AS IEC 62209.3:2020
IEC 62209-3:2019

Australian STANDARD®

STANDARDS Australia

Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices

Part 3: Vector measurement-based systems (Frequency range of 600 MHz to 6 GHz)

AS IEC 62209.3:2020

This Australian Standard® was prepared by TE-007, Human Exposure to Electromagnetic Fields. It was approved on behalf of the Council of Standards Australia on 26 August 2020.

This Standard was published on 11 September 2020.

The following are represented on Committee TE-007:

Australian Centre for Radiofrequency Bioeffects Research
Australian Communications and Media Authority
Australian Industry Group
Australian Mobile Telecommunications Association
Australian Radiation Protection and Nuclear Safety Agency
Commercial Radio Australia
Communications, Electrical and Plumbing Union — Electrical Trades Division
Department of Defence (Australian Government)
Engineers Australia
National Measurement Institute

Additional Interests

Telstra Corporation

This Standard was issued in draft form for comment as DR AS IEC 62209.3:2020.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:
www.standards.org.au

ISBN 978 1 76072 967 7

AS IEC 62209.3:2020
IEC 62209-3:2019

Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices

Part 3: Vector measurement-based systems (Frequency range of 600 MHz to 6 GHz)

First published as AS IEC 62209.3:2020.

Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee TE-007, Human Exposure to Electromagnetic Fields.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this document is to specify measurement protocols and test procedures for the reproducible measurement of peak spatial-average specific absorption rate (psSAR) induced inside a simplified model of a human head or body by radio-frequency (RF) transmitting devices, with a specified measurement uncertainty. Requirements are provided for psSAR assessment using vector measurement-based systems. Such systems determine the psSAR by three-dimensional (3D) field reconstruction within the volume of interest in accordance with the requirements herein for the measurement system, calibration, uncertainty assessment and validation methods. The protocols and procedures apply for the psSAR assessments covering a significant majority of people including children during use of wireless communication devices operated in close proximity to the head or body.

This document is applicable to wireless communication devices intended to be used at a position near the human head or body at distances up to and including 200 mm. This document may be employed to evaluate SAR compliance of different types of wireless communication devices used next to the ear, in front of the face, mounted on the body, combined with other RF-transmitting or non-transmitting devices or accessories (e.g. belt-clip), or embedded in garments. The overall applicable frequency range is from 600 MHz to 6 GHz.

The system validation procedures provided within this document cover frequencies from 600 MHz to 6 GHz.

With a vector measurement-based system this document can be employed to evaluate SAR compliance of different types of wireless communication devices.

The wireless communication device categories covered include but are not limited to mobile telephones, cordless microphones, auxiliary broadcast devices and radio-transmitters in personal computers, desktop and laptop devices, multi-band, multi-antenna, and push-to-talk devices.

This document is identical with, and has been reproduced from, IEC 62209-3:2019, *Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices — Part 3: Vector measurement-based systems (Frequency range of 600 MHz to 6 GHz)*.

As this document has been reproduced from an International Standard, the following applies:

(a) In the source text “this part of IEC 62209” should read “this document”.

(b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

NOTES