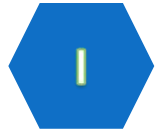




Yonggui Electric Data Center Business Capabilities



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Core Product Matrix



1

Company Overview





Company Overview — About Us



Zhejiang Yonggui Electric Equipment Co., Ltd. was founded in 1973, with registered capital of RMB 388 million, total assets of approximately RMB 3.57 billion, and more than 2,500 employees.

The company was listed on the ChiNext Board of the Shenzhen Stock Exchange on September 20, 2012. Headquartered in Taizhou, Zhejiang, it has R&D centers and manufacturing bases in Sichuan, Shenzhen, Shanghai, Jiangsu and other locations. Its products cover three major business sectors: Rail Transit & Industrial, E-Mobility & Energy Information, and Special Equipment.

The company is a National High-Tech Enterprise, a National Intellectual Property Demonstration Enterprise, and a National Specialized and Sophisticated “Little Giant” Enterprise, providing integrated interconnect system solutions for key national equipment industries.

As of the end of 2024, the company recorded sales revenue of RMB 2.02 billion.

◆ Yonggui products are widely used in rail transit, special equipment, new energy vehicles, energy storage systems, and communication equipment.
For liquid cooling applications, the company can provide fluid connectors, tubing, cold plates, and integrated liquid-cooling solutions.



Rail Transit & Industrial



Special Equipment



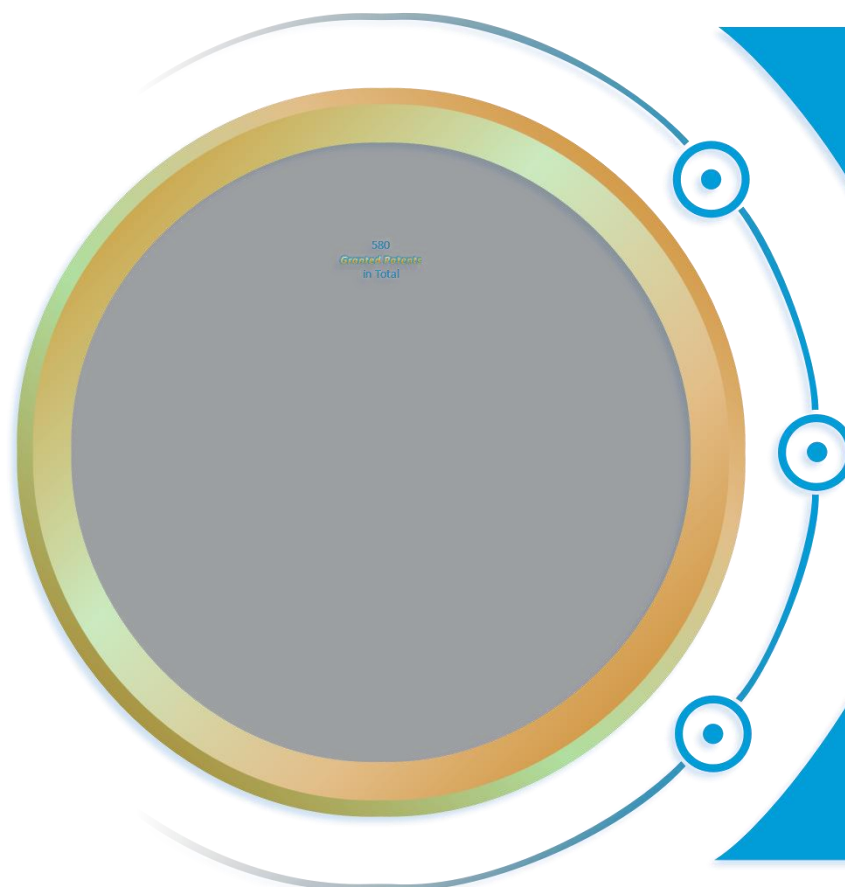
E-Mobility & Energy

2

Product Development Capabilities



Patent Portfolio



Invention Patents **78** Patents

Utility Models **442** Patents

Design Patents **60** Patents





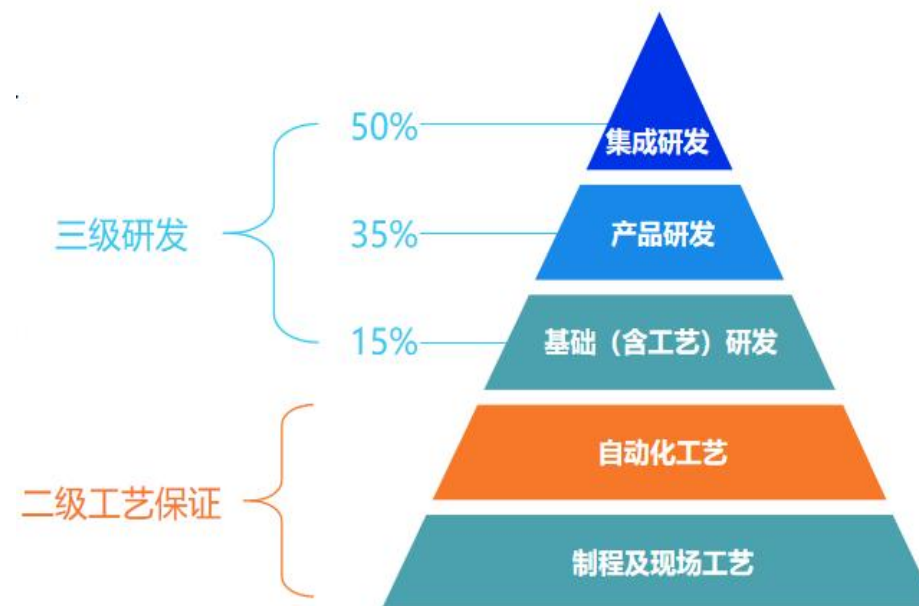
Team Structure

Yonggui Personnel Structure

- Yonggui is positioned as a product-driven company and promotes an engineering culture.

Technical personnel account for 15% of the total workforce. The company currently has 700+ technical staff, including 400+ R&D personnel.

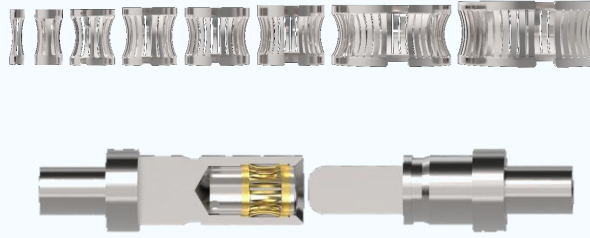
Yonggui has built a multi-level R&D system covering raw materials, basic processes, core technology pre-research, product application development, and integrated development to maintain technology leadership.



Fundamental R&D Capabilities for Contacts



Slotted Contact Terminal Series



Crown-Spring Contact Terminal Series



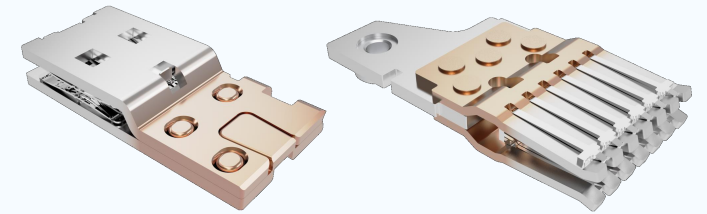
Wire-Spring Contact Terminal Series



Ring-Spring Contact Terminal Series



Stamped Round Terminal Series



Rectangular Contact Terminal
Series



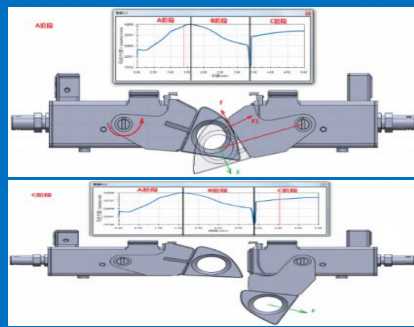
- Yonggui has a dedicated Contact Technology Research Department with more than 20 engineers.
- For conventional power/signal transmission and high-current scenarios in electrical connector products, the team provides comprehensive contact design and validation support.



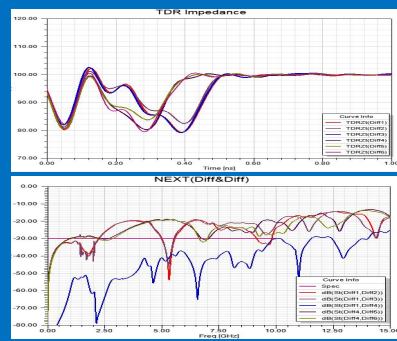
CAE Simulation Analysis Capabilities

Yonggui has simulation capabilities covering connector structural strength, signal integrity, mold flow, thermal performance, drop, transient interruption, electromagnetic compatibility, and fluid behavior.

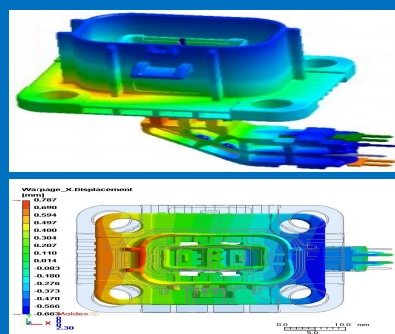
Structural Strength Analysis



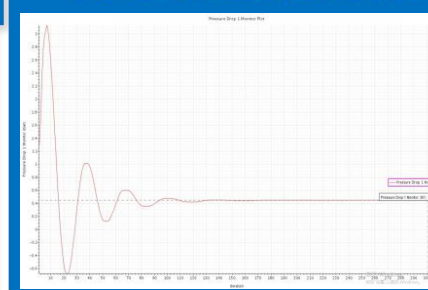
Signal Integrity Analysis



Mold-Flow Simulation

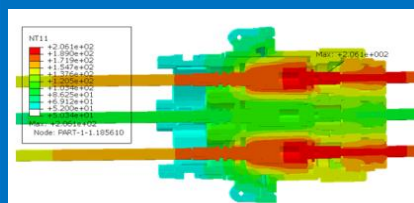


Cable Flow Resistance Analysis

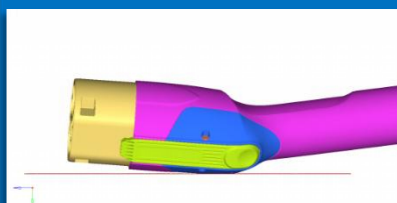


液体连接器流阻	总流阻	动力粘度
0.200bar	0.432bar	0.00394 Pa·s
0.240bar	0.576bar	
0.300bar	0.750bar	
0.360bar	0.925bar	
0.400bar	1.047bar	
水管尺寸	流量	水管+冷却单元流阻
直径	0.90L/Min	0.232bar
6.0mm,单	1.20L/Min	0.336bar
侧长度	1.50L/Min	0.450bar
3.5m-环	1.80L/Min	0.565bar
温23℃	2.00L/Min	0.647bar

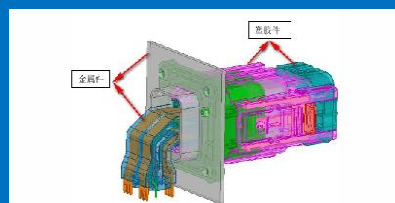
Thermal Simulation



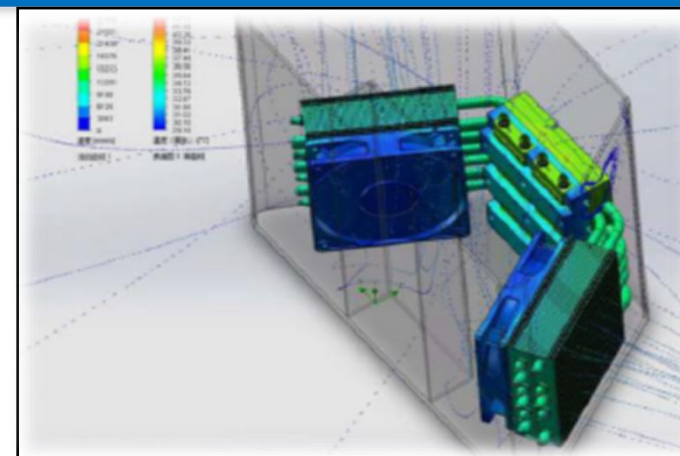
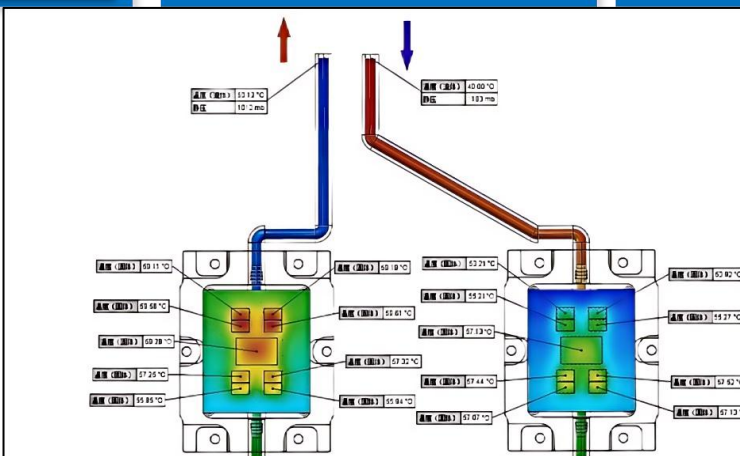
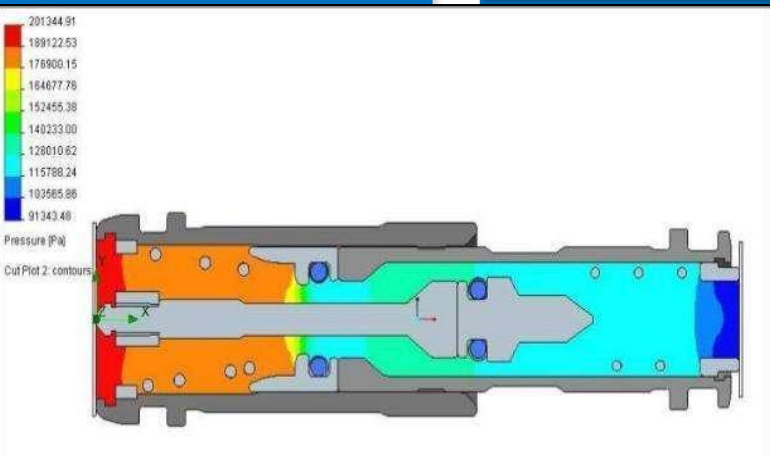
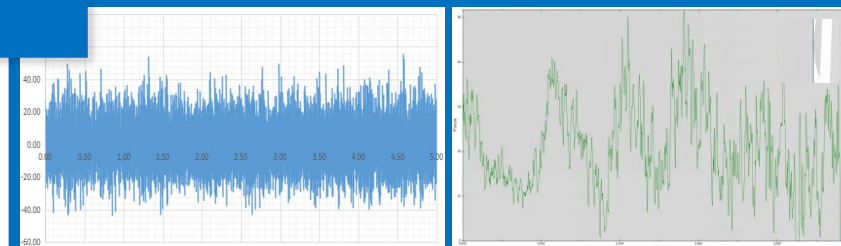
Drop Simulation



EMC Simulation



Vibration-Induced Interruption Analysis



3

Manufacturing Capabilities

- Tooling & Mold Design and Manufacturing
- Sheet Metal and Stamping Processing
- Contact Plating Processing
- Injection Molding and Production
- Precision Contact Machining
- Product Integration and Assembly





Basic Profile

- Yonggui operates an independent tooling and mold workshop as well as a professional mold design studio.
- The tooling and mold workshop covers nearly 2,000 m² and has more than 40 employees.
- It includes an independent mold-flow analysis room, with 2 dedicated mold-flow analysis engineers, 5 mold design engineers, and 2 tooling fixture design engineers.



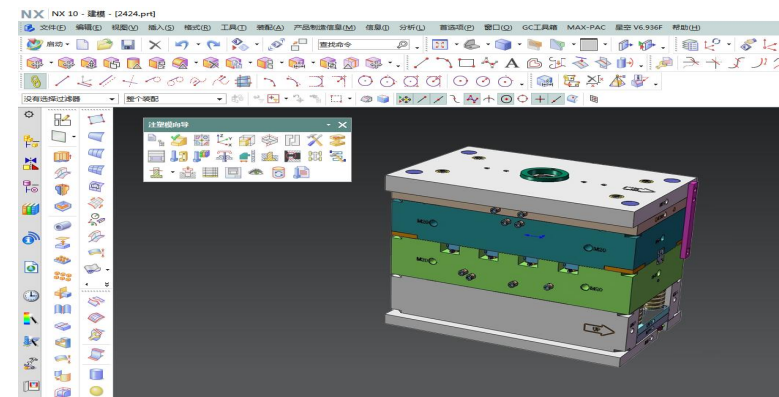
Equipment Overview

- Equipped with 40+ processing units/sets, including original imported Seibu slow wire EDM, Mitsubishi slow wire EDM, Mitsubishi EDM machines, Taiwan Jhunli grinders, Ching Hung EDM machines, surface grinders, CNC machining centers, high-speed engraving machines, CNC milling machines, fast wire-cutting machines, drilling machines, tapping machines, and lathes.
 - Equipped with HEXAGON CMMs, fully automatic 2.5D vision measuring systems, Nikon height gauges, and other inspection equipment.
- 3R standard holders are used for all electrode machining and inspection.



Production Capacity

- Annual design and manufacturing capacity for plastic molds: 400+ sets.
- Annual design and manufacturing capacity for tooling fixtures: 600+ sets.



Injection Molding Production

Basic Profile

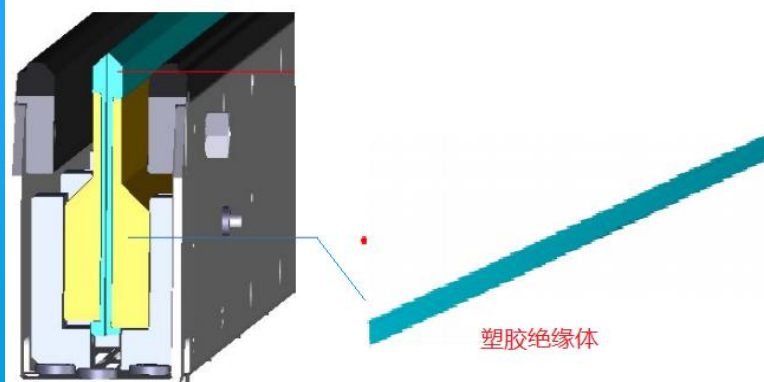
- Yonggui's tooling and injection molding workshop covers more than 3,500 m².
- The injection molding team includes more than 50 employees across management, production, quality, and warehousing.

Equipment Overview

- Equipped with 50+ injection molding machines, including original imported FANUC, Nissei, and Chen Hsong machines.
- Machine tonnage ranges from 45T to 380T, supporting horizontal, vertical, and two-shot molding for various plastic materials.
- All machines are equipped with visual monitoring systems and robotic arms to enable fully automated production.

Production Capacity

- Annual capacity of the plastic injection molding workshop: 20+ million pieces.





Basic Profile

- The sheet metal workshop covers more than 4,000 m² and includes one constant-temperature welding room.
- Certified to the ISO 3834 and EN 15085 international welding systems.
- The sheet metal team includes more than 60 employees across management, production, quality, and warehousing.



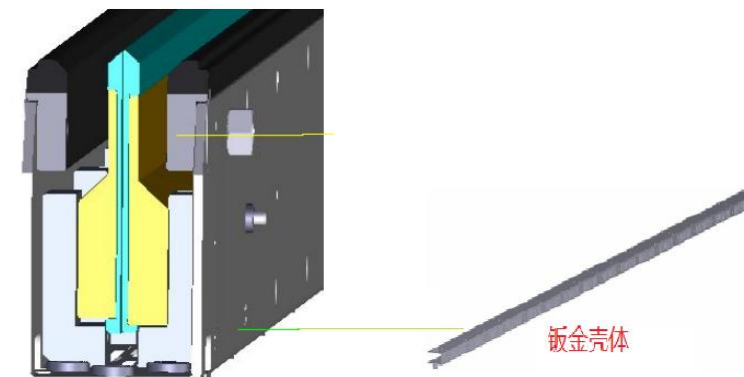
Equipment Overview

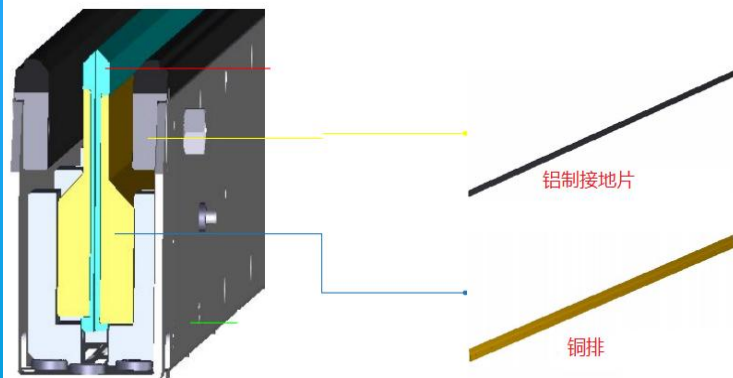
- Equipped with 50+ production machines, including automatic welding workstations, welding robots, laser cutting machines, bending machines, shearing machines, wire drawing machines, grinding machines, riveting presses, drilling machines, CNC punching machines, conventional punching machines, resistance welding machines, argon arc welding machines, and CO₂ shielded welding machines.



Production Capacity

- Annual capacity for conventional stamping products: 50+ million pieces.





Basic Profile

- Yonggui operates an independent precision machining factory with three production workshops covering more than 6,000 m².
- The team includes more than 160 employees across management, production, process engineering, quality, and warehousing.

Equipment Overview

- Equipped with a large number of high-precision machining systems, including original imported and Sino-foreign joint-venture equipment from CITIZEN, TORNOS SWISS, Kitamura, Brother, and others.
- Main equipment includes Swiss-type lathes, turret lathes, CNC lathes, machining centers, conventional lathes, conventional milling machines, wire-cutting machines, slotting machines, polishing machines, vacuum furnaces, spring forming machines, laser welding machines, and insertion/withdrawal force sorting machines, totaling nearly 200 units/sets. The factory also has 30+ sets of inspection and auxiliary equipment, including 2.5D projectors, CCD inspection machines, vacuum tempering furnaces, and laser welding machines.

Production Capacity

- Capable of mass-producing high-precision metal components, including pins (contacts), sockets, housings, and cavities.
- Annual manufacturing capacity: 70+ million pieces.



Basic Profile

- To further strengthen contact production and control capabilities, Yonggui jointly established Sichuan Yonggui Chuanhong Metal Surface Treatment Co., Ltd. The company has registered capital of RMB 13 million and a plant area of 15,000 m².



Equipment Overview

- Multiple metal surface treatment production lines, including:
1 fully automatic gold plating line; 2 silver plating lines; 2 semi-automatic tin plating lines; 2 zinc plating lines;
1 manual phosphating line; 2 semi-automatic electroless nickel plating lines; and 1 aluminum anodizing and coloring line.

Note: Due to environmental restrictions, sheet-metal painting, spraying, and similar surface processes cannot be carried out in-house; these processes may be outsourced.



Production Capacity

- Annual production capacity: 500+ million pieces.





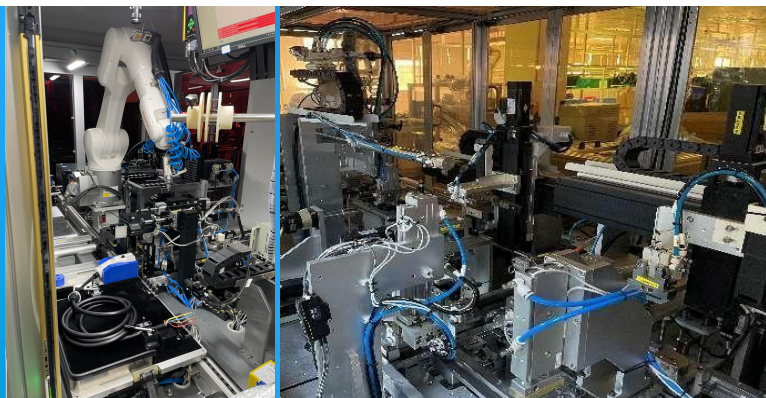
Basic Profile

- Yonggui operates component assembly lines, connector assembly lines, charging-gun cable assembly lines, and integrated product assembly lines. The manufacturing process is supported by an MES system for data collection and storage, enabling product traceability.



Equipment Overview

- More than 100 production lines, including component assembly lines, connector assembly lines, charging-gun cable assembly lines, and integrated product assembly lines; 50+ are automated or semi-automated lines.



Production Capacity

- Annual capacity for connector plugs, receptacles, charging-gun cable assemblies, and integrated products: 75+ million sets.

4

Product Testing Capabilities

- Laboratory Overview
- Team Structure
- CAE Simulation Analysis
- Capabilities





Sichuan HST Testing Technology Co., Ltd.

SICHUAN HST LAB TECHNOLOGY CO., LTD

CNAS-Certified Laboratory

Provincial Test Center

Floor Area	Staff	Equipment	Equipment Assets
1600m ²	20+	40+	RMB 10M

CNAS Certified



Comprehensive Testing

Environmental Tests

- ◆ High/low temperature test
- ◆ Thermal shock test
- ◆ Temperature/humidity cycling test
- ◆ Low-pressure test
- ◆ Salt spray test
- ◆ Chemical resistance test

Electrical Performance

Tests

- ◆ Contact resistance
- ◆ Voltage drop
- ◆ Insulation resistance
- ◆ Temperature rise
- ◆ Current cycling

Mechanical Performance

Tests

- ◆ Vibration & shock test
- ◆ Impact test
- ◆ Drop test
- ◆ Constant acceleration test
- ◆ Contact insertion/withdrawal force
- ◆ Connector mating/unmating force
- ◆ Strength test

Sealing Performance

Tests

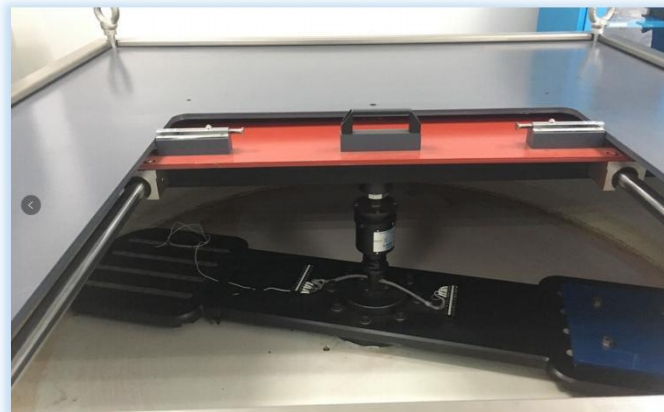
- ◆ Rain test
- ◆ Dust test
- ◆ Immersion test
- ◆ Air-tightness test
- ◆ IP protection test

Laboratory Equipment Examples

Test Examples



High/Low Temperature Test Chamber



Constant Acceleration Test Equipment



Electrical Performance Test Bench



Temperature Rise Test Laboratory



High-Power Electrical Test Auto-Acquisition System



Locomotive Sway Test Equipment

5

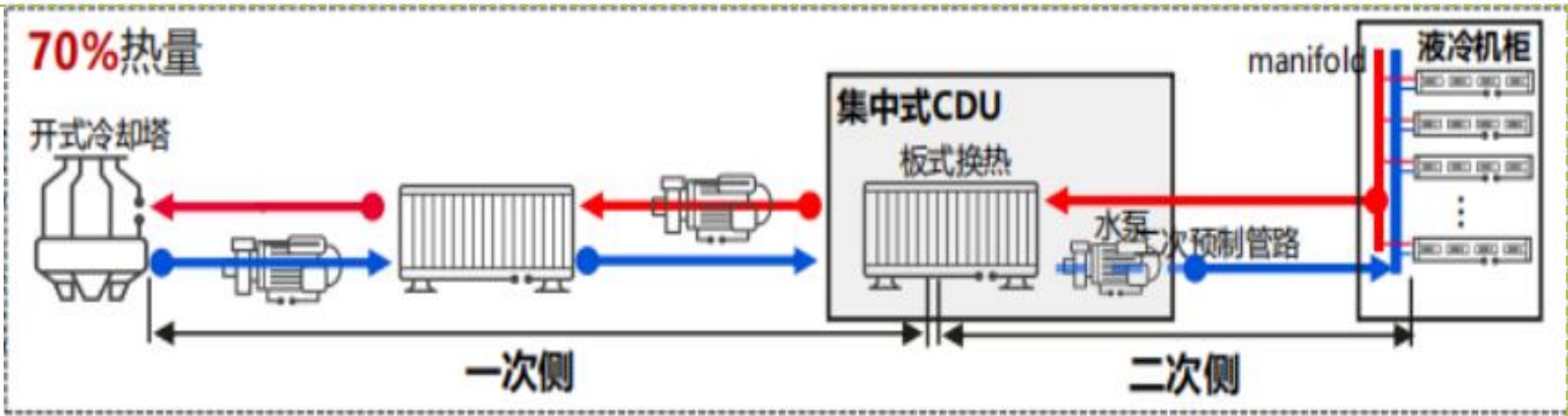
Core Product Matrix

- Communication Interconnect Solutions
- Typical Product Introduction



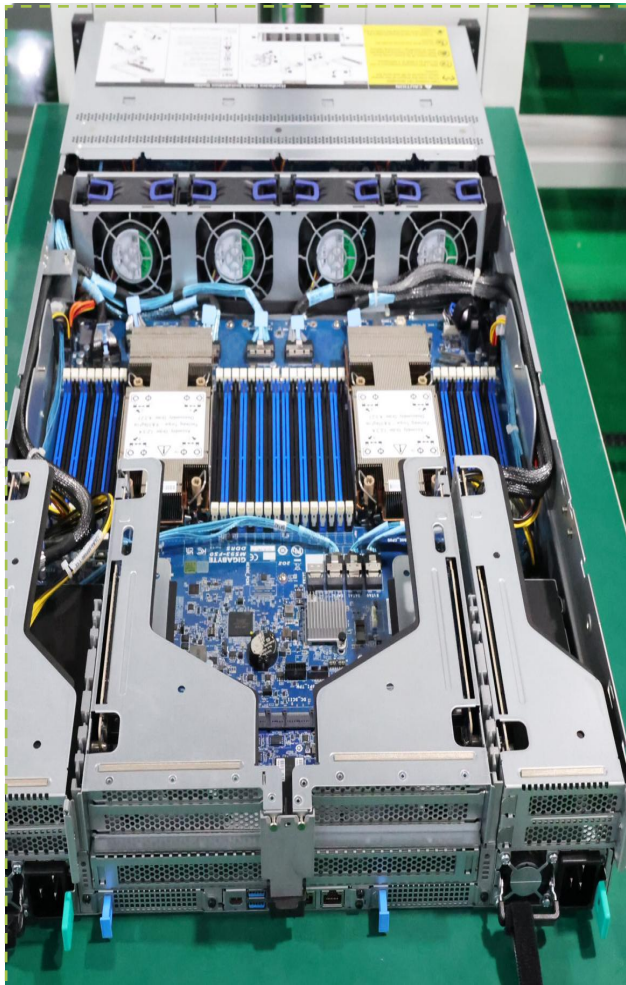


Liquid Cooling System



Power System

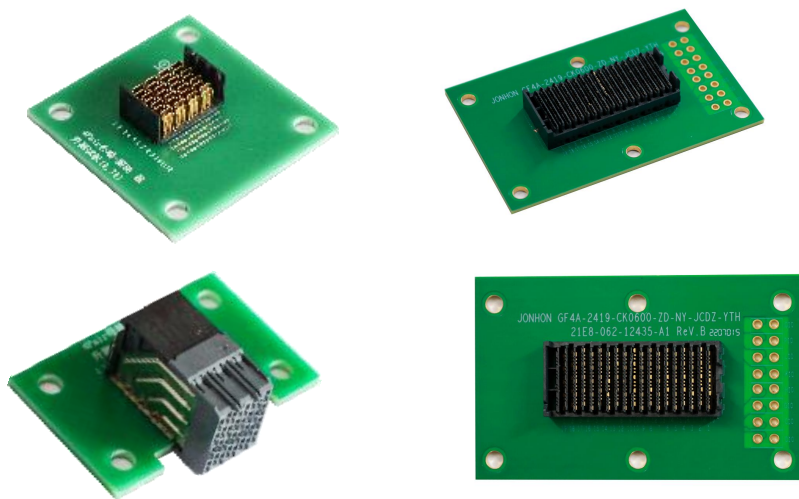
巴拿马电源与传统UPS架构的对比



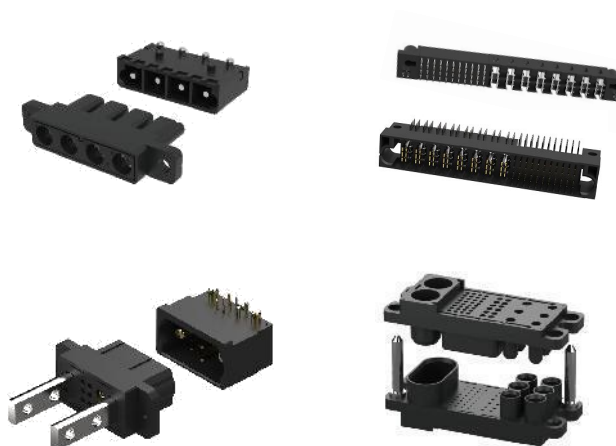
Server System



High-Speed Backplane / PCB Mezzanine Connectors



Module Power Interface Connectors



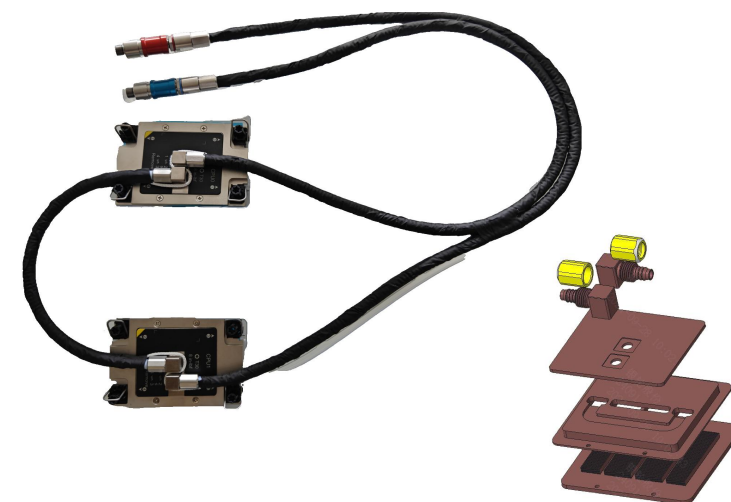
Data Center End Power Distribution Connectors



Liquid Cooling Connectors



Liquid Cooling Plate Assemblies

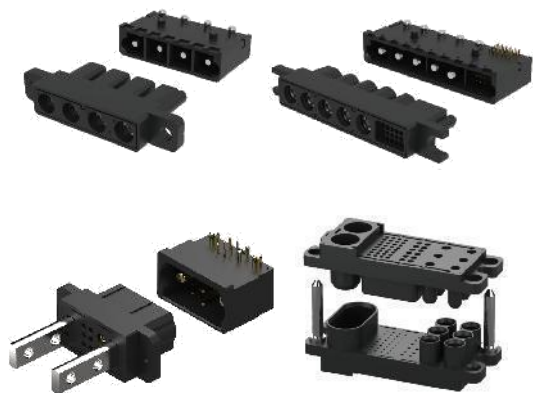




Power System Connectors

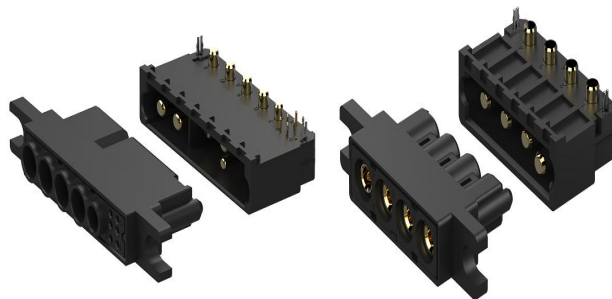


UPS Module Power Interface Connectors



141067, 141095 and 141100 Series

Panama Power Connector — Gen 1 (HVDC)



141030A and 141054 Series

Panama Power Connector — Gen 2 (HVDC)



YGC196-572

Data Center End Power Distribution Connectors



HDC-P Series

— Delta: connectors and harnesses
— Vertiv: connectors, cable assemblies, and battery modules.

Domestic Panama version — Zhongheng Electric, Delta, Anshibo
Overseas NVIDIA system — Vertiv and Megmeet are both in the start-up stage.

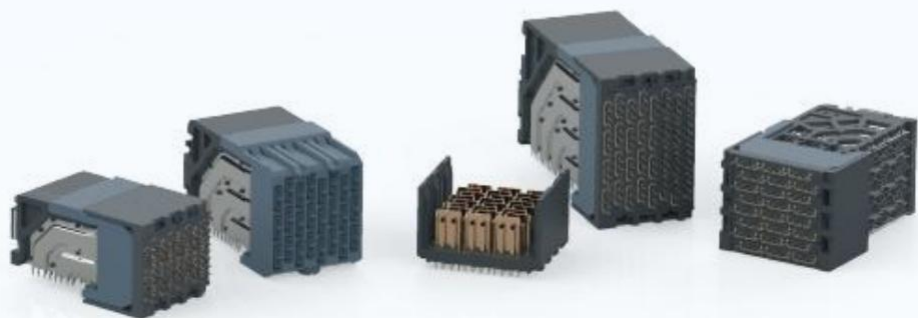
PDU — HDC-P Series (no application)
The PDU side mainly uses a power-strip-like structure.





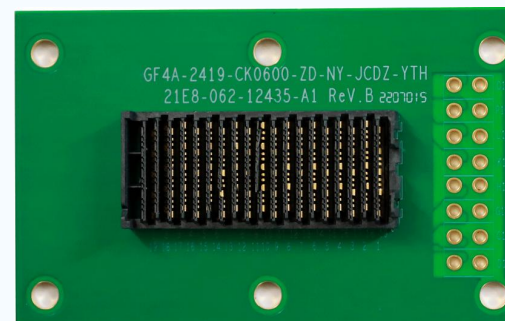
YGM56系列

- ✓ 对标Molex的Impel/Impel Plus背板连接器开发;
- ✓ 可进行安装互换替代;
- ✓ 产品最低满足: 25Gbps ~ 40Gbps \56Gbps
- ✓ 满足 Molex: 25Gbps ~ 40Gbps \56Gbps标准
- ✓ 满足 华为: 25Gbps ~ 40Gbps \56Gbps标准
- ✓ 满足当前 56Gbps 以下高速数据传输速率



High-Speed Mezzanine Connector

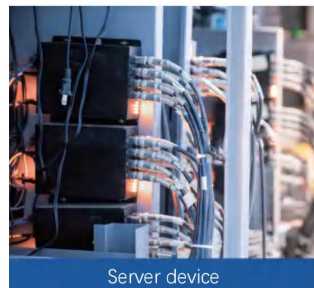
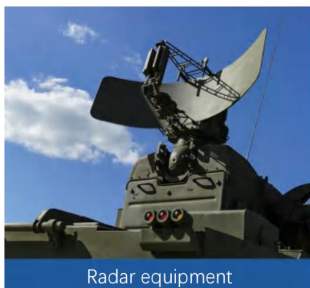
The GF4A Series 56 Gbps PAM4 rectangular high-speed mezzanine connector is a board-to-board connector designed for high-density, high-performance circuit interconnection. It is suitable for space-constrained applications with stringent signal-integrity requirements. The connector complies with GB/T 4588.4 and is applicable to single-sided, double-sided, and multilayer printed circuit boards. Contacts use press-fit termination.





Liquid Cooling Connector Series

- ✓ ODCC Alliance (Open Data Center) member
- Products available with push-pull, bayonet, and straight-plug locking methods
- Aluminum alloy, stainless steel, and titanium alloy materials available
- Custom bore sizes available on request
- Custom pipeline connection interfaces available
- Pipeline fittings available



LTA/AX Series



Connection: bayonet quick-lock
Available in LTA standard and LTAX self-pressure-relief versions
Nominal bore: 3–15 mm

UQD/UQDB Series



Connection: push-pull quick-lock
For quick connection between hoses and manifolds
Nominal bore: 2, 4, 6 mm

LTC Series



Connection: push-pull quick-lock
For external chassis/cabinet or pipe-to-pipe connections
Nominal bore: 3–20 mm

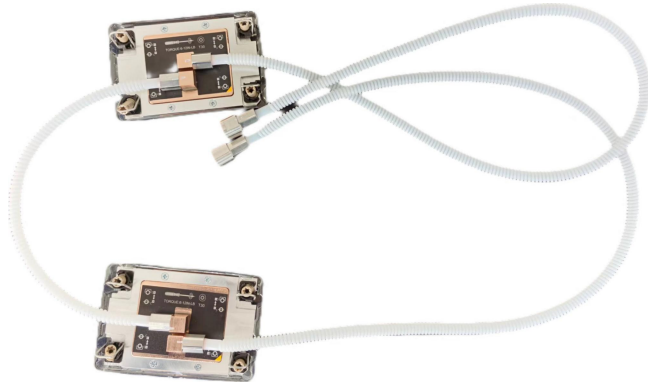
LTF/FP Series



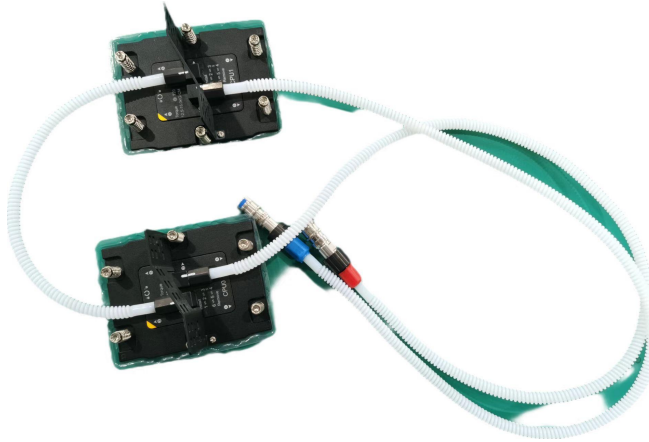
Connection: straight-plug
Available in LTF standard and LTFP under-pressure mating versions
Nominal bore: 3–12 mm



Copper Cold Plate Assemblies (Customized)



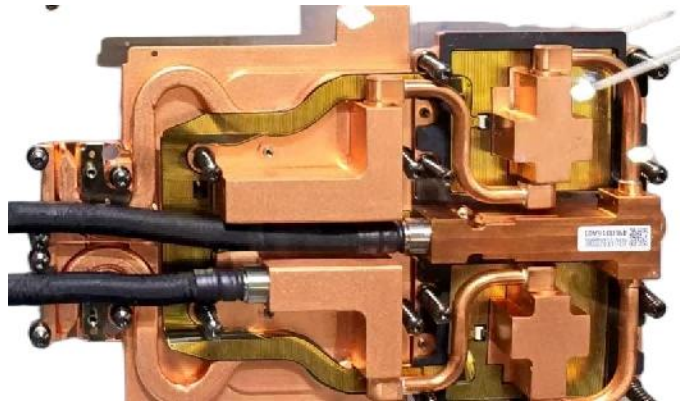
Intel-EGS Platform Cold Plate



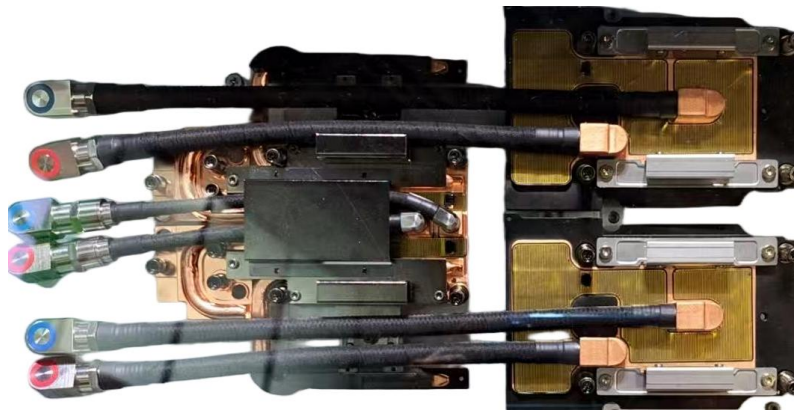
AMD-SP5 Platform Cold Plate



Intel-EGS Platform Standalone Cold Plate



NVIDIA GB200 Chip Cold Plate



NVIDIA GB300 Chip Cold Plate



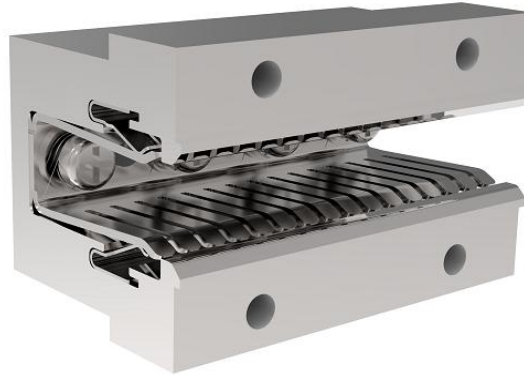
Ascend 910B Chip Cold Plate



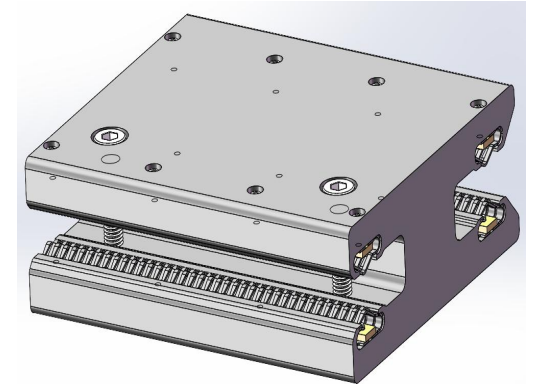
Duckbill Connector (Customized)



YGC196-572 has been mass-applied in Zhongheng HVDC systems and is also under validation at Anshibo and Delta. Estimated 2026 output value: over RMB 15 million.



141120 — 1000A connector, validated by Delta and Vertiv. Mass production is expected to be completed in 2026.



3100A Series connector is under development; validation and development are expected to be completed in July.



Thank You!

Yonggui Connection — Connection Experts

