



Innovation meets Precision:
Your premium electronics manufacturing partner
for pioneering RF and wireless technology.

Your trusted partner for bespoke high-end test solutions –

engineered to meet the rigorous demands of

Telecommunications, Automotive, and Defence

– Development – Manufacturing – Service –

Made in Germany

// Competence Quality Reliability



Development, Production & Service –
tailor-made system solutions.

We turn your vision into precise reality.

// High-frequency technology

// EMC technology

// CNC milling technology



// The Company

Development and manufacture of customised products

Telecommunications & Mobile Industry

The telecommunications sector is one of our most important markets. We develop and manufacture high-quality shielded enclosures, relay units, coupling units and air interface adapters for air interface emulation for 2G, 4G, 5G, 6G, IoT, Wi-Fi, and TETRA.

To ensure the efficient control of our devices and systems, we offer bespoke software solutions and integrate customised program sequences – precisely tailored to your requirements.

High-Frequency and Measurement Technology

Our high-frequency components offer state-of-the-art technology for a wide range of applications. Our product range includes programmable attenuators, semiconductor switches, hybrid couplers, attenuators, power dividers, remote-feed splitters, RF filters, coaxial relays, and much more.

In the field of EMC measurement technology, we supply high-quality relay units and matching accessories – perfectly tailored to your individual requirements.

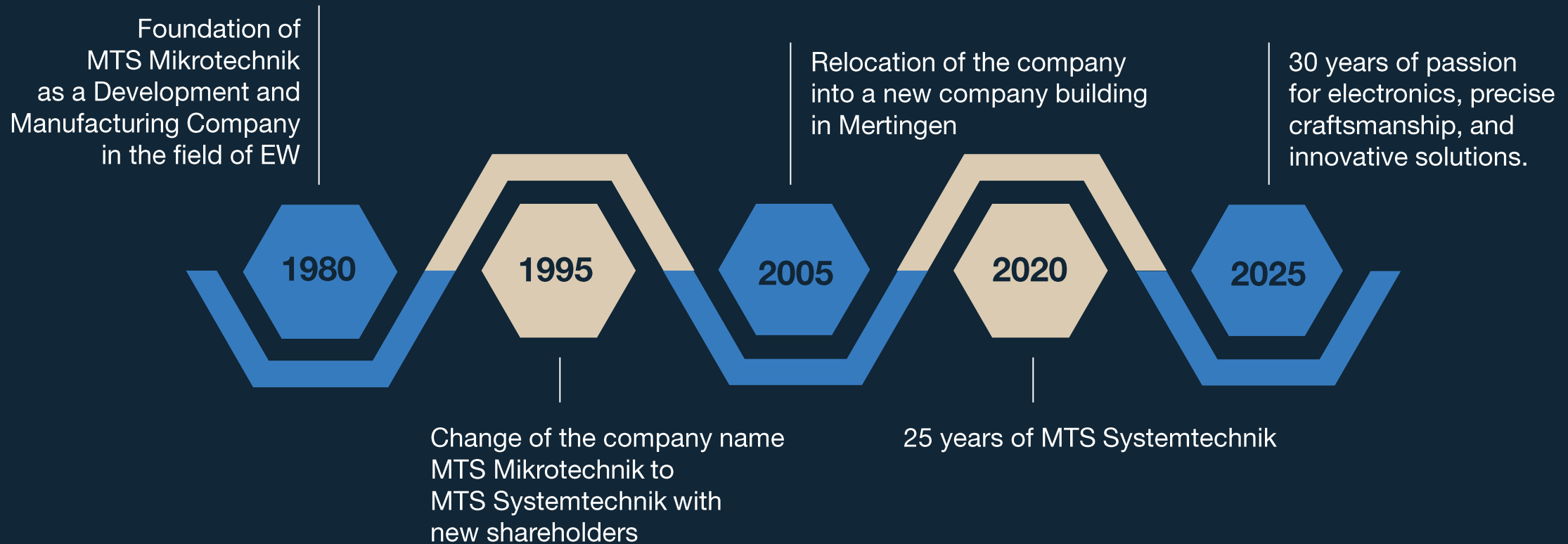
CNC Milling Technology

In our state-of-the-art CNC machining centres, we produce high-precision milled components – from prototypes through to series production – exactly in accordance with your individual specifications.

Our mechanical product range also includes robust standard aluminium enclosures, including profile enclosures, milled cassette trays, and 19-inch plug-in units, which are characterized by their reliability and flexibility.

// The Company

The company's history at a glance

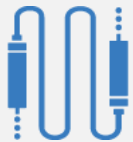


// *Main products*



Bespoke signal distribution

We offer state-of-the-art systems for the reliable distribution of audio, video and RF signals. Our solutions are used worldwide in the telecommunications, satellite communications, mobile communications and radio monitoring sectors.



Development and production of active and passive high-frequency components

Our portfolio includes bespoke solutions for signal distribution, as well as high-quality switches, attenuators, filters, couplers and much more.



Manufacture of mechanical components

We manufacture precision mechanical components for the aerospace, high-frequency technology and optical industries.

// *Company facts*

Company

Administration, sales and production - all under one roof. Worldwide representatives for the marketing of MTS products.

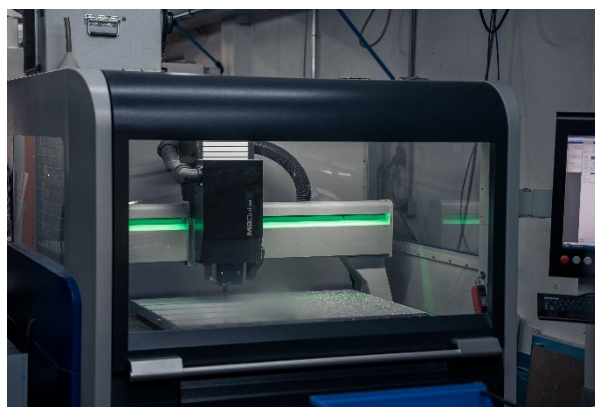
Employees

50 employees in full and part time, consisting of engineers, technicians, skilled workers and trainees

Training

- Electronics technician (m/f/d) for devices and systems
- CNC cutting machine operator (m/f/d)
- Industrial clerk (m/f/d)

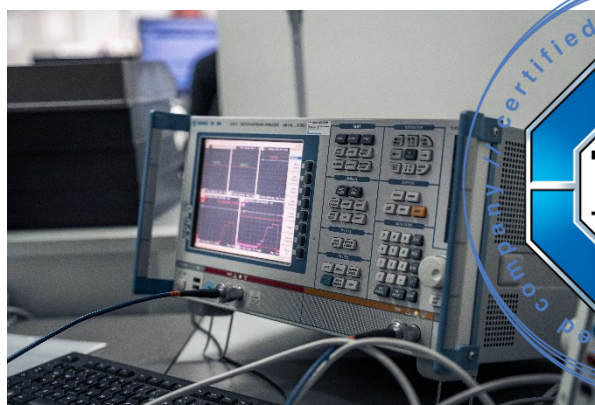
// Company facts

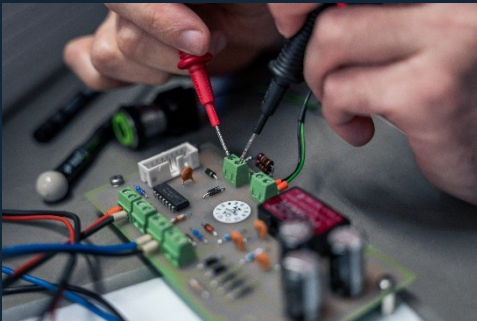
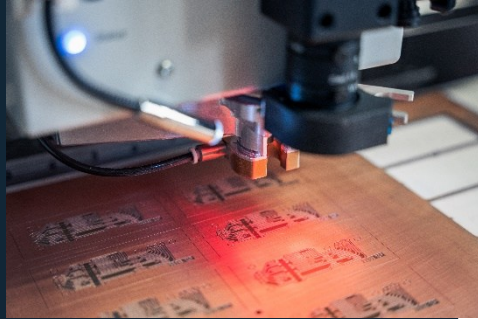


DIN EN ISO 9001:2015 certified

(Development, production, distribution)

Modern measuring devices and machines





// Competences

- // In-house development, simulation and production of high-frequency components and systems
- // Software and hardware laboratory
- // System integration
- // EMC absorber chamber
- // CAD services
- // CNC machining centre
- // Modern production processes
- // Quality standard DIN EN ISO 9001



// *Our markets*



Cutting-edge technology, unrivalled reliability and certified quality: MTS Systemtechnik is the partner of choice for developers and manufacturers of highly sensitive equipment. Our customers rely on our discretion and transparent processes in market sectors such as telecommunications, aerospace, defence, medical technology, the automotive industry and electronics.

// *Development and design*

- // **In-house hardware and software development department** staffed by experienced engineers specialising in high-frequency technology, electrical engineering and software development
- // **Development and design** of our own products, ranging from complex devices and systems right down to individual components
- // **Programming** of user interface and control software, firmware and embedded solutions
- // **Rapid development evaluation** in printed circuit board design using a state-of-the-art PCB milling and drilling plotter
- // **3D CAD designs** in a modern software environment for complex devices and systems, components and mechanics
- // **Prototype and initial sample production** using precision 3D printing processes
- // **Comprehensive product testing** in the company's own EMC anechoic chamber

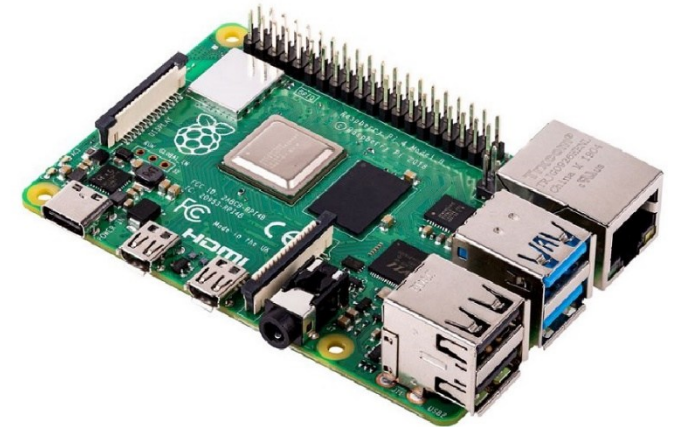
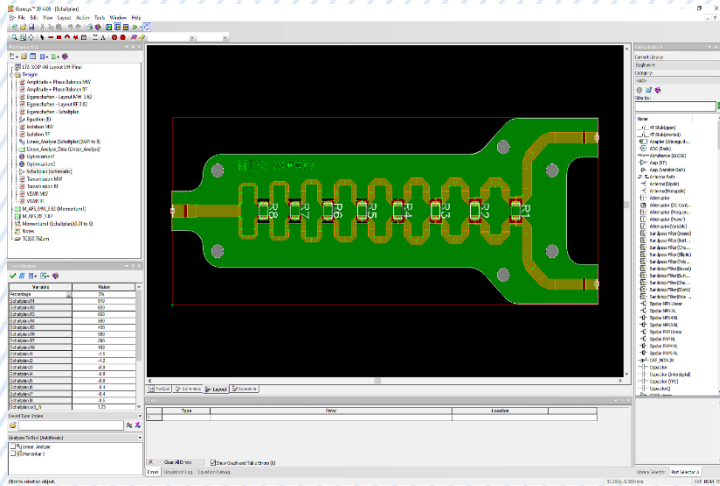
// *Electronic manufacturing*

- // **Production** of individual printed circuit boards
- // **Assembly** of the units and systems
- // **Cable assembly** specialising in coaxial cables
- // **Manufacture and assembly** of sub-assemblies and components
- // **Quality control and testing** of individual products
- // **Electronic measurements** in our in-house test facility
- // **Documentation** through detailed test reports
- // An **extended workbench** as a flexible service

// ***Mechanical manufacturing***

- // **State-of-the-art CNC milling centre** equipped with seven versatile milling machines
- // **Flexible manufacturing capabilities** ranging from prototyping and one-off production to series production
- // **High-precision machining** of sophisticated components and complex parts.
- // **Quality assurance** using precise 3D coordinate measuring technology
- // **Wide range of materials**, including aluminium, steel and engineering plastics (POM)
- // **Finishing** through professional surface treatment
- // **Extended workbench** as a flexible and reliable service

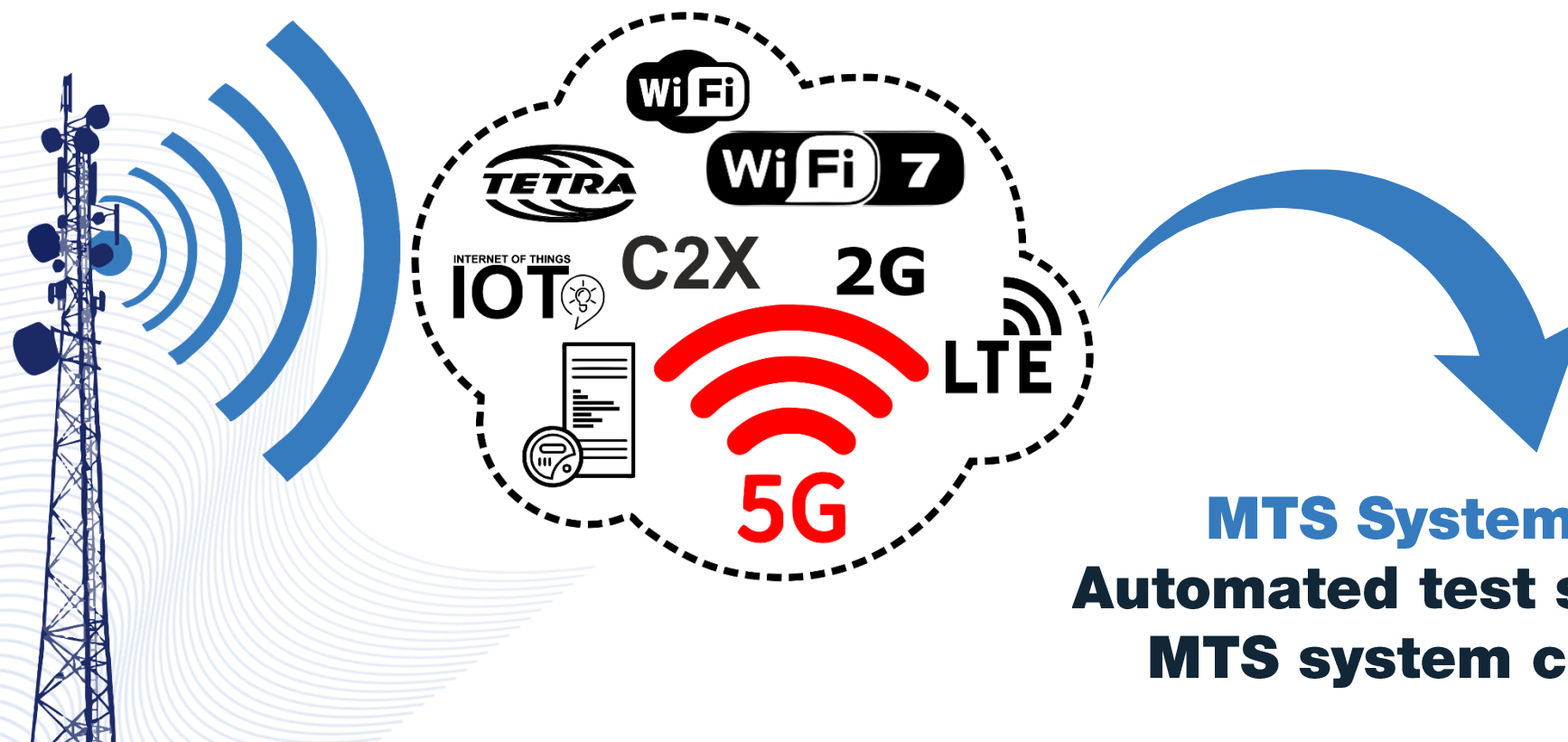
// Modern resources



- // State-of-the-art software environment featuring Keysight Genesys, Pulsonix for PCB design, Visual Studio and other industry-specific tools
- // Rapid development evaluation during prototyping through the use of a PCB milling and drilling plotter
- // Modern hardware and software programming based on high-performance development boards

**Ready for the future –
Ready for new technologies**

5G



MTS Systemtechnik -
Automated test solutions with
MTS system components



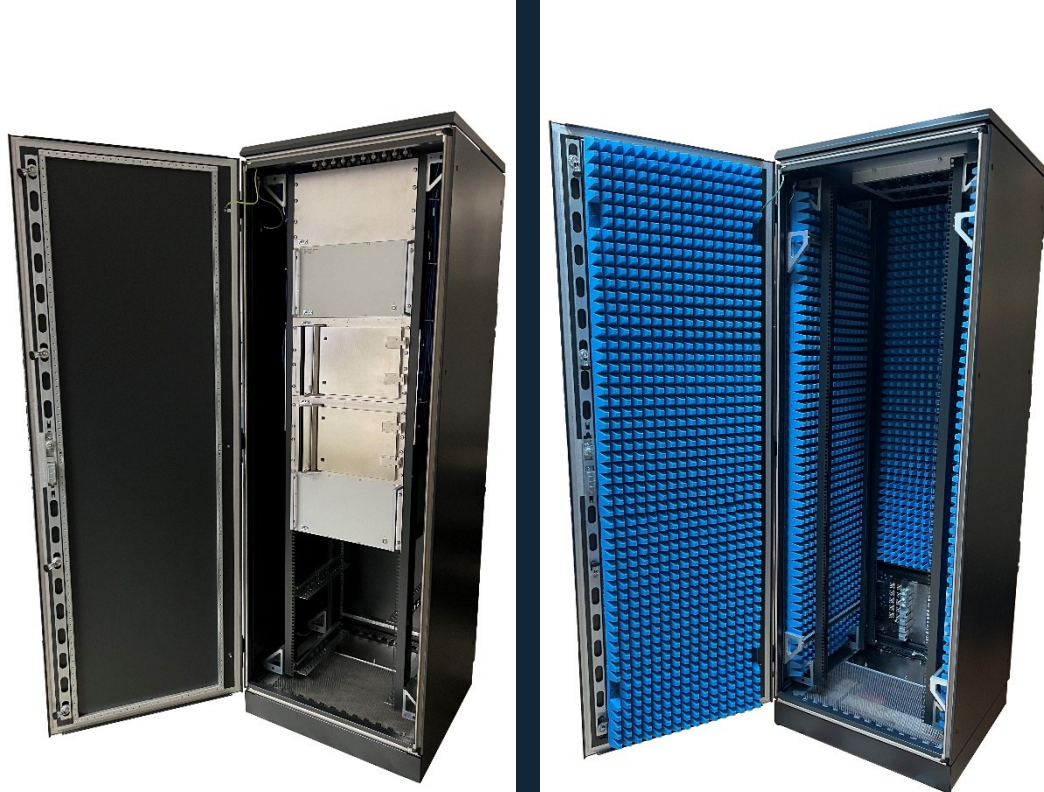
// Components

- // In-house development, simulation and production of high-frequency and microwave components
- // Power divider - Wilkinson and Resistive
- // Semiconductor attenuators - 95 dB / 122 dB attenuation
- // Semiconductor switch - 2s, 4s & 8s with ≥ 100 dB isolation
- // Coupler - Directional coupler & 3 dB Hybrid
- // Level detectors - 5 to -65 dBm dynamic range
- // Passive filter modules - USB 3.2 (20 Gbit/s) & Gigabit-Ethernet
- // etc.



// *Devices and systems*

- // Over 90% of MTS devices and systems consist of the company's own component developments
- // Power divider units - DC to 13 GHz
- // Attenuator units - 1 MHz to 13 GHz
- // Air Interface emulations - 1 MHz to 13 GHz
- // Coupling units - 380 MHz to 6 GHz
- // Switching matrices - 1 MHz to 13 GHz
- // Shielding boxes - 10 kHz to 13 GHz
- // etc.



// *System solutions*

The sensitivity of mobile devices has increased dramatically in the last year. 4G or 5G devices can detect up to -130 dBm, NB IoT applications even up to -145 dBm. Very high RF shielding is required to test these technologies under defined conditions. MTS rack systems are a solution that offers about 120-140 dB. The main features are a shell-type enclosure, filtered interfaces, adapted RF cabling and complete installation in and on the facility.

- // MTS 19" rack system
- // Integrated fans in the roof
- // Connection panel in the roof for RF connections
- // Connection panel on the back for feedthroughs

**// Autonomous solution
for radio measurements
and monitoring**



// *Measuring vehicle*

The autonomous solution for mobile, measuring, monitoring and communication vehicles

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Universal equipment carrier

5G

All types of radio measurements

Radio optimisation

Benchmarking

Troubleshooting / Debugging

IMSI Catcher

Optional radio direction finder

authorities and organisations with security tasks applications

Self-sufficient power supply, can be used almost anywhere

// **Measuring vehicle**

Further application possibilities:

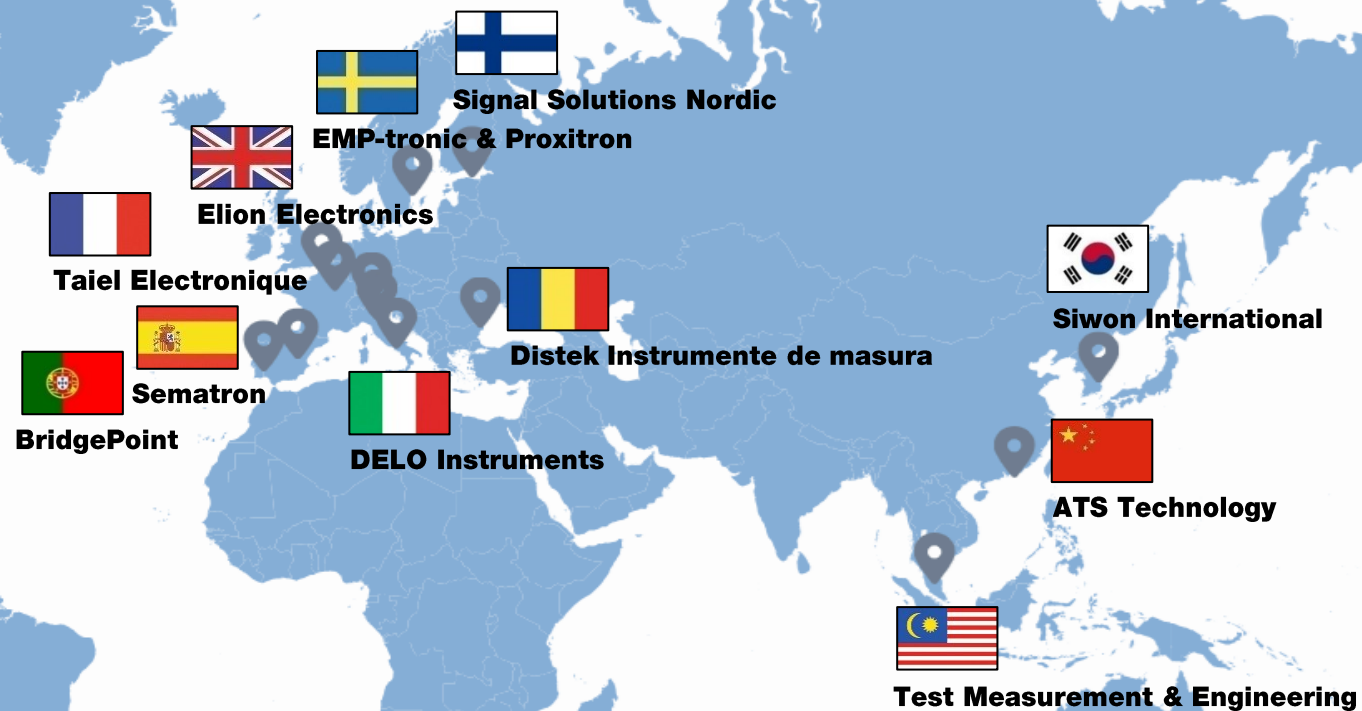
- // Jammer Technology
- // Drone defence
- // Monitoring
- // Wiretaps



// Main customers



// Representations





*// Together towards the right solution –
Contact us*

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