



# EMC TESTING FOR MEDICAL DEVICES

## INTRODUCTION

Comprehensive EMC testing for medical devices is an absolute requirement and crucial for:

- ▶ Malfunction prevention
- ▶ Patient safety
- ▶ Reliable performance

**ROHDE & SCHWARZ**

Make ideas real



## DID YOU KNOW ?



Comprehensive electromagnetic interference (EMI) and electromagnetic susceptibility (EMS) testing is required for all medical devices that are electrically powered or have electronic functions or sensors



These medical devices must also meet the stringent local and international regulations in place to guarantee their safe and effective operation

## EXAMPLES OF MEDICAL DEVICES

The following table provides examples of medical devices classified solely under Regulation (EU) 2017/745, as referenced in MDCG 2021-24 Guidance on classification of medical devices.

Class	Risk level	Exam-
I	Low risk	Hospital beds, electric wheelchairs, digital thermome-
IIa	Medium risk	External hearing aids, powered drills, ECG machines
IIb	Medium to high	Anesthesia equipment, X-ray machines, lung ventilators
III	High risk	Automated external defibrillators (AED), neurostimulators*, pacemakers*

\*Applies to active implantable devices

## WHERE WE CAN HELP

- ✓ Adherence to FDA, CE, IEC and local standards
- ✓ Debugging interference sources and lab pre-compliance testing
- ✓ Ensuring seamless connectivity and wireless coexistence
- ✓ Scientific monitoring of medical device performance during test

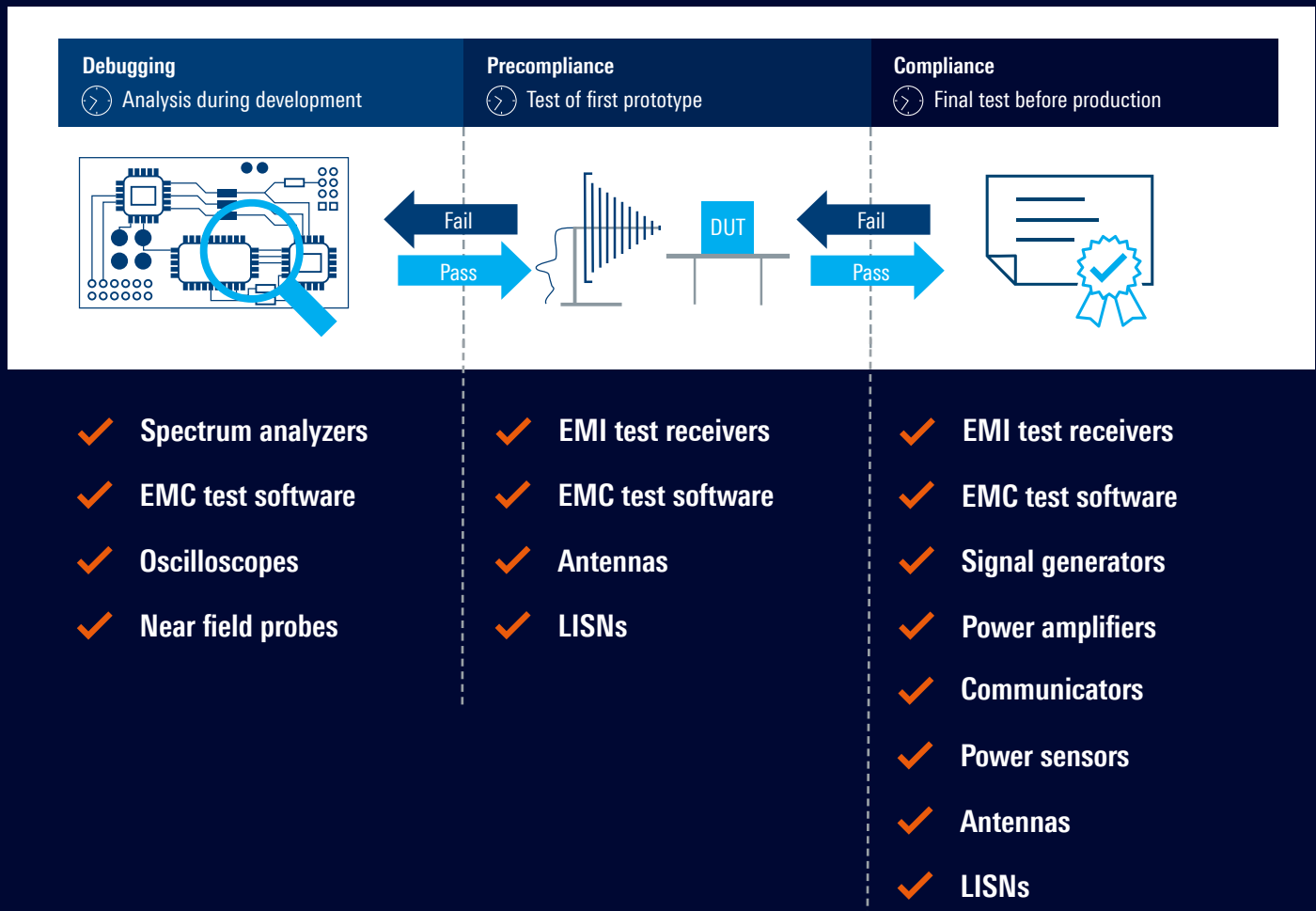
# OUR EXPERT SOLUTIONS FOR ALL DESIGN AND TESTING NEEDS

## Our solutions:

## Supported standards and technologies:

Basic medical EMC test solutions	CISPR 11   IEC 60601-1-2   YY 9706.102
Radiated spurious emission test solution	GSM   WCDMA   4G   5G   Bluetooth   WLAN
Wireless coexistence test solution	ANSI C63.27   ETSI EN 300 328   ETSI EN 301 893
Immunity against RFID test solution	AIM 7351731
Hearing aids EMS test solution	IEC 60118-13   ANSI C63.19
Active implant EMC test solution	ISO 14708-x series   ISO 14117

## ESSENTIAL EQUIPMENT FOR MEDICAL EMC TESTING



# EMC Test Software: R&S®ELEKTRA

Meet R&S®ELEKTRA: The powerful EMC test solution for swift and reliable measurements of electromagnetic disturbances

- Key features:
- ◆ User-friendly interface
  - ◆ Vast library of EMC test configurations
  - ◆ EUT centric planning and comprehensive reporting
  - ◆ Flexible scalability

[More about R&S®ELEKTRA here](#)



Test with confidence and a peace of mind.  
Talk to our experts today.

[Learn more here](#)

R&S® is a registered trademark of Rohde&Schwarz GmbH&Co.  
KG

Trade names are trademarks of the owners

PD 3610.1491.32 | Version 01.01 | February 2026 (IB)

EMC Testing for medical devices

Data without tolerance limits is not binding | Subject to change