Rohde & Schwarz On-site calibration services

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# We are the experts for on-site test and measurement services.



# Especially when you really need us.

## Service solutions tailored to your specific needs

Maximum availability, minimum downtime

Professional calibration and **maintenance** to keep your valuable investment in the best shape Accredited calibrations,

manufacturer and multivendor calibrations

Flexibility to fulfill your individual requirements

No transportation risk or costs Precise and traceable measurement

**Highly qualified staff** to support you with all technical issues

## Demands of your business

#### We're there where you need us, and you can always count on us.

Efficient operation of your test facility is an essential part of running a profitable business. If you manage an R&D lab to supply prototypes for your next product launch, or if you provide EMC compliance testing for your customers or on-site testing for your production line, you need to ensure high availability of your measuring equipment to meet the demands of your business.

Any downtime has a direct impact on the utilization of your measuring equipment, resulting in a degraded cost/benefit ratio. Therefore, downtime is a major cost factor for you. This is why we do everything we can to minimize the time your instruments have to be offline for maintenance and calibration purposes and you can focus on the core tasks of your business. In your lab, in your EMC test chamber or in our mobile calibration laboratory – often the necessary work can be done fast and most efficiently at your site. This eliminates shipping time and saves you the effort, risk and cost of packing and transporting your equipment. We coordinate service requests with you to meet your individual time requirements and schedule. This ensures that you can put your equipment back into operation as quickly as possible.

For services such as repairs that have to be performed at our service center, we give binding, no-surprise, fast-return commitments. We will arrange and coordinate shipping for all equipment that has to be shipped to a Rohde&Schwarz or a third-party service center for further handling.



# For us, precision is not a question of location

## We're there to maximise the availability of your equipment

On-site services are offered as permanent installations at customer facilities or as temporary campaigns either at the customer's facilities or in our mobile calibration laboratory. Depending on your needs, we can organize fully equipped mobile calibration labs of different sizes.

You can also choose our virtual on-site calibration service including packaging, pickup and return of your instruments directly from your site to our service centers. Especially with virtual on-site service, you get your equipment back faster than with the normal depot service and spare the travel costs that incur with regular on-site service.



## **On-site**

- Rohde&Schwarz professionals performing calibrations and adjustments at your company site to minimize downtimes and maximize availability
- Immediate arrangement and coordination of shipping to service center for repair services that cannot be performed on-site with fast return commitments
- Permanent and temporary campaigns at customer facilities

# Individual requirements

## We focus on what's important - and that's you!

We know that all customers have individual requirements. This is why we offer flexible solutions that are tailored to your specific needs. Whatever your capacities, priorities and schedule – we can adapt to it.

For the on-site campaign, we can bring our fully equipped, mobile calibration laboratory or can calibrate directly in your facilities. Whether in a part of your laboratory or in a separate room – we have the flexibility to perform calibrations wherever it fits you best. Plus, we will provide consultation on the optimal conditions for a precise calibration such as temperature, humidity and space requirements.

## Virtual on-site

- Packaging, pickup and return of equipment from customer site to Rohde&Schwarz service center
- I Fast turnaround times
- I Scheduled return of equipment
- No travel costs for Rohde&Schwarz team

## Flexibility

If you notice during the project that further equipment not stated in the initial on-site contract needs to be serviced, we can easily include this in our schedule. In addition to calibrating your T&M instruments, we can also check the equipment in your labs and EMC test chambers, e.g. cabling, couplers, antennas and amplifiers. Rohde & Schwarz | On-site calibration services

## Wide range

## Instruments and standards

As an equipment manufacturer, we know the relevant parameters for a conclusive calibration. That is what makes us an ideal partner for calibrating other manufacturers' instruments.

Our calibration services cover a large portfolio of third-party instruments. The array of equipment that we calibrate ranges from DC, RF and MW to fiber optics and includes TV and broadcast measuring instruments, automotive radar systems and, in particular, EMC test equipment. For example, we calibrate your

Burst, surge and ESD instrumentation to EN 61000-4-x (or ISO 10605)

EMI receiver to CISPR 16-1-1

AMNs to CISPR 25

We can calibrate not only individual instruments but also complete systems such as those for EMC testing.

DC and low frequency	RF measurands	Time and frequency	Optics
<ul> <li>DC voltage*</li> <li>Direct current*</li> <li>AC/DC transfer</li> <li>DC resistance*</li> <li>Electric power</li> <li>Capacitance</li> </ul>	<ul> <li>RF voltage*</li> <li>RF power*</li> <li>RF impedance*</li> <li>RF attenuation*</li> <li>Pulsed measurands*</li> </ul>	I Time interval* I Frequency	<ul> <li>Wavelength</li> <li>Optical power</li> <li>Linearity</li> <li>Insertion loss</li> <li>Optical fiber attenuation</li> <li>Optical fiber length</li> <li>Optical attenuation</li> </ul>

\* Accredited calibration available

Rohde&Schwarz calibration services have one primary objective: to ensure the functionality and accuracy of your valuable T&M instruments for years to come. For calibration, we use the test systems that we developed and rely on in manufacturing our own products. This enables us to check measurement points **over the complete frequency range**. We also have the technical documentation and test routines available to measure all the parameters and points required for accurately calibrating third-party instruments.

## Single point of contact

On request, we cooperate with other suppliers to service your laboratory. As your general contractor, we coordinate the entire project and reliably help you to achieve your goals. Having a single point of contact gives you more time to focus on essential matters and your core business.

## **Ensuring compliance**

## National and international standards

As a market leader in test and measurement, we know about the importance of reproducible and exact measurements in development, production and service. Our strict compliance with national and international standards means you can rest assured that Rohde&Schwarz service meets our – and your – highest standards. The traceability of our calibration results to national and international standards means maximum compliance for you and an optimal precondition for any audit.

Since 1977, Rohde & Schwarz has been operating accredited laboratories in Germany. We have worked hard and thoroughly ever since to keep and enhance this accreditation. Building trust in our technical expertise and experience is an integral part of our service offering. We are taking a step further by bringing accredited calibration directly to your doorstep. With this unique offering, we can provide you with the most convenient and cost-effective calibration services directly at your test facilities.

Europe



North America



## On-site and with DAkkS accreditation

On-site calibrations from Rohde&Schwarz cover a broad spectrum of measurements. We use methods based on proven competencies in line with DIN EN ISO/IEC 17025:2005 as well as verified and validated by national accreditation bodies, e.g. Deutsche Akkreditierungsstelle (DAkkS).

## Market segments

With our technical expertise and experience, we serve multiple market segments. In any segment, compliance with standards presents unique challenges, from R&D to certification to production testing.

- Automotive
- I Aerospace and defense
- I Broadcast and media
- I Electronic design
- Wireless communications

Since your product or service must comply with ISO, EN, CISPR, FCC or MIL standards, we make sure your measuring equipment is calibrated in line with applicable standards.

# We are your partner for EMC testing



# And we offer expert solutions

The complexity of EMC systems requires special service concepts.

And it does not matter whether you want to determine immunity to burst, surge or flicker or to test your ESD guns.

We provide more than you expect. In addition to calibrating your T&M instruments, we also check the equipment of your labs and EMC test chambers, e.g. all cabling and amplifiers. On request, we integrate the measurement results into your measurement software.

Calibrations are performed in line with the relevant standards, manufacturers' specifications or your individual needs – with full accreditation. The interplay of electronic, mechanical and pneumatic components with T&M and system equipment requires expertise in a wide range of disciplines.

Together with selected subcontractors, we can offer you a complete solution for your EMC test chamber.

As your general contractor, we coordinate the entire process and reliably help you achieve your goals. Having a single point of contact gives you more time for essential matters.

We would be happy to visit your facility and work out a custom solution together with you. Rohde & Schwarz | On-site calibration services

## Multiple advantages

#### Instruments and standards



Having your instruments calibrated by Rohde&Schwarz offers you multiple advantages. As the manufacturer, we are thoroughly familiar with all the special features of our products and can resolve any issues quickly.

Even the best instruments may over time deviate from their optimal performance and require adjustment or repair. In most cases, these services can only be performed by the instrument manufacturer. Having your instruments calibrated by Rohde&Schwarz therefore not only saves you time but also forwarding costs.

To ensure your Rohde&Schwarz instruments are always in best shape, whenever we calibrate them we also scan them for viruses and malware, update the firmware and the security software and perform the necessary preventive maintenance. The R&S<sup>®</sup>Manufacturer Calibration and the R&S<sup>®</sup>Accredited Calibration also include all necessary adjustments to your instrument.

A calibration by the manufacturer protects your valuable investment and ensures a long product life.





## **On-site process**

As part of our customized solutions, we develop a schedule for the on-site campaign that matches your requirements. The example in the diagram below shows the most important steps of such a schedule.





# Quality is inherent in all our products. And in all our services.

Our various calibration products enable us to tailor our services to your individual needs. Whether you choose our R&S®Accredited Calibration or our R&S®Manufacturer Calibration – you will always receive a service package that is more complete and comprehensive than what a pure service provider can offer.

## **R&S®Manufacturer Calibration**

An R&S<sup>®</sup>Manufacturer Calibration ensures you a comprehensive range of services based on national and international standards. As the manufacturer, we take care of all required adjustments, firmware updates and hardware modifications. We document each calibration with a certificate that contains both the incoming and outgoing status of your instrument.

## **R&S®Accredited Calibration**

An R&S®Accredited Calibration ensures compliance with international standards and calibration data traceability. Many standards require accredited calibrations as proof of competence. Our accredited service centers not only measure accredited parameters, they also verify all product characteristics. An R&S®Accredited Calibration is as comprehensive and in depth as an R&S®Manufacturer Calibration and provides additional accreditation documentation.

## **Multivendor performance calibration**

As an equipment manufacturer, we know the relevant parameters for a definitive calibration. That is what makes us an expert partner for calibrating other manufacturers' instruments. All required manufacturer-specified instrument parameters are measured. You receive a calibration certificate and documentation of measurement results. These services are **also available as accredited services**.

If you require a calibration by the manufacturer, we also offer the multivendor manufacturer calibration for third-party instruments. Rohde&Schwarz will organize the secure packaging and shipment of your equipment to the original manufacturer for calibration.

#### **Repair services**

If you need repairs, you can rely on Rohde&Schwarz as a fair partner. As the manufacturer we know our own products best, of course, so we not only repair your equipment but also prepare it for future use. In order to prevent failure, we analyze each product using advanced diagnosis systems to detect irregularities early on. Plus, we perform all the modifications and updates required for your product.

Necessary adjustments and repairs for third-party instruments, which have to be performed by the manufacturer, will be managed by Rohde&Schwarz.

For all repairs that have to be performed in the Rohde&Schwarz or third-party service center, Rohde&Schwarz will organize the secure packaging and shipment of your equipment.

## Rohde & Schwarz calibration services

	R&S <sup>®</sup> Manufacturer Calibration	Multivendor perfor- mance calibration
ISO 17025 accredited	•	•
ISO 9001 certified	•	•
Calibration in line with ISO 17025	•	•
Traceability to national/international standards	•	•
Virus and malware scan	•	
Incoming results	•	•
Comprehensive measurement in line with manufacturer specifications	•	•
Firmware update	•	
Required adjustment	•	
Security updates	•	
Preventive maintenance/performance modifications	•	
Outgoing results (after repair or adjustment)	•	
Calibration certificate	•	•
R&S®Online Service Management	•	•
Service report	•	•
Cleaning	•	•
Electrical safety test	•	•

## We believe your instruments should be easy to manage.

# R&S<sup>®</sup>Online Service Management

R&S<sup>®</sup>Online Service Management provides you with a clear overview and helps you to save time by simplifying the management of instrument data, service cases and test equipment. This system contains your current service cases, complete service history and all documents for your instruments.

Equipment	Service requests	Contracts and more
Manage your equipment – see at a glance whether an instrument was recently calibrated or needs to be in the near future.	Place service requests, track the status of orders or review past services. You can also download calibra- tion and service reports.	Keep your contracts in view and store your per- sonal data – user, division, contact information and much more.

## Benefits at a glance

- Rohde&Schwarz encryption meets the highest standards. We make sure that you, and only you, can access your data
- R&S<sup>®</sup>Online Service Management also allows you to manage other manufacturers' instruments that we service. Calibration documents and lists can be exported in standard formats
- R&S<sup>®</sup>Online Service Management can also be set up to alert you about upcoming calibration dates
- I Easy-to-print shipping label and service reference number for convenient shipping
- I Your instrument is already registered before it arrives at Rohde&Schwarz

## Quick and easy

R&S<sup>®</sup>Online Service Management is there when you want to have instruments calibrated or need to order other services. You can place orders from anywhere, at any time, quickly and easily.



Use R&S<sup>®</sup>Online Service Management for even more advantages.

## **Global professionals**

Rohde&Schwarz is your experienced and qualified worldwide partner for calibration and repair services. Our on-site specialists can provide consultation on technical issues and will gladly inform you about further services we can perform for equipment at your laboratory or EMC test chamber. On request, we can also develop tailored solutions for upgrading your EMC chambers or replacing old instruments with new high-performance products.

Portland

USA Los Angeles Ottawa

Columbia/Maryland

Brazil

Uruguay

Rio de Janeiro

São Paulo

Toronto

Colombia

Chile

Argenti

Dalla Monterrey xico Mexico C

With our broad network of T&M experts, we have the expertise and capacity to cater to your individual needs. Over **10,000** employees work for Rohde&Schwarz worldwide. Our service and sales network comprises subsidiaries and offices in more than **70 countries** to ensure close contact with our customers.



## Customer feedback

Customer feedback is of high importance to us. After each on-site service job, we perform a review meeting with you. We are permanently optimizing services to provide an outstanding, superior customer experience to you. The quality we deliver has already delighted many customers:

## What do you think?

"Excellent service as always."

"Good cooperation, great team."

"Very patient and willing to work around a crazy production schedule, always a pleasure."

"As usual, everything was performed to our full satisfaction."

"Many thanks for the great professional job. Clear and very good explanations."

"Smooth operation as always. Thank you."

"Outstanding service. Please keep up the good work."

"We would like to say thank you for the good service and the very friendly cooperation with the project manager."

"Very good as always. Thank you very much."

## Service that adds value

- I Worldwide
- Local and personalized
- I Customized and flexible
- I Uncompromising quality
- Long-term dependability

#### Service and sales locator

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