

Product Service

**Choose certainty.  
Add value.**

## Specific Absorption Rate (SAR) Testing

### SAR Testing Service

Complying with continuously changing SAR standards is imperative as a means of meeting legal obligations and addressing both public and industry concerns. TÜV Product Service is perfectly placed to advise on the latest developments as well as offering a comprehensive fully accredited test service.

SAR Testing Services are offered to manufacturers, network operators, research organisations and regulatory authorities. Confidence, development and regulatory testing is carried out in accordance with the R&TTE Directive 1999/5/EC, FCC, Industry Canada and Australian standards. We also track the development of other test standards world-wide and will offer testing to there new standards as they emerge.

### Test Capability

#### Test Platforms:

Two UKAS accredited SARA2 systems from IndexSAR

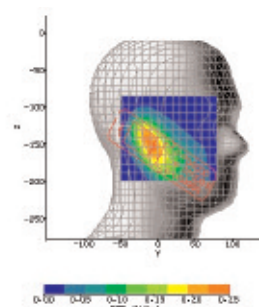
#### Range of frequencies:

350 MHz to 5.8 GHz

#### Typical product types:

- Mobile phones (all frequency bands including 2G and 3G)

- Laptops & Tablet PCs
- Micro Base stations
- Pico Base stations
- Femto Cell Base stations
- Body worn backpacks
- PDAs
- Body worn printers
- PTT radios
- Antennas (single and multi-band)
- Cordless telephones
- VoIP
- Private mobile radios
- Microwave equipment



3D Scan using the SARA2 SAR measurement system

### Our Promise to you

- Reports issued upon completion of testing
- Flexible working
- Competitive pricing to meet the current economic conditions

TÜV Product Service Ltd  
TÜV SÜD Group

TÜV®



Product Service

[www.tuvps.co.uk](http://www.tuvps.co.uk)

### Typical Test standards

#### USA / FCC

- Federal Communications Commission, Code of Federal Regulations, Title 47 (CFR47), Vol. 1, Chapter 1, Part 2 (§2.1091 and §2.1093).
- OET Bulletin 65 Supplement C (Edition 97- 01): Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields.

#### Canada / IC

- RSS-102 Issue 2 (2005-11): Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands).



Compliant Body SAR Test Measurement System  
Small Base Station Antennae test set-up shown

#### Europe / R&TTE Directive

- EN 50360: 2001 Incorporating Corrigendum No.1, Product standard to demonstrate the compliance of mobile phones with the basic restrictions related to human exposure to electromagnetic fields (300 MHz - 3 GHz)
- EN 62209 -1 Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 1: Procedure to determine the specific absorption rate (SAR) for handheld devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)
- EN 62311: 2008, Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)
- EN 50385: 2002, Product standard to demonstrate the compliances of radio base stations and fixed terminal stations for wireless telecommunication systems with the basic restrictions or the reference levels related to human exposure to radio frequency electromagnetic fields (110 MHz – 40 GHz) — General Public
- EN 50371: 2002, Generic standard to demonstrate the compliance of low power electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (10 MHz – 300 GHz) — General public

#### Australia

- ACA - Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard – 2003. Radiocommunications (Electromagnetic Radiation — Human Exposure) Amendment Standard 2007 (No. 1)

#### International

- IEC 62209 -1 Human exposure to radio frequency fields from handheld and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)
- IEC 62209 -2 (Draft) Human Exposure to Radio Frequency Fields from Handheld and Body-Mounted Wireless Communication Devices - Human models, Instrumentation, and Procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for mobile wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)
- IEC 62311: 2007 (Ed. 1.0), Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)

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