PRODUCT OVERVIEW HANDBOOK

Precision Electronic Test & Measurement Instruments

A complete overview of the Techmize by Tonghui instrument range for European engineers, distributors and industrial customers.

Techmize Electronic GmbH · Ismaning, Germany

Rev. 2026-11

About Techmize

Precision measurement, engineered in China, delivered in Europe

Changzhou Tonghui Electronic Co., Ltd.

The parent company — three decades of measurement engineering

Founded in 1994 in Changzhou, China, Tonghui Electronic has spent over three decades focused on precision impedance and electrical test & measurement instrumentation. The company is publicly listed on the Beijing Stock Exchange and recognized as a National High-Tech Enterprise and National "Little Giant" innovator, with 86 granted patents (57 invention patents) and a dedicated R&D center spanning 7 specialized divisions — including joint research programs with Southeast University and other partner universities. Tonghui's quality and engineering discipline is backed by ISO 9001, ISO 14001, ISO 45001 and ISO 50001 certification, and CE marking across the large majority of its products. This is the foundation every Techmize product is built on.

1994	300+	28%	>16%	86
Founded, Changzhou, China	Employees company-wide	Dedicated R&D roles (92 people)	Of revenue invested in R&D (3-yr avg.)	Granted patents (57 invention)

Techmize Electronic GmbH

The European entity — local presence, local support

Techmize Electronic GmbH is Tonghui's dedicated entity for the European market, based in Ismaning, Germany, with local warehousing to support the European distributor network. It brings Tonghui's instrument range to European engineers and industrial customers through authorized distributors, combining local points of contact for sales and technical support with the accuracy and engineering depth behind every Techmize product.

Target segments

Passive component manufacturing	**New energy / battery testing**	**Industrial automation & production lines**

Certified to international standards

ISO 9001

Quality Management System

ISO 14001

Environmental Management System

ISO 45001

Occupational Health & Safety Management

ISO 50001

Energy Management System

CE Marking

Available for the large majority of Techmize products

SEMI F47-0706

Semiconductor equipment standard

Recognized status

National High-Tech Enterprise

National “Little Giant” Innovator (2022)

Beijing Stock Exchange Listed (2021)

86 Granted Patents (57 invention)

Techmize products comply with Directive 2011/65/EU (RoHS), and CE marking applies to the large majority of the range. The EU Declaration of Conformity for a specific product is available from Techmize or your authorized distributor on request.

What do you need to test?

A quick guide from test need to recommended product family. Each entry points to the category catalog that carries the full datasheet and specifications.

Test need	Recommended product(s)	Category catalog
Capacitor / inductor / magnetic core parameter testing (L, C, R, Z, D, Q)	**TH2836 / TH2840X / TH2840 / TH2838 / TH283X / TH2822 series**	A — Passive Component
High-frequency impedance testing (up to 130 MHz)	**TH2851 / TH2848 series**	A — Passive Component
RF impedance testing (1 MHz – 5 GHz, wafer/PCB)	**TH2852 / TH2853 series**	A — Passive Component
Inductor DC-bias characteristic testing (works with all Techmize bench LCR meters / impedance analyzers; TH2840BL recommended)	**TH1779A (paired with an LCR meter / impedance analyzer)**	A — Passive Component
Power semiconductor (MOSFET / IGBT) C-V & switching characterization	**TH510 / TH521 series**	B — Semiconductor
Semiconductor avalanche energy / UIS testing	**TH530 series**	B — Semiconductor
General-purpose source/measure characterization (incl. semiconductor devices)	**TH199X series**	C — Micro-Signal (see note)
Ultra-low current / high-resistance / insulation-degradation measurement	**TH2690 / TH2692 series**	C — Micro-Signal
Insulation resistance / leakage current of capacitors, cables and insulating materials	**TH2683 series**	C — Micro-Signal
Digital multimeter / data-logging bench measurement	**TH1953 / TH1963 / TH1963A series**	C — Micro-Signal
Multi-channel data acquisition and temperature / signal scanning	**TH2554 series**	C — Micro-Signal
Low-resistance / DC micro-ohm (DCR) measurement	**TH2515 / TH2516 / TH2518 series**	C — Micro-Signal
Battery internal-resistance and voltage testing	**TH2523 series**	C — Micro-Signal
AC/DC power supply or DC electronic load for testing a DUT	**TH6400 / TH6430 / TH66000 / TH6900 / TH7100 / TH7200 / TH8300 / TH8400**	D — Power Electronics
Mains power-quality / power-meter measurement (fixed or wideband)	**TH342X / TH343X / TH344X series**	D — Power Electronics
AC/DC withstand-voltage & insulation-resistance safety testing	**TH9010 / TH9110 / TH9120 / TH9130 / TH9130S / TH9310 / TH9320**	E — Safety & Cable
Multi-channel scanning withstand-voltage testing (production line)	**TH9320-S series**	E — Safety & Cable
Ground-bond / protective-earth continuity testing	**TH9410A / TH9411A series**	E — Safety & Cable
Cable / wire-harness continuity, insulation & contact-resistance testing	**TH600 series (TH615 / TH630) / TH86XX family**	E — Safety & Cable
Coil / winding inter-turn insulation testing (pulse method)	**TH2884 / TH2886S / TH2883 series**	E — Safety & Cable

A Passive component & impedance testing	**B** Semiconductor device testing	**C** Micro-signal & precision measurement	**D** Power electronics	**E** Safety & cable testing

Note — TH199X is a general-purpose source/measure unit, positioned in Category C. For broader semiconductor device characterization, see the Semiconductor Device Testing catalog (Category B) for TH510/TH521/TH530, or consult TH199X directly for a more flexible bench solution.

Five categories, one complete portfolio

Each category has its own dedicated catalog with full datasheets and specifications.

A

Passive Component & Impedance Testing

TH2852 · TH2853 · TH2851 · TH2848 · TH2836 · TH2840X · TH2840 · TH2838 · TH283X · TH2822 · TH1779A

Precision impedance analyzers and LCR meters for capacitors, inductors, magnetic cores, transformers and RF components — from general bench testing up to 5 GHz RF precision analysis.

B

Semiconductor Device Testing

TH521 · TH530 · TH510

C-V characterization, power-device analysis and avalanche-energy (UIS) testing for power semiconductors — a focused, growing segment for SiC/GaN and new-energy applications.

C

Micro-Signal & Precision Measurement

TH199X · TH1953 / TH1963 / TH1963A · TH2515 / TH2516 / TH2518 · TH2523 · TH2554 · TH2683 · TH2690 · TH2692

Source/measure units, femtoammeters, high-resistance and insulation meters, low-resistance meters, battery testers, data acquisition systems and digital multimeters for ultra-low-current and high-precision bench measurement.

D

Power Electronics

TH66000 · TH6900 · TH6430 · TH6400 · TH7100 · TH7200 · TH8300 · TH8400 · TH343X / TH344X · TH342X

AC/DC power supplies, DC electronic loads, bidirectional power systems and power meters for characterizing and stressing power devices and systems under test.

E

Safety & Cable Testing

TH9120 · TH9130 / TH9130S · TH9010 · TH9320-S · TH9110 · TH9310 / TH9320 · TH9410A / TH9411A · TH600 series · TH86XX · TH2886S / TH2883 / TH2884

Withstand-voltage, insulation-resistance, ground-bond and cable/harness testers for electrical safety compliance and production-line quality assurance.

This handbook is a starting point. Ask your Techmize contact or authorized distributor for the full category catalog, individual datasheets, or a tailored product recommendation for your application.

Let’s talk

Get in touch with Techmize or your local distributor

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Website LinkedIn YouTube

Techmize products are available in Europe through a network of authorized distributors. For local sales, technical support and after-sales service, please contact Techmize directly or reach out to your nearest authorized distributor.

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