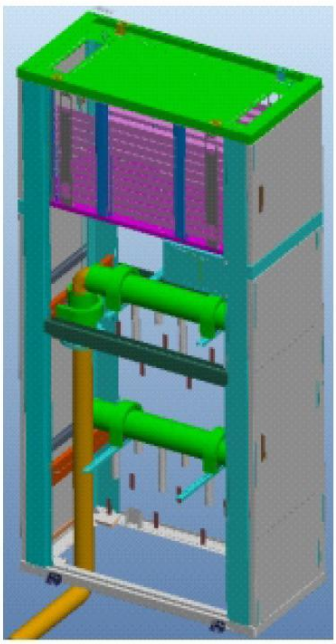


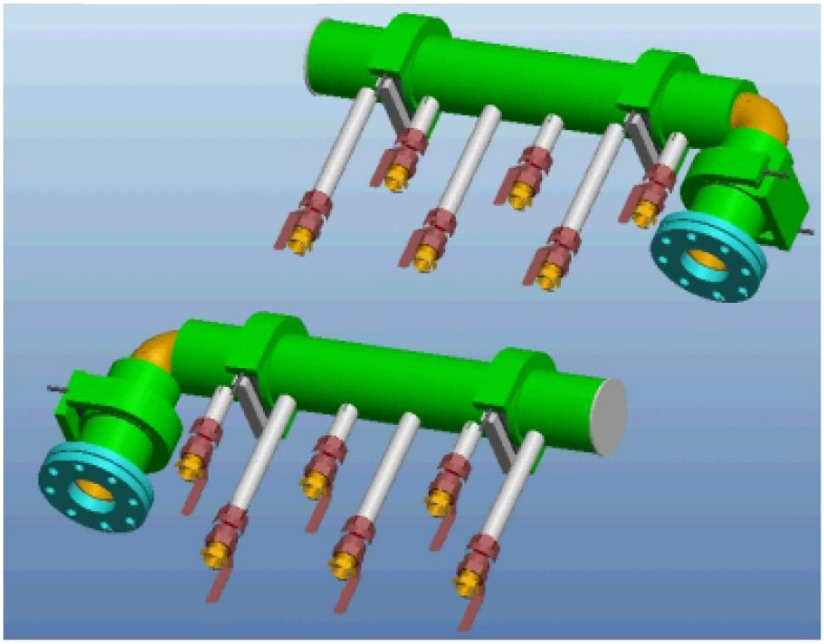
Air Conditioner

- Dynamic input cooling capacity, air conditioning front horizontal air supply, back air return.
- Standard 14 EBMEC centrifugal fans, N+1 redundant backup, each fan is equipped with geo-switch maintenance, the whole machine consumes 1.5kW.
- 600W*1200D*2500H
  —44.6kW cold volume@return air condition 37℃DB/25%RH, chilled water inlet and outlet water temperature 15/21℃.
  —9000 m^3 /h air volume.
  Meet dual power input, unit power module, safe and reliable.
  —Mains, high voltage DC dual input, each carrying 50%.
- TCP/IP Protocol.
- Air/return air temperature control and differential pressure control mode (adjustable by field operation and maintenance personnel).
- Infrared leak detector.
- Condensate pump.

Longxing Telecom
LongXing Telecom
LongXingTelecom
Anju Road, Beilun District, Ningbo, China
info@lxtelecom.com
www.lxtelecom.com
+86 574 87908988
+86 574 87908188
Ver: 231118

Cold-water Distribution Unit

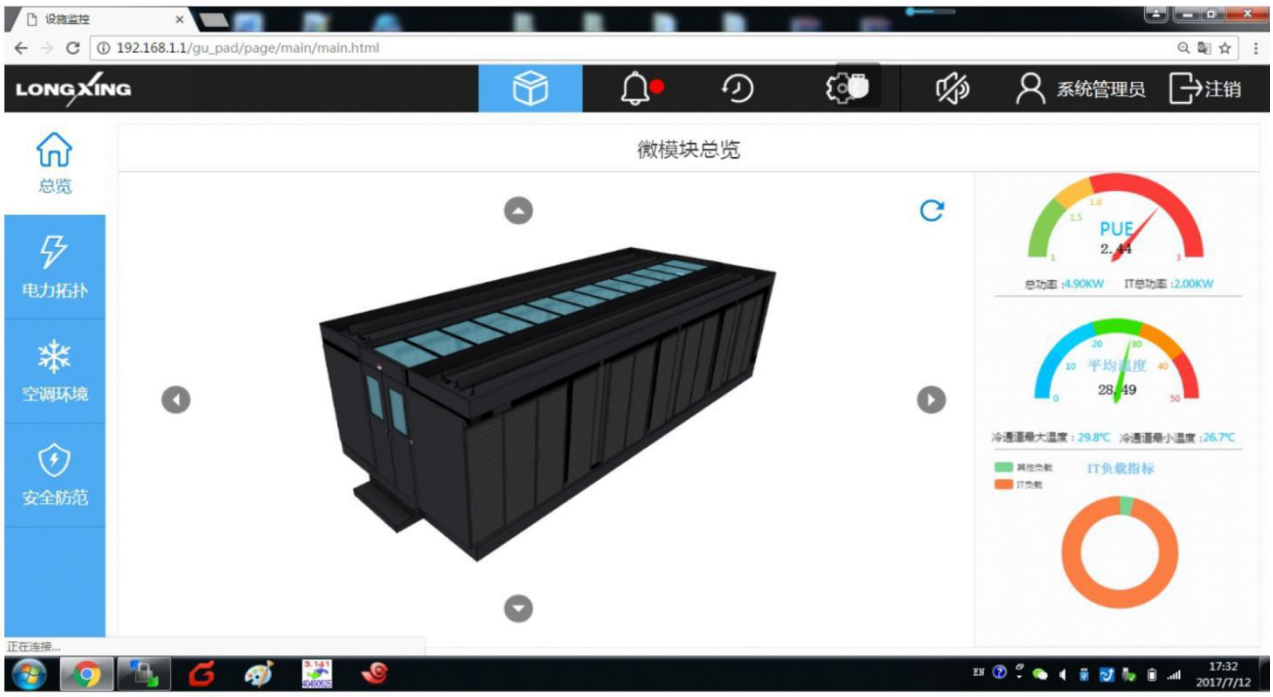




Monitor System

Longxing Telecom
LongXing Telecom
LongXingTelecom
Anju Road, Beilun District, Ningbo, China
info@lxtelecom.com
www.lxtelecom.com
+86 574 87908988
+86 574 87908188
Ver: 231118
LONGXING
We Shape Solutions

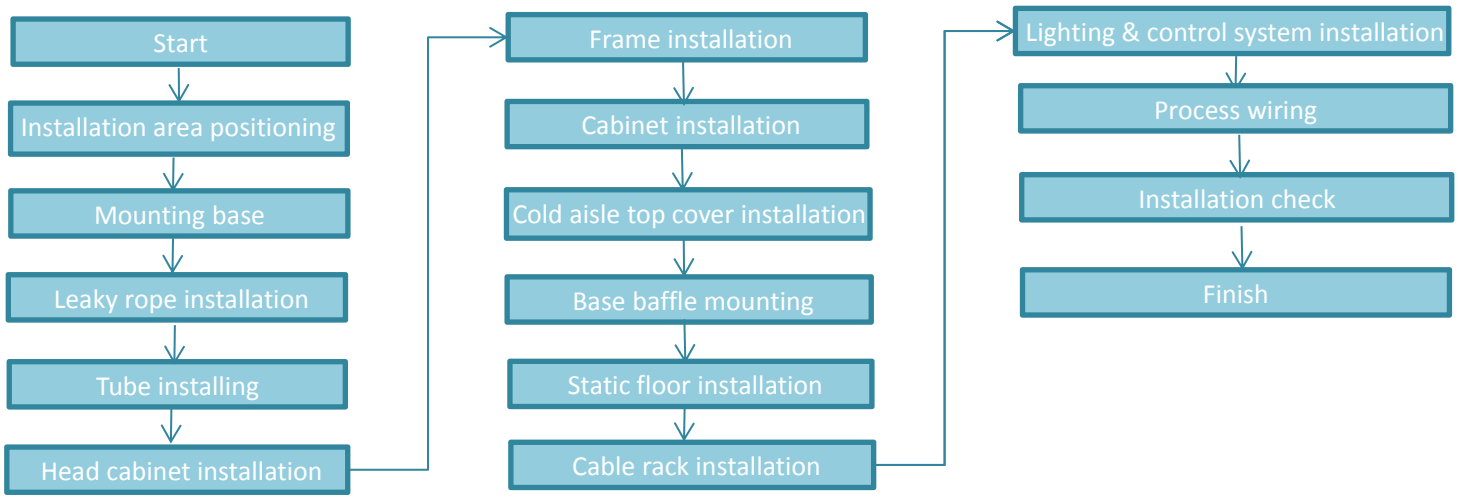
Monitor System



Longxing Telecom
LongXing Telecom
LongXingTelecom
Anju Road, Beilun District, Ningbo, China
info@lxtelecom.com
www.lxtelecom.com
+86 574 87908988
+86 574 87908188
Ver: 231118

Micro Data Centre Construction Introduction

Micro Data Centre construction process (Take the single module as an example. The overall deployment time is 6-8 days.)



Longxing Telecom
LongXing Telecom
LongXingTelecom
Anju Road, Beilun District, Ningbo, China
+86 574 87908988
info@lxtelecom.com
+86 574 87908188
www.lxtelecom.com
Ver: 231118