

Two parallel diagonal lines, one orange and one dark grey, extending from the bottom left towards the center.

Company Introduction

Two parallel diagonal lines, one orange and one dark grey, extending from the top right towards the center.

Focus
Innovation
Breakthrough

Changzhou Tonghui Electronic Co., Ltd



Company profile

- **Founded in 1994**, registered capital of 16 million USD
- **The leading enterprise in electronic component measuring instruments in China**
- **Listed on the Beijing Stock Change in 2021 with stock code 833509**
- R & D personnel accounted for 25%, and annual R & D investment accounted for more than 11%
- In 2022, the turnover is 28 million USD

Enterprise honors and qualification

- National High-tech Enterprise; Jiangsu Small Giant Enterprise
- Jiangsu Engineering Technology Research Center of Magnetic Components Measuring Instrument
- Jiangsu province Industrial Design Center
- The second prize of Science and Technology award of China machinery Industry.
- Awarded for the third prize of Jiangsu Science and Technology Progress for 3 times.
- Jiangsu special fund project for transformation of scientific and technological achievements.
- Led two science and technology projects in Jiangsu province.
- Obtained SME innovation fund of the Ministry of Science and Technology for 2 times.
- The first prize of Jiangsu Innovation and Entrepreneurship competition.

The first, second and third prizes of Changzhou Innovation and Entrepreneurship Competition

- 54 authorized patents including 25 patents for invention, 37 pending patents, 58 software copyright.



Enterprise honors and qualification



1. National Concern Enterprise



2. Provincial "Enterprise Technology Center"



3. Second Prize of Scientific and Technological Progress Award



4. Changzhou Worker Pioneer

Enterprise R&D Platform

- **Provincial R&D Innovation Platform**

- ▷ Jiangsu Provincial Enterprise Technology Center
- ▷ Jiangsu Provincial Engineering Technology Research Center
- ▷ Jiangsu Industrial Design Center
- ▷ Jiangsu Provincial Military-civilian Integration Innovation Platform

- **Industry-university-research cooperation innovation platform**



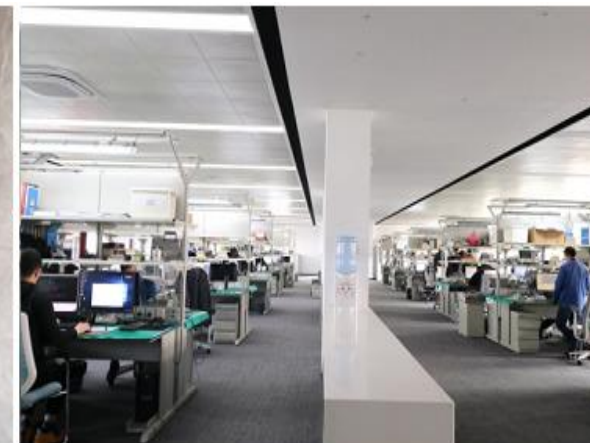
▷ Southeast University:

Advanced Power Chip Testing Technology Joint R&D Center

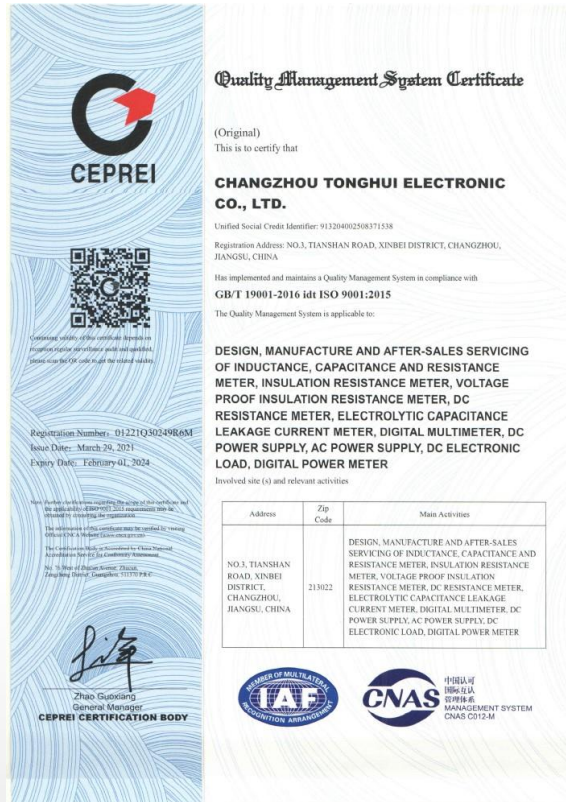


▷ Jiangsu Institute of Technology:

Micro Signal Test Engineering Technology Research Center



Enterprise qualification



• ISO9000:2015

• ISO14000:2015

The history of enterprise development

Year 2002

ISO9000:2000 quality management system certification

Year 2008

CMMI Software Management International certification

Year 2015

Listed on the New Third Board Base tier (Stock code : 833509)

Year 2019

Identified as "Provincial Specialized Little Giant Enterprise" and "Provincial Engineering technology research center".

Year 2021.9

Moving into the new factory

Year 1994

Tonghui founded with 7 people.

Year 2003

Identified as "High-tech enterprise" by Jiangsu Science and Technology Department

Year 2012

Restructured into a shareholding company

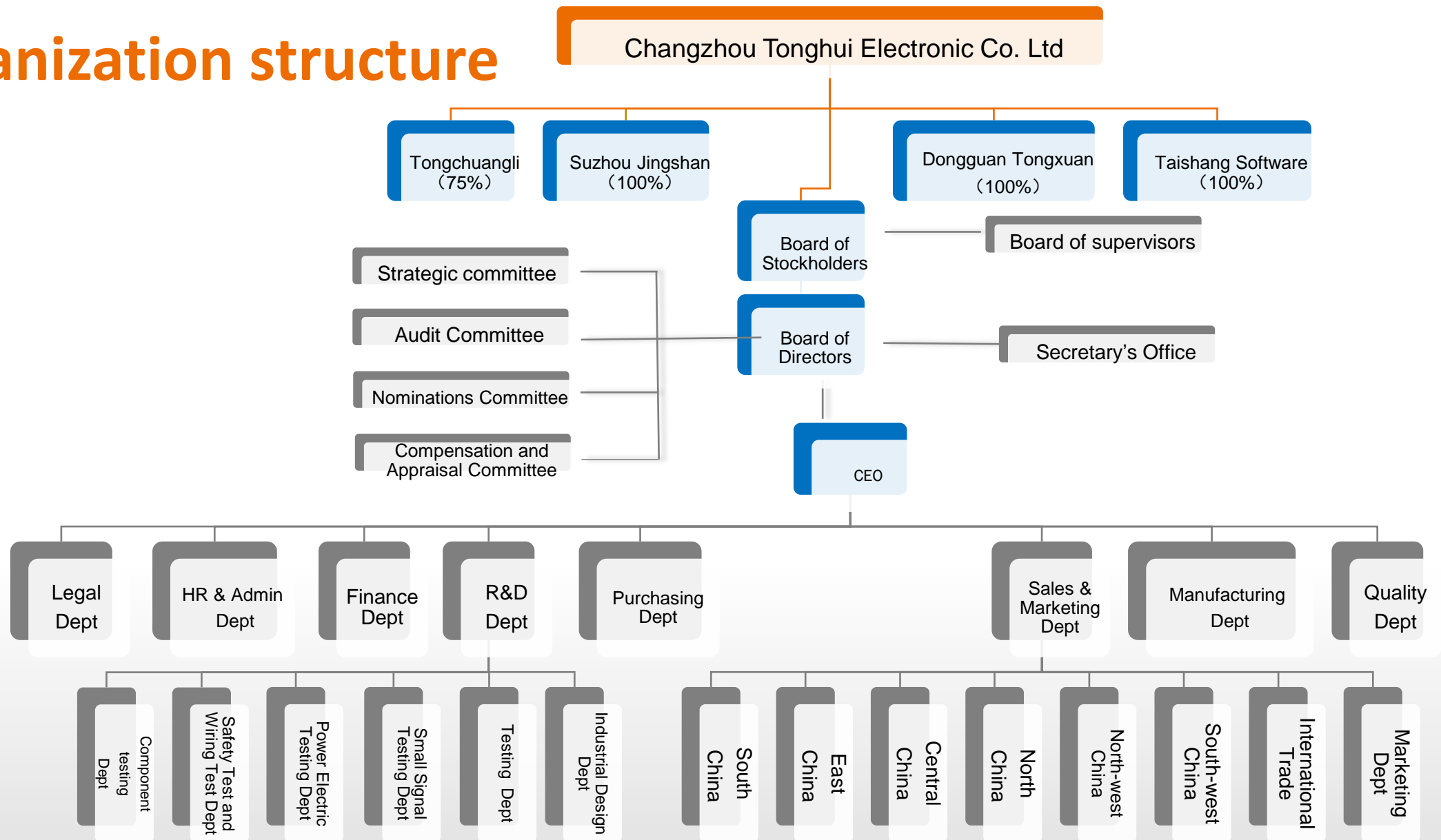
Year 2016

"Tonghui" trademark has been identified as a well-known trademark

Year 2021.1

Listed on the New Third Board Select tier

Organization structure



Founder team



Chairman & CEO: Zhao Haohua

(Professorate Senior Engineer, Distinguished expert of National Institute of Metrology)

Education Background:

- 1982.9-1986.7 Bachelor of Radio Technology, Nanjing University of Science and Technology
- 1986.9-1989.1 Master of Signal, Circuit and System, Nanjing University of Science and Technology

Achievement:

- Changzhou Municipal People's Congress Representative, "May 1st" Labor Medal Winner
- More than 30 years of experience in electrical measuring instrument research and development
- Presided over a number of provincial and ministerial science and technology projects, and obtained many invention patents.

Founder team

Stick to the original intention of starting a business, and work together for 30 years



Development potential

Electronic T&M instruments -- "eyes" for scientific exploration, "rulers" for high-end manufacturing

Main Products: Intelligent Electronic Measuring Instruments (300 Models)

Application: Passive devices, semiconductor devices, integrated circuits, new materials, new energy, consumer electronics and other fields

中国电子仪器行业协会
地址：北京市昌平区回龙观镇 电话：010-60505112 邮编：100084

证 明

常州同惠电子股份有限公司是中国电子仪器行业协会副理事长单位，是电子测量仪器行业骨干企业，北京上市公司。该公司多年来在电子元器件测量领域技术水平及市场占有率居于国内领先地位。2019-2021 年，贵公司生产的电子元器件测量仪器产品市场占有率在 20% 以上，国内排名第一。具体情况如下：

产品名称	市场占有率	市场占有率	市场占有率
（根据《中国电子测量仪器行业统计年鉴》及《中国电子测量仪器行业统计年鉴》统计）	2019 年	2020 年	2021 年
市场占有率	20% 以上	20% 以上	20% 以上

备注：以上市场占有率数据是根据中国电子仪器行业协会副理事长单位常州同惠电子股份有限公司 2019 年销售数据 25000 台，2020 年 30000 台，2021 年 41000 台，市场占有率达到 20%。

特此证明。

中国电子仪器行业协会
二〇二二年二月二十日

Position in the market

- Leading manufacturer in China
- Main competitors: Keysight, Hioki, Wayne Kerr, Chroma, GW instek

Competitiveness

- **Research and development:** continuous innovation
- **Marketing:** close to customers
- **Manufacturing:** International quality level

Mission and roadmap

To provide reliable and low-cost test equipment for the users all over the world.
Improve our life and protect the environment



Enterprise strategies

Focus

**Professional,
dedicated, attentive**

-- Concentrate on the field of
electronic measuring
instruments with
professional theory and
experience

Innovation

Facing the forefront of
world science and
technology development

- **Semiconductor Device**
- **New energy, battery test**

Development

R&D

Marketing

Products features

01

•Component
Parameter
Tester

02

•Micro Signal
Type Tester

03

•Power
Electronic
Tester

04

•Electrical
Safety Tester &
Cable Tester

05

•ATE



Main products



Cable /Harness Tester



Component Parameter Tester



ATE



Winding Component Tester



Benchtop DMM



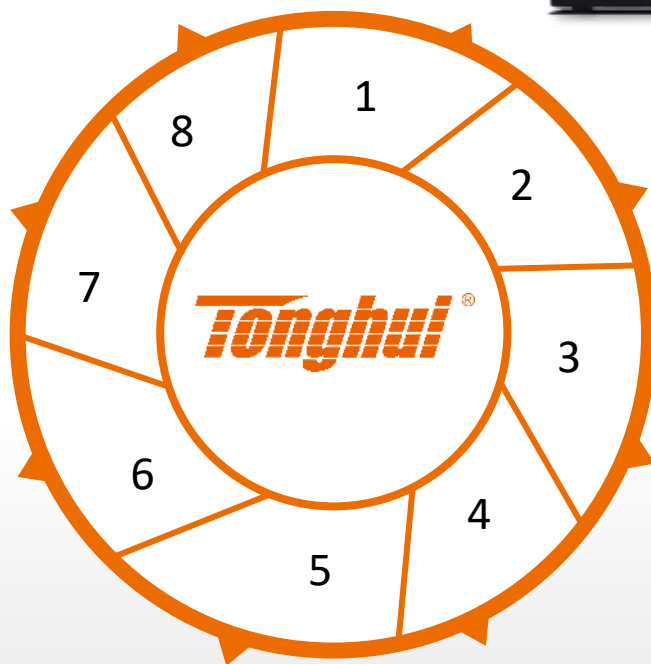
Electrical Safety Tester



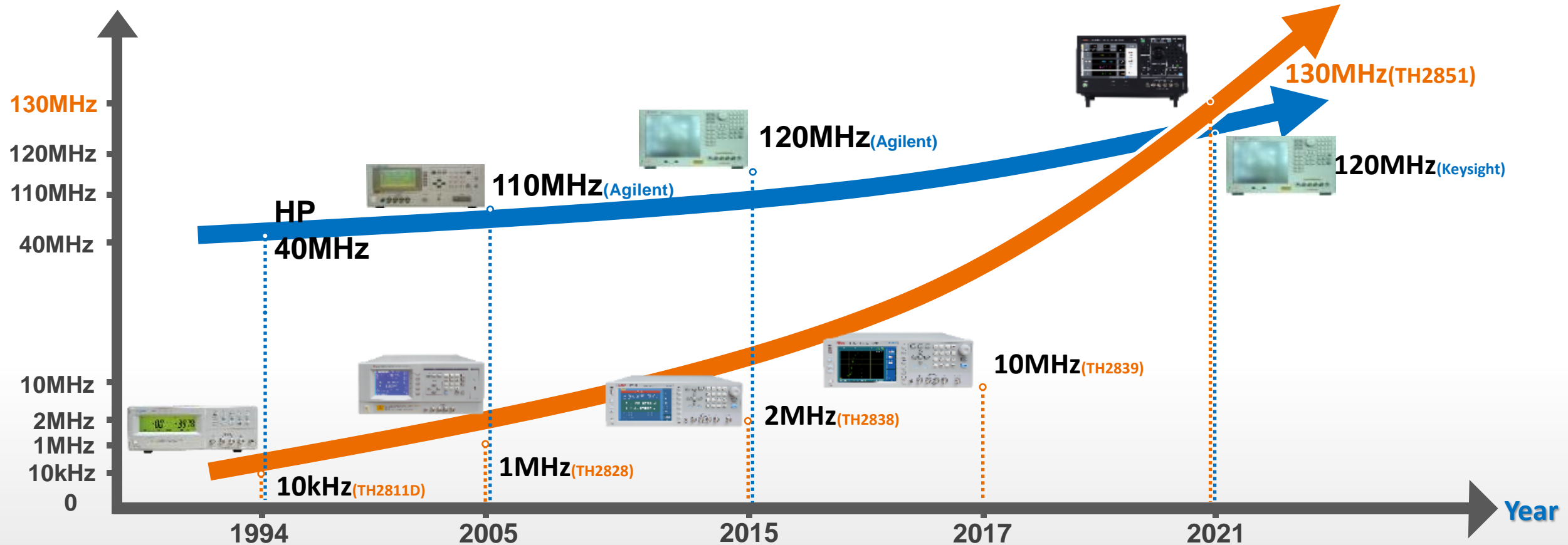
Micro Signal Tester



Power Electronics Products



Innovation history of Core products



- Continue to take root in the field of impedance testing instruments for more than 30 years
- Practice the ingenious concept of "doing one thing well for a lifetime"

Core Technological breakthrough



Brand	Tonghui TH2851	Keysight E4990A
Test Frequency	10Hz-130MHz	20Hz-120MHz
Max Test Speed	2.5 ms each time	3.8 ms each time
Basic Accuracy	0.08%	0.08%
Separate LCR Function	With	Without
Output Impedance	25Ω/100Ω Option	25Ω

Note: Keysight data comes from the official website <https://www.keysight.com/>,
TH2851-130 is calibrated by China Metrology Institute, certificate number XDgp2022-00731

Core products and competitiveness

1 Impedance test instrument



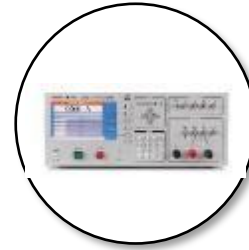
Impedance
Analyzer



LCR Meter



Automatic
Transformer
Tester



DC Bias
Current
Source



Loudspeaker
Testing
Instrument



Core products and competitiveness

1 Impedance test instrument

◎ Impedance testing instruments are used in,

- passive devices (inductors, capacitors, magnetic beads, transformers, resonators, filters, etc.),
- semiconductor devices (wafers, chips, triodes, MOS tubes, IGBTs, etc.),
- materials (plastics, ceramics, magnetic , amorphous, etc.), biomedical, electrochemical, etc.
- It has a wide range of applications in manufacturing, scientific research institutes, national defense, aerospace, etc.



• Passive components



• semiconductor



• Dielectric material



• Magnetic material



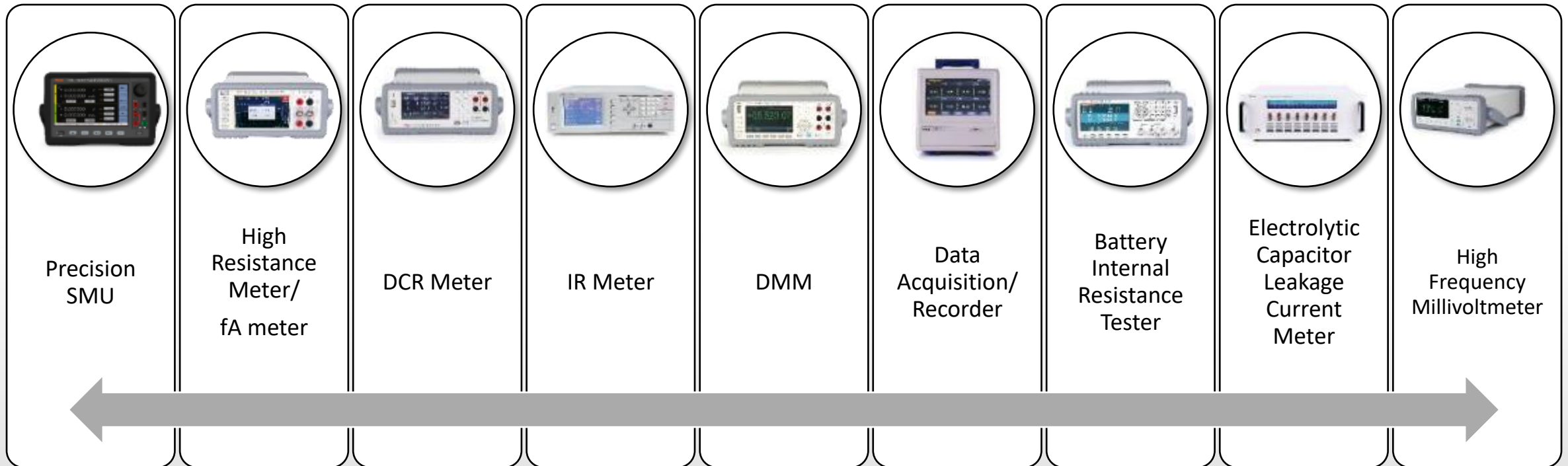
• Liquid crystal material



• Semiconductor material

Core products and competitiveness

2 Micro Signal Type Tester



Core products and competitiveness

2 Micro Signal Type Tester

◎ Application

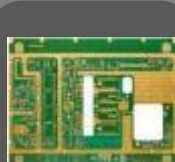
- Testing, verification and analysis of semiconductor wafers, diodes, LEDs, photosensitive devices, sensors, MOSFETs, BJTs, ICs and other electronic devices and materials;
- Testing and analysis of materials (ceramics, thin films, dielectrics, semiconductors, nanometers, etc.), electronic components, high resistance, microcurrent, and weak charges of electronic/non-electronic systems.



| Wound Components



| Connector



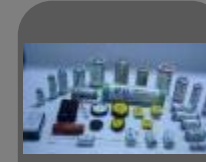
| PCB



| Antenna



| Electronic Component



| Various batteries

Core products and competitiveness

3 Electrical Safety Tester and Cable Tester



Hipot Tester
AC/DC/IR



Safety
Performance
Analyzer



Impulse
Winding
Tester



Ground Bond
Tester



Motor Test
System



Leakage
Current
Tester



Cable/
harness
Tester

Core products and competitiveness

3 Electrical Safety Tester and Cable Tester

- ◎ Electrical safety testing instruments are used in product safety parameter testing in industries such as **new energy vehicles, lithium batteries, consumer electronics, household appliances, electrical equipment, electronic components, and medical equipment.**



Core products and competitiveness

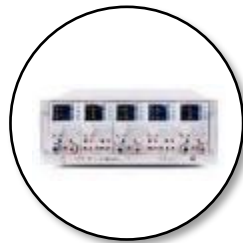
4 Power Electronic Tester



Programmable
DC Power Supply



Programmable
AC Power Supply



DC Electronic
Load



Digital Power
Meter/Power
Analyzer



Power Electronic
Test System



Core products and competitiveness

4 Power Electronic Tester

- ◎ Power electronic test instruments are mainly used in **photovoltaic inverters, electric vehicle chargers/charging piles/drivers, power electronic components, computer/server/communication power supplies, switching power supplies, 3C batteries, battery chargers, power adapters, backlight inverters** Parameter testing of products such as inverters, UPS, LED drivers, etc.



| R&D



| Labs



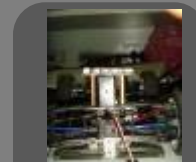
| Production Lines



| Automation



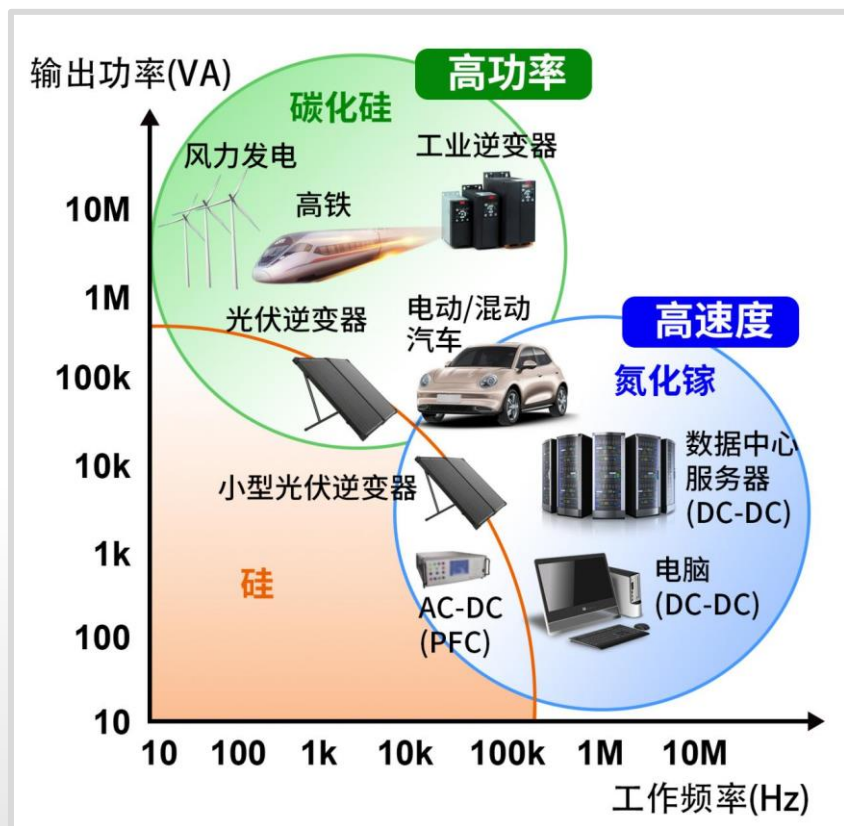
| Industrial Test



| New Energy

Key development area in future

Power semiconductor device testing



New energy test



Partners

| Universities and Research Institutes

CETC, China Aerospace, China Shipbuilding, Tsinghua University, Zhejiang University, Shanghai Jiaotong University, University of Science and Technology of China, etc.

| Companies

TDK, Delta, Premo, Molex, Liteom, Amphenol, Foxconn, Pulse, GEM, Fujitsu, Huawei, BYD, Gree, Feng Hua, Midea, Faratronic, Click Technology, AAC Technology, etc.





Future enterprise development strategy

| Make “TONGHUI” the most famous electronic instrument brand in the world.

| Uphold the spirit of ingenuity to ensure product quality

| Strive to achieve a leading position in the field of third-generation semiconductor devices and new energy testing.

Tonghui[®]



Join hands, Share the future

Thanks for your attention.

Changzhou Tonghui Electronic Co., Ltd