

EMC PARTNER AG

# COMPANY PROFILE





### Accredited Calibration

Quality at EMC PARTNER is based on an ISO 9001 management system. This is the foundation for an ISO 17025 accreditation verified by the Swiss Calibration Service (SCS). SCS No. 146 is the accreditation number of EMC PARTNER AG.

Locally accredited but recognized worldwide through affiliation with the ILAC organisation



EMC PARTNER AG

## THE LARGEST RANGE OF IMPULSE TEST EQUIPMENT UP TO 100KV AND 100KA

Experts in high voltage impulse technology, EMC PARTNER AG has built its reputation delivering innovative solutions for commercial and industrial EMC immunity testing, indirect lightning on aircraft and component testing for a worldwide customer base. EMC PARTNER is continually expanding through new product lines and new geographic areas. Based on our client's needs and the evolving market, EMC PARTNER design both traditional EMC impulse generators and impulse test systems for evolving technologies. Our clients, employees and the environment are equal partners in defining who we are.

A true Partner for EMC test solutions!





## A SWISS ORIGINAL

Our long-standing commitment to the EMC industry does not stop at designing test equipment. Our roots go back to the formative years of the EMC industry with over 30 years unbroken participation in IEC standard committees. A tradition that continues today with the new generation. We are totally committed to improving the EMC environment through our active participation in the International Electrotechnical Commission (IEC), the Society of Aerospace Engineers (SAE) and EUROCAE.

EMC PARTNER continues to push forward technological frontiers with patented designs and an innovative workforce.

<b>INNOVATIVE</b>	First design of a multifunction test system for CE marking
<b>EXPERIENCED</b>	Long-time participation in the EMC industry and standardization
<b>MOTIVATED</b>	Highly qualified, and experienced staff
<b>RELIABLE</b>	ISO 17025, accredited calibration laboratory.



# IN-HOUSE DEVELOPMENT AND PRODUCTION

A team of qualified engineers enables us to provide competent advice, high quality reliable products and an efficient service for our customers. All relevant functions are maintained in-house with the benefit of being able to react fast to market demands for updates or new product developments. EMC PARTNER instruments are distributed to international markets through a network of trained representatives.

## Development



Keeping pace with the ever changing requirements of national and international standards and evolving market needs requires our development team to continuously search for new and innovative solutions.

## Production



The use of high quality materials is the foundation of our production. Our trained and qualified personnel ensure that material quality translate into reliable products.

## Calibration



During the production process, individual modules and circuit boards are pre-tested before integration into a finished product for final calibration. This process maintains the quality and reliability of EMC PARTNER products.

## Logistics



Accredited under the international “known consignor” scheme, EMC PARTNER AG export to all the industrialized countries following a strict process throughout the stocking, packaging and shipment of products.

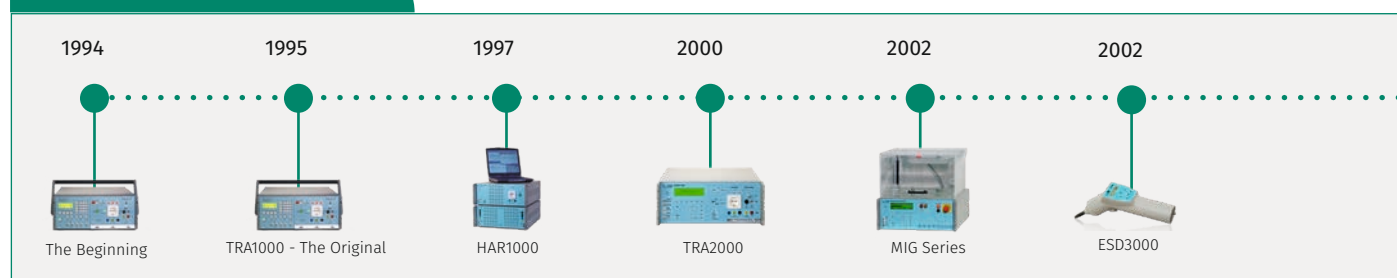


## SUCCESS THROUGH INNOVATION

**Continual improvements and new designs ensure that our customers have access to the best equipment. EMC PARTNER AG, today, tomorrow and in the future**

From the beginning, EMC PARTNER AG has used new and evolving technologies to drive forward innovation in EMC testing solutions and instrument design. The initial product from EMC PARTNER AG's design office was TRA1000, the world's first integrated solution for conducted immunity tests. The fully modular IMU3000 and IMU4000 are the fourth generation in a long line of innovative products with a 25 year pedigree. ESD3000, still the only AA battery powered generator up to 30kV, followed soon after TRA1000. The unique design has kept ESD3000 as the ESD generator of choice across multiple applications.

### Product Evolution





# COMMITMENT TO QUALITY

From the beginning, our designs are fully integrated using a modern 3D CAD system which increases reliability and reduces time to market. The production process follows ISO 9001 procedures supported by a customized ERP system. The story does not end when instruments are shipped. The service department in Laufen, staffed by trained professionals, is linked closely with repair centres around the globe giving our customer base the best possible support through the product life cycle

## Standard Committees

Maintaining a technology lead means being involved in the standardization process. Membership of international standard organizations is part of our commitment to delivering the best test equipment enabling our customers to fulfil current and future requirements.

### LOW FREQUENCY EMC

International Electrotechnical Commission (IEC)  
Technical committee TC77

Special commission SC77A / WG6  
Special commission SC77B / MT12  
Swiss national committee for EMC

### INDIRECT LIGHTNING

Society of Aerospace Engineers (SAE)  
AE2 committee

European Organisation for Civil Aviation  
Equipment (EUROCAE)  
WG14 / WG31

## Quality Management

The EMC PARTNER ISO 17025 accreditation, follows quality procedures laid down in ISO 9001. All departments are regularly audited to ensure the highest standards are maintained. Quality management is key to ensuring product reliability.

SWISS  
QUALITY



2002



MIG2000-6 for MIL-STD-461

2005



Avionics Test System (DO-160)

2007



Fast DOW Tester

2009



MIG9603

2009



Transient 3000

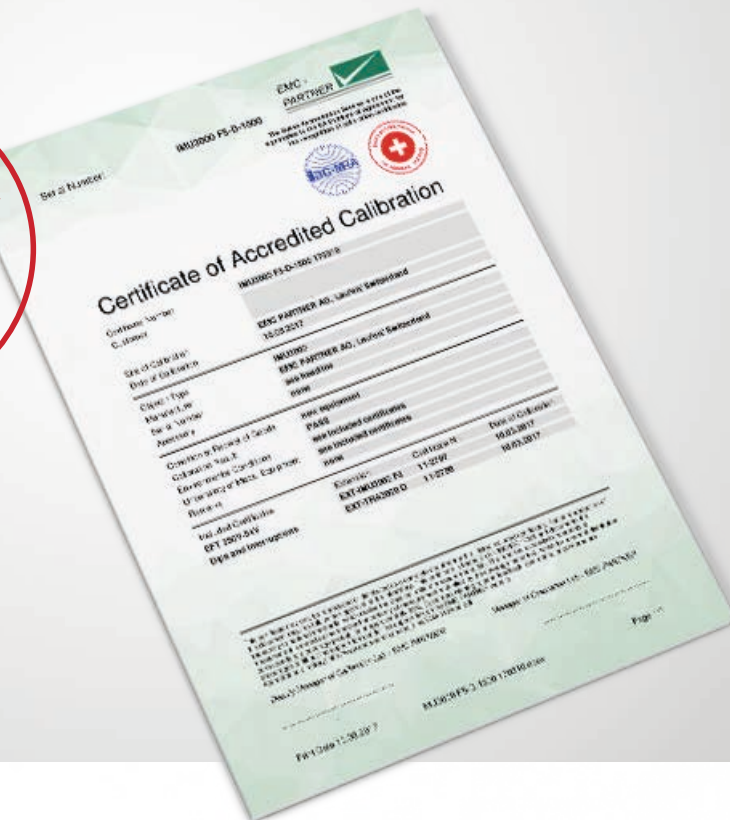
2012



IMU Series

2014





## THE FUTURE

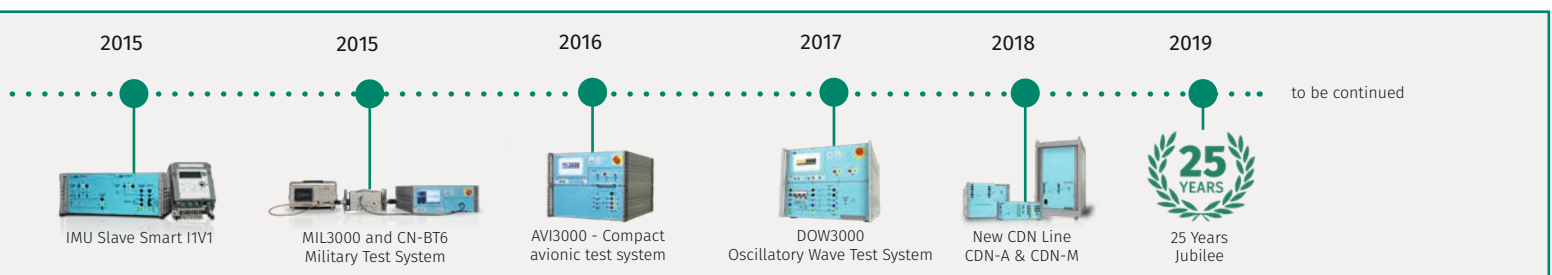
**Trained and motivated staff are our greatest resource.**

**A constantly evolving EMC market requires not only new products, but a new way of thinking.**

New technologies drive our business. EMC PARTNER is engaged in a global training program for sales and service partners providing the tools to meet future challenges. Linked with our commitment to the environment and our social responsibility, EMC PARTNER aim to build relationships that last.

### Accredited Calibration

As a global manufacturer of EMC test systems we have to respect national and international standard requirements. ISO 17025 is recognized worldwide as the benchmark for quality. With the SCS Nr. 146 we are accredited by the Swiss Calibration Service (SCS), to perform calibrations on all products manufactured by EMC PARTNER AG. The Swiss Accreditation Service (SCS) is a signatory to ILAC, the International Laboratory Accreditation Cooperation, which extends acceptance to a worldwide customer base.





UNIQUE EMC TEST SOLUTIONS

# **Product Application Overview**



## HOUSEHOLD AND CONSUMER ELECTRONICS

### Transient Systems for conducted immunity tests on electronic equipment

Basic and product standards including; ESD, EFT, surge, AC dips, AC magnetic field, surge magnetic field, differential mode, damped oscillatory and DC dips. According to IEC, EN, CISPR, ISO,

<b>MODERN</b>	Graphic user interface with multiple languages
<b>FLEXIBLE</b>	Full modularity configured as wanted
<b>EXPANDABLE</b>	Add circuits and accessories to extend test capability

#### Latest Products

IMU4000 and IMU3000 Modular Test Systems





## INDUSTRIAL APPLICATIONS

### Systems for testing DC-DC converters and EV charging stations

IEC, EN and ECE standards for electrical vehicle charging stations require EFT and Surge tests be carried out on high current connections. A new range of CDNs specially designed to operate up to 1,500V/200Adc make this possible. FULL RANGE option makes a 200A CDN fully compliant from 16A.

**FLEXIBLE**

CDN can be extended with higher dc voltages and additional circuits

**RELIABLE**

Used at the most prestigious test facilities around the world

**IMAGINATIVE**

Forward thinking solutions to meet tomorrows challenges

#### Latest products

New CDN Line, Automatic or manual Coupling up to 200A





## AVIONICS TESTING

### Test equipment for indirect lightning, voltage spikes and induced signal susceptibility

Impulse test equipment and accessories for aircraft electronics testing. Solutions for RTCA / DO-160 and EUROCAE / ED-14 sections 17, 19, 22 and 25. Specific equipment for Airbus ABD0100-1-2, ABD0100-1-8, Boeing D16050 and many more.

<b>RELIABLE</b>	High impulse fidelity coupled with long test duration.
<b>INTEGRATED</b>	Total system solution with generators, couplers and probes.
<b>ADVANCED</b>	Compact high tech solution with many unique features.

#### Latest products

AVI3000 & CN-BT7 coupler - Compact avionics test system







## TELECOM APPLICATIONS

### Test instruments for telecommunication equipment, interfaces and components

Impulse test equipment and accessories for telecommunications applications. Complete solutions for ITU-T K.44, ITU-T K.20, ITU-T K.21 basic and enhanced levels for impulse, power contact and power induction. FCC part 68 impulse tests on subscriber line equipment. Product standards and specialist component test requirements.

<b>COMPLETE</b>	Not just impulse generators, also power contact and power induction.
<b>UNIQUE</b>	Specialist equipment for telecom interfaces and protection devices.
<b>FLEXIBLE</b>	Choice of hardware to meet specific need.

#### Latest product

TEL0305LP3 - Impulse current generator with switched outputs





## MILITARY TESTING

### Test equipment for the military environment

Generators and accessories for testing military vehicles used by all services. Based around the MIL-STD-461 requirements CS106, CS115, CS116, CS117 and CS118. Complete modular test systems meet the highest levels. Additional test equipment is available to meet other MIL-STD requirements.

**COMPLETE**  
**RELIABLE**  
**EASY**

Everything included for test and verification.  
Long experience in the toughest environments.  
Fast system setup, touch panel control, on screen graphical help.



### Latest product

MIL3000 Test system - New technology test system for MIL-STD-461



## COMPONENT TESTING

### Impulse generators for qualification of components used in surge environments

Instruments for testing varistors, gas discharge tubes (GDTs), surge protective devices (SPDs), X / Y capacitors, suppressor diodes, connectors, inductors, fuses, resistors, etc. Specialist equipment for both 2-pole and 3-pole surge protection devices.

#### SAFE

Safety circuit with test cabinet interlock ensure personnel safety.

#### SPECIALIST

Unique test systems for specific applications.

#### RELIABLE

Solid state patented design performs when needed.



#### Latest product

COMP0804CAP - Active Flammability Tester for X and Y capacitors



## ENERGY DISTRIBUTION

### Impulse testing of monitoring and metering equipment in the energy distribution network

Specialist generators for testing electricity meters, protection relays, distribution transformers, etc. Latest generation smart meters can be tested for insulation properties, electrical parameters, differential mode disturbance as well as EMC.

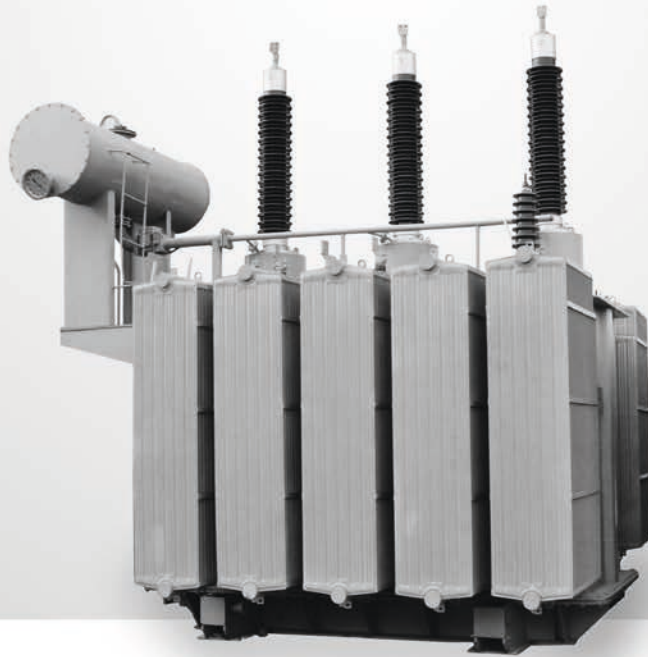
<b>HIGH TECH</b>	Special application based test equipment.
<b>RELIABLE</b>	Tried and trusted products built on long experience.
<b>FLEXIBLE</b>	Choice of hardware to meet specific need.

#### Latest Product

DOW3000 - Damped oscillatory wave test system







## INSULATION TESTING

### Generators to test voltage withstand characteristics of products and materials

The 1.2/50  $\mu$ s lightning impulses are applied for insulation tests on transformers, cables, switches, etc. and increasingly to test materials in the semiconductor industry. Repeatable waveforms, controlled energy content and high voltages are characteristic of these impulses. Measurement and recording of discharges plays a significant part in determining the quality of a test object

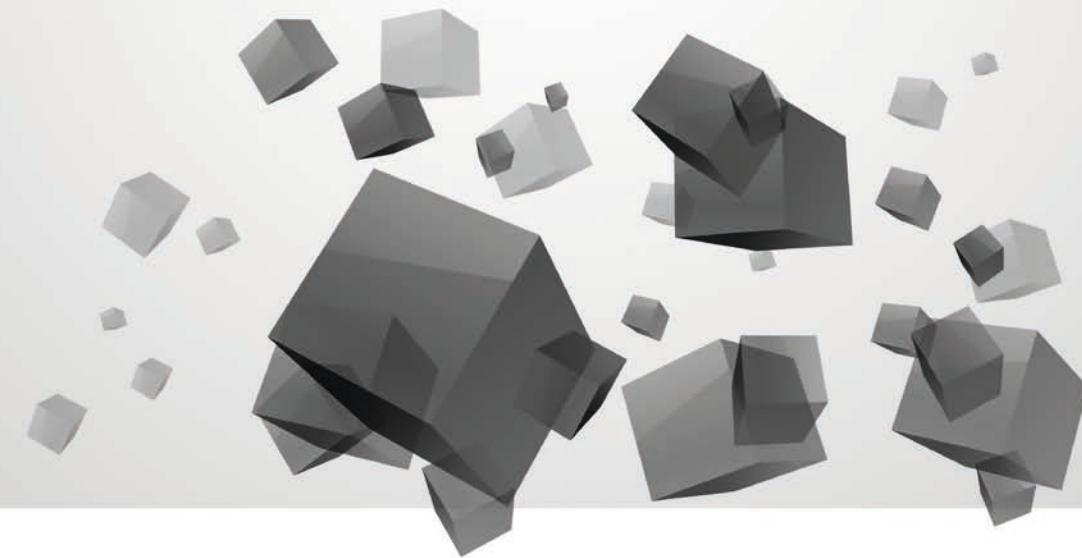
**UNIQUE**  
**RELIABLE**  
**SAFETY**

Solid state technology from 200V to 144kV.  
High impulse fidelity into capacitive and inductive loads.  
Emergency stop built into every generator

#### Latest Product

MIG2403 and mounted test cabinet





## EMISSION MEASUREMENT

### Test equipment for commercial and industrial electronics

Power line distortion can cause disturbance in electronic equipment and under certain conditions also affect humans. Flicker and Harmonic measurements are required as part of the European Union CE evaluation for many products.

<b>INTEGRATED</b>	Harmonics and flicker test system with all hardware in one unit.
<b>EXPANDABLE</b>	Single phase system can be extended to test three phases.
<b>RELIABLE</b>	Used and approved by top international agencies.

#### Latest product

HAR1000 + HAR-EXT1000 - Harmonics & Flicker Emission Analyzer





## SYSTEM AUTOMATION

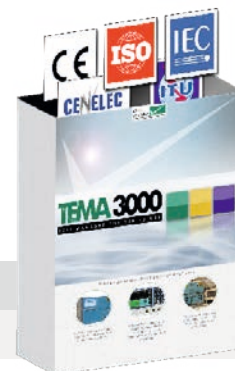
### Extend hardware with software packages that increase power and flexibility

EMC PARTNER test equipment offers a high degree of automation directly from the instrument front panel. Functions such as amplitude, polarity, phase angle and coupling path can all be adjusted. However, remote control from a PC offers additional benefits. A range of software packages provide reliable remote operation and enhanced operator features. Demo versions of all software packages are available free of charge on the EMC PARTNER AG website.

<b>INTUITIVE</b>	Interface easy to understand. Put us to the test.
<b>EXPANDABLE</b>	Software modules add capability as needs arise.
<b>READY</b>	Test routines pre-programmed for immediate use.

#### Latest product

TEMA3000 - Software test suite for EPOS test systems





## AFTER SALES SERVICES

### Our customers are important partners now and in the future

A successful sale is the start of a long and mutually beneficial relationship. Maintaining product availability at the highest level for our customers is top priority. A highly skilled and motivated team is at your service!

#### Training

In the factory or onsite training helps our customers to achieve maximum utilisation of their investment.

#### Calibration

Equipment is subjected to the same rigorous test regime whether for a manufacturer's or ISO 17025 accredited calibration.

#### Customer Service

Experienced engineers are on hand to provide the fastest response to any service request.

#### **INTERNATIONAL EXPERIENCED RESPONSIBLE**




Swiss expertise maintained through worldwide service centres.  
Many years in the EMC industry  
We stand behind our products



# Specific EMC test requirements ?

Search & find your required test equipment with our powerful **QUICK SELECTOR** tool at







**www.emc-partner.com**

**EMC PARTNER**   

search...

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Documents Exhibitions & Seminars Links

Find your Products by  Categories  Standards  Application  Impulse  Keyword  Send inquiry

### Search product by standard

Find Product by Standard: IEC, ITU, MIL-STD, EN, DO-160, Airbus & more...  
Select one or more checkboxes and press the search button to show the products.

<input type="checkbox"/> ABD0100.1.2	<input type="checkbox"/> IEC 60255-5	<input type="checkbox"/> IEC 61000-4-34	<input type="checkbox"/> IEC 62052-11	<input type="checkbox"/> MIL-STD-461 / CS117
<input type="checkbox"/> ABD0100.1.8.1	<input type="checkbox"/> IEC 60335-1	<input type="checkbox"/> IEC 61000-4-4	<input type="checkbox"/> ISO 10605	<input type="checkbox"/> MIL-STD-461 / CS118
<input type="checkbox"/> ANSI / IEEE 62.45	<input type="checkbox"/> IEC 60384-14	<input type="checkbox"/> IEC 61000-4-5	<input type="checkbox"/> ITU-T K.20	<input type="checkbox"/> MIL-STD-883
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<input type="checkbox"/> ANSI C62.41	<input type="checkbox"/> IEC 60664-1	<input type="checkbox"/> IEC 61000-4-9	<input type="checkbox"/> ITU-T K.22	<input type="checkbox"/> Renault 32-10-001/D
<input type="checkbox"/> ANSI C63.16	<input type="checkbox"/> IEC 60950-1	<input type="checkbox"/> IEC 61008-1	<input type="checkbox"/> ITU-T K.44	<input type="checkbox"/> Renault 32-10-035/A
<input type="checkbox"/> DC 10614	<input type="checkbox"/> IEC 61000-3-2	<input type="checkbox"/> IEC 61009-1	<input type="checkbox"/> ITU-T K.45	<input type="checkbox"/> RTCA DO-160 - Section 17
<input type="checkbox"/> EN 50121-3-2	<input type="checkbox"/> IEC 61000-3-3	<input type="checkbox"/> IEC 61010-1	<input type="checkbox"/> JASO D 001-94	<input type="checkbox"/> RTCA DO-160 - Section 19
<input type="checkbox"/> EN 50121-4	<input type="checkbox"/> IEC 61000-4-10	<input type="checkbox"/> IEC 61051-1	<input type="checkbox"/> JESD22-A114-B	<input type="checkbox"/> RTCA DO-160 - Section 22
<input type="checkbox"/> EN 50155	<input type="checkbox"/> IEC 61000-4-11	<input type="checkbox"/> IEC 61180-1	<input type="checkbox"/> JESD22-A115-A	<input type="checkbox"/> RTCA DO-160 - Section 25
<input type="checkbox"/> EUROCAE/ED-14	<input type="checkbox"/> IEC 61000-4-12	<input type="checkbox"/> IEC 61180-2	<input type="checkbox"/> MIL-DTL-23659D	<input type="checkbox"/> SAE J551-15
<input type="checkbox"/> FAA AC 20-136	<input type="checkbox"/> IEC 61000-4-16	<input type="checkbox"/> IEC 61340-3-1	<input type="checkbox"/> MIL-STD-1512	<input type="checkbox"/> STANAG 4239
<input type="checkbox"/> IEC 60060-1	<input type="checkbox"/> IEC 61000-4-18	<input type="checkbox"/> IEC 61340-3-2	<input type="checkbox"/> MIL-STD-1541	<input type="checkbox"/> UL 1414
<input type="checkbox"/> IEC 60060-2	<input type="checkbox"/> IEC 61000-4-19	<input type="checkbox"/> IEC 61439	<input type="checkbox"/> MIL-STD-331	<input type="checkbox"/> UL1449
<input type="checkbox"/> IEC 60065-1	<input type="checkbox"/> IEC 61000-4-2	<input type="checkbox"/> IEC 61643-1	<input type="checkbox"/> MIL-STD-461 / CS106	<input type="checkbox"/> VDE 0675 Teil 6
<input type="checkbox"/> IEC 60255-22-1	<input type="checkbox"/> IEC 61000-4-28	<input type="checkbox"/> IEC 61730-1	<input type="checkbox"/> MIL-STD-461 / CS115	<input type="checkbox"/> VW TL 824-66

**Search Product by**

- Standard
- Application
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- Keyword

**or send us your concrete inquiry directly via website**



# TEMA3000 SOFTWARE SUITE

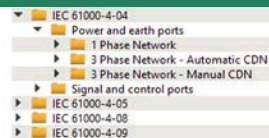
**TEMA3000 - The best solution for professional EMC Test Labs enables comfortable test setups, easy parameter changes and customizable protocols with DSO integration for EPOS based test system.**

## Customizable Reporting



- › Customize & edit your reports
- › Export to multiple file formats
- › Integrate DSO measurements

## Manage Tests and Sequences



- › Predefined basic IEC test setups
- › Save and load tests & sequences
- › Combine tests to sequences

## Productive Workflow



- › Minimum learning time
- › Drag and drop technology
- › Integrated assistant function

## Smart Connectivity



- › Transfer tests / reports to PC
- › Integrated webserver
- › Remote control from computer

# THE EMC PARTNER PRODUCT RANGE

**Find further brochures on our website [emc-partner.com/brochures](http://emc-partner.com/brochures) or contact your local representative for a hardcopy.**

## IMMUNITY TESTS

Transient Test Systems for all EMC tests on electronic equipment. ESD, EFT, surge, AC dips, AC magnetic field, surge magnetic field, common mode, damped oscillatory and DC dips. According to IEC and EN 61000-4-2, -4, -5, -8, -9, -10, -11, -12, -13, -14, -16, -18, -19, -29.



## LIGHTNING TESTS

Impulse test equipment and accessories for aircraft, military and telecom applications. Complete solutions for RTCA / DO-160 and EURO-CAE / ED-14 for indirect lightning on aircraft systems, MIL-STD-461 tests CS106, CS115, CS116, CS117, CS118 and Telecom, ITU-T .K44 basic and enhanced tests for impulse, power contact and power induction.



## COMPONENT TESTS

Impulse generators for testing varistors, gas discharge tubes (GDT), surge protective devices (SPDs), X / Y capacitors, circuit breakers, electricity meters, protection relays, insulation material, suppressor diodes, connectors, chokes, fuses, resistors, emc-gaskets, cables, etc.



## EMISSION MEASUREMENTS

Measurement of Harmonics and Flicker in 1-phase and 3-phase electrical and electronic products according to IEC / EN 61000-3-2 and 61000-3-3 . HARCS Immunity software adds interharmonic tests, voltage variation according to IEC/EN 61000-4-13, -4-14.



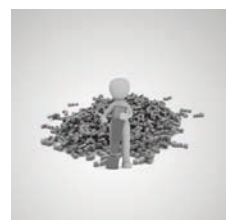
## SYSTEM AUTOMATION

A full range of accessories enhance the test systems. Test cabinets, test pistols, adapters and remote control software, simplify interfacing with the EUT. Programmable PSU, EMC hardened for frequencies from 16.7Hz to 400Hz. PS3-SOFT-EXT complies with IEC / EN 61000-4-14 and -4-28.



## SERVICE

Our commitment starts with a quality management system backing up our ISO 17025 accreditation. With the SCS number 146, EMC PARTNER provides accredited calibration and repairs. Our customer support team is at your service!





For further information please do not hesitate to contact your local EMC PARTNER AG representative or visit our website for more information and contact details.

# [www.emc-partner.com](http://www.emc-partner.com)



## Swiss Headquarters

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## Your local representative

Information and specifications in this document are an indication of capability only. V.3.0. Technical performance is given in the EMC PARTNER AG Technical specification for the corresponding instruments. The English text is the only binding version of this document. Translation into other languages is not guaranteed to be a true representation of content or specification. Version 3.0. Subject to change without notice.