

ROHDE & SCHWARZ

Make ideas real



R&S® TS9981C COMMERCIAL RADIATED IMMUNITY TEST SYSTEM

Solution Brief

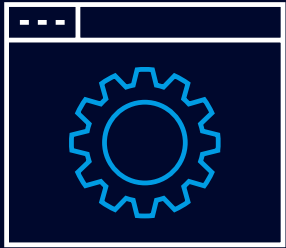


EMC SYSTEM SOLUTIONS

THE RIGHT SYSTEM FOR YOUR REQUIREMENTS

Whether you're looking for small precompliance test systems or large fully automated setups, Rohde&Schwarz provides tailored solutions to fit your specific needs. As an industry leader in EMI test receivers, test software and broadband amplifiers, Rohde&Schwarz has all the core components for a complete system. Moreover, we have extensive experience in the design and development of electromagnetic compatibility (EMC) test systems and entire EMC test facilities that are used worldwide. This, combined with active participation in EMC standards organizations, makes Rohde&Schwarz your ideal EMC system solution provider.

KEY BENEFITS



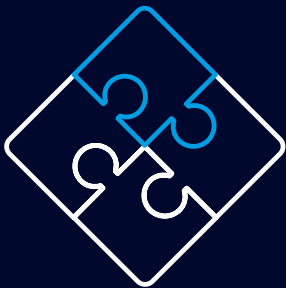
ALL-IN-ONE SOLUTION

Rohde&Schwarz takes on system responsibility, ensuring compliance with current standards and compatibility with your existing test equipment. Our industry collaborations with key suppliers of chambers, transient equipment and other components enable a true turnkey solution.



SYSTEM DEFINITION

Our tailored system design, from concept to implementation, is built on a modular framework that enables future upgrades. All core instruments come from Rohde&Schwarz. Additionally, the system is optimized to meet critical RF performance requirements.



SYSTEM INTEGRATION

System production, integration and verification testing are performed at regional system production facilities before delivery. Our highly experienced Rohde&Schwarz engineers carry out on-site installation, commissioning, acceptance testing and professional training.



SERVICE & SUPPORT

Rely on Rohde&Schwarz EMC system service level agreements (SLA) to ensure your system is operating at peak performance and critical uptime requirements are met from the day you go live and throughout the system lifecycle.

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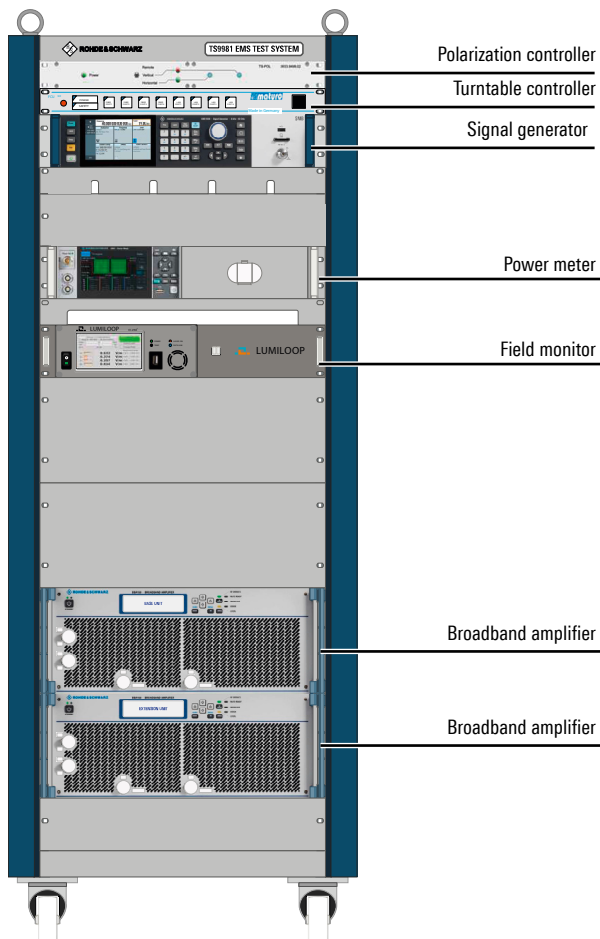
IMMUNITY TESTING OF ELECTRICAL AND ELECTRONIC EQUIPMENT IN LINE WITH IEC/EN 61000-4-3

The IEC/EN61000-4-3 standard establishes a common reference for evaluating the immunity of electrical and electronic equipment when subjected to radiated radio-frequency (RF), electromagnetic fields that are not in close proximity to the equipment under test (EUT). The R&S®TS9981C radiated immunity test system is a typical system solution to achieve field strengths as defined in IEC/EN61000-4-3 for the frequency range from 80 MHz to 6 GHz. All core instruments are available with accredited calibration.

System specifications in brief

Parameter	Specification
Frequency range	80 MHz to 6 GHz
Field strength	10 V/m + 80 % AM or higher
Test distance	up to 3 m
Uniform area specifications	1.5 m × 1.5 m
Modulation	CW, AM, FM, φM, PM

Example of a rack layout



Scope of delivery

This table outlines typical system components for the R&S®TS9981C, including optional extensions and accessories. Feel free to contact us if you need more information or have inquiries.

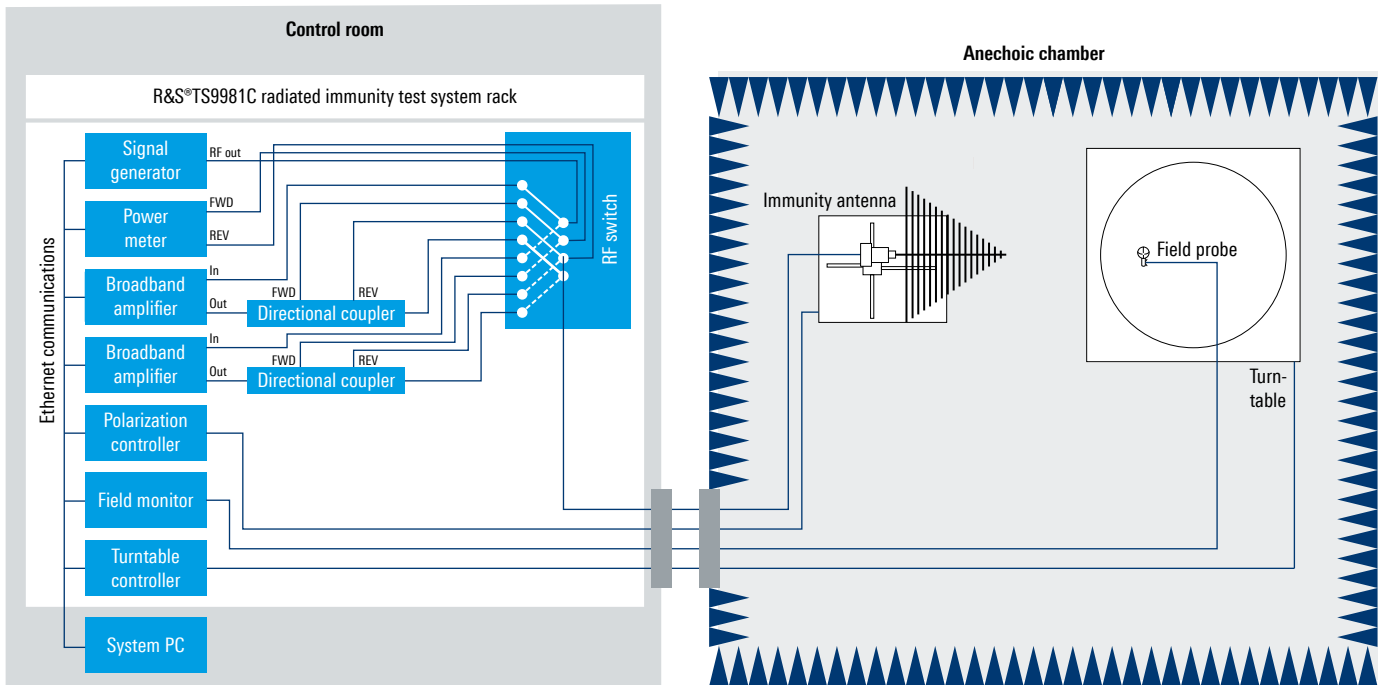
Essential system components from Rohde & Schwarz	Specification
Signal generator	up to 6 GHz including options for pulse modulator, pulse generator, AM/FM/φM
Broadband amplifier system	80 MHz to 6 GHz with directional coupler, amplifier input, forward and reverse power switching, and high-power switching
Power measurement system	for forward and reverse power monitoring
High-performance immunity antenna set	80 MHz to 6 GHz
Field monitoring system	up to at least 6 GHz
Antenna mast	with automated pneumatic polarization control
R&S®ELEKTRA test system software	
Site-specific interconnecting cables	
Tailored system documentation	
On-site installation, commissioning, acceptance testing and training	

Recommended system components, accessories and extensions from Rohde & Schwarz

- Adaptation to customer-specific requirements, e.g. field strength, frequency range, test distance
- R&S®AdVISE visual EUT monitoring system
- Test system PC bundle
- System extension for conducted immunity testing in line with IEC/EN61000-4-6
- BCI (bulk current injection) test accessories kit "Commercial"
- Basic CDN (coupling decoupling network) test accessories kit "Commercial"
- EM Clamp test accessories kit "Commercial"

COMMERCIAL RADIATED IMMUNITY TEST SYSTEM

Simplified RF block diagram of the R&S®TS9981C with an anechoic chamber



SERVICES AND SUPPORT

Rohde & Schwarz offers customers dependable local service to ensure optimal system reliability. We support you through all phases of the system lifecycle and are always on hand with an extensive and constantly growing portfolio of services that can be tailored to your specific needs.

Keep your system running seamlessly with Operational Services from Rohde & Schwarz, which include Calibration, Software Maintenance, Technical Support and Preventive Maintenance. Minimize interruptions unplanned events and stay up to date with the latest standards using Rohde & Schwarz Availability Services which cover Repair, System Upgrade, Training and Application Engineering support the service level .

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