

## ACCREDITED SITE VALIDATION

We are the European market leader in accredited site validations. Due to intensive investigation, many of our results have been adopted in international standards (e.g. CISPR 16 series). The resulting know-how lead is applied in the course of the services for our customers.

### Standard Validation Measurement:

- Shielding Effectiveness
- NSA / RSM
- NSIL (9 kHz - 30 MHz)
- Site VSWR
- Field Uniformity
- Absorber Lined Shielding Enclosure
- Ambient Noise
- Freespace VSWR Measurement
- Table Influence
- Reverberation Chamber

### Test Sites have to be Calibrated Regularly

Test sites have to be calibrated regularly even if there have not been any changes in the construction. We offer service for the accredited calibration of EMC test sites. The aim is to provide the traceability of the EMC test site as required by ISO 17025 for accredited test houses.

### Calibration of Cables

We offer the accredited calibration of cables (e.g. cables installed below the ground plane) in combination with the re-validation of the chamber in the frequency range 10 MHz – 18 GHz.

## REFERENCES

Among our worldwide customers there are manufacturers of EMC test facilities, operators of EMC test houses, research centers, universities and companies measuring the electromagnetic fields generated by mobile communication base stations.

- More than 1.000 performance evaluations and expert reports regarding radiated-emission and radiated susceptibility sites worldwide since 1990 for all major test site producers.
- More than 25.000 antennas and field sensors calibrations for EMC test laboratories in Europe.
- Antennas with measurement systems and test software operated by major chamber manufacturers and test labs worldwide.

Accredited test house No. 0312 and Accredited calibration laboratory No. 0612 according to EN ISO/IEC 17025, FCC Recognition as accredited EMC Test Laboratory No.835627-reports and certificates accepted worldwide (ILAC)



## CONTACT

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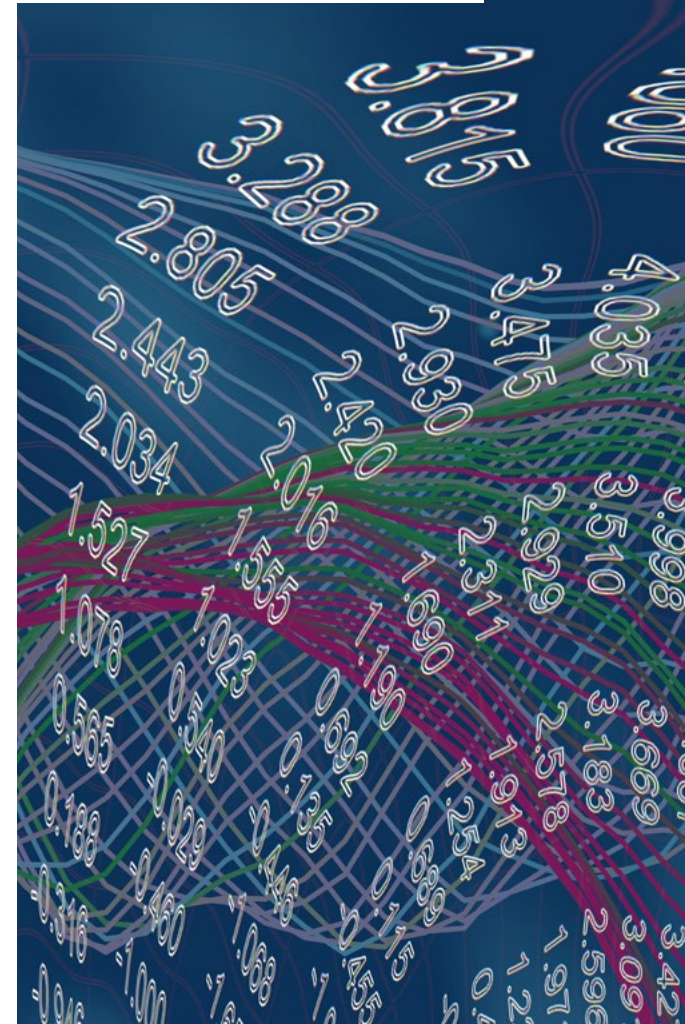
RF Engineering



SEIBERSDORF  
LABORATORIES



FREQUENTLY ASKED SOLUTIONS



SERVICES & PRODUCTS

RADIO FREQUENCY  
ENGINEERING

### PRODUCTS & SERVICES

The activities of our business unit are based on long lasting scientific research works. The research output is in line with European and international standardisation works and is published at scientific conferences. For our products, the research output is the basis for a continuous development. The team of experts is specialised in:

- Calibration of antennas, field probes and other RF equipment used for the measurement of electromagnetic compatibility
- Validation of EMC measurement test sites
- Antennas for site validation
- Measurement systems

### ACCREDITED CALIBRATION SERVICES

Our accreditation for calibration according to ISO 17025:

- Antennas
- Field Probes
- RF test equipment (LISN, current probes, comb generators, attenuators, cables etc.)
- Recognised world-wide in all EA and ILAC member states.

Our team of experts offers you:

- Services of an independent calibration laboratory
- Short turnaround time and flexible scheduling
- Antenna calibration all the year round



Improved RefRad X

### ANTENNAS & MEASUREMENT EQUIPMENT

#### CalStan 11

- A software tool for automation of RF measurements such as NSA, NSIL, sVSWR, Cable Loss etc.
- Free demo software available:  
<https://www.seibersdorf-laboratories.at/calstan11>

#### Precision Omnidirectional Dipole Antennas - POD 16 / POD 618

- Compliant to CISPR 16-1-4 for site validation above 1 GHz
- Excellent dipole-like radiation pattern up to 18 GHz
- Fully automated positioning unit (SPA and SPM) available

#### Magnetic Field Exposure Assessment System - MF EASY

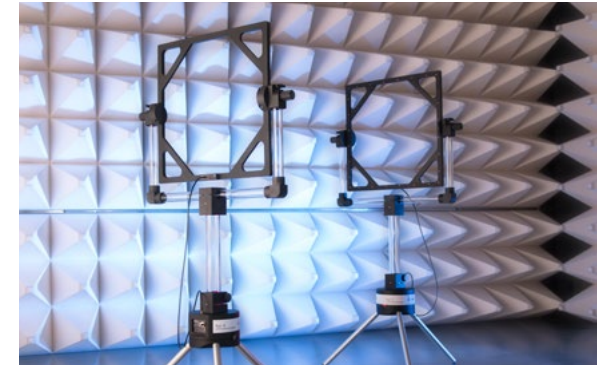
- Scalable and flexible multichannel measurement system for magnetic fields
- Simultaneous fully isotropic measurements on 5 or 10 (15) independent measurement positions
- Frequency range DC – 400 kHz

The MF EASY can be powered from 12 V battery and is therefore perfectly usable for on-vehicle measurements.



#### RefRad X

- A battery operated comb generator and field source
- Improved frequency accuracy for increased dynamic range
- LISN check from 10 kHz
- A valuable tool for engineers ensuring the quality of radiated and conducted EMC and EMF measurements



#### Precision Loop Antenna – PLA-R

- Compliant to CISPR 16-1-4 and standards for radiated emission testing, 9 kHz – 30 MHz
- Active antenna, battery powered, with low noise preamp and passive mode for strong signals
- Saturation detection (waveform independent) that communicates with RE test software
- Antenna mounting and stand for easy change of orientation (x, y, z) included

#### Loop Antenna Set for Site Validations – PLA-Set

- Active battery powered transmit loop antenna PLA-T and active receive loop antenna PLA-R
- Designed for NSIL testing 9 kHz – 30 MHz up to 10 m distance (CISPR 16-1-4, internal draft)
- Antenna mounting and stand for easy change of orientation (x, y, z) and laser pointer for alignment included
- Shielding Effectiveness measurement with large dynamic range (EN50147-1, IEEE 299) and no need for additional power amplifier

#### Antenna Stands

- Easy mounting and adjusting the NSA transmit antenna: 1 m and 2 m height in horizontal polarization and 1 m and 1.5 m in vertical polarization
- Convenient tilting of the transmit and receive antennas for Freespace NSA measurement
- Probe Positioner for FU-testing