

CITC Technical Specification

Specification for Wireless Audio, Radio Microphones, In-Ear Monitoring and Ancillary Equipment

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Scope

This specification applies to wireless audio, radio microphones, in-ear monitoring and ancillary Equipment.

Enforcement

This specification shall enter into force on 01/06/2021.

Any previous version of this technical specification is withdrawn.

General Requirements

All equipment must comply with the requirement of CITC specification GEN001, be safe and must not adversely affect other electrical equipment.

All telecommunications and radio terminal equipment must comply with the relevant technical specifications established by CITC. In addition, such equipment may be subject to regulations for Declaration of Conformity or registration. See www.citc.gov.sa for details.

If more than one interface type is offered by a piece of equipment, each interface must meet the applicable technical specifications.

Further information on the characteristics and presentation of network interfaces can be found by visiting operator's website.

It is mandatory that test reports are obtained from a laboratory that has been accredited by a body that is a member of the ILAC Mutual Recognition Arrangement.

Limits and conditions

Testing should be carried out to ensure compliance with the listed specifications.

Frequency band	Max Output Power or Magnetic Field	Usage	Standard	Comments
29.7 – 47.0 MHz	10mW ERP	Audio microphones	EN 300 422 EN 301 489-9	Professional equipment only
173.965 – 174.015 MHz	2mW ERP	Audio microphones	EN 300 422 EN 301 489-9	Professional equipment only
174 – 216 MHz	50mW ERP	Audio microphones	EN 300 422 EN 301 489-9	Professional equipment only

470 – 862 MHz	50mW ERP	Audio microphones	EN 300 422 EN 301 489-9	Professional equipment only
863 – 865 MHz	10mW ERP	Audio microphones	EN 300 422 EN 301 489-9	Professional equipment only
864.8 – 865.0 MHz	10mW ERP	In-ear monitoring	EN 300 220 EN 301 489-9	Consumer equipment
863 – 865 MHz	10mW ERP	Wireless Audio	EN 301 357 EN 301 489-9	Consumer equipment
1785 – 1795 MHz	20mW EIRP	Audio microphones	EN 300 422 EN 301 489-9	Professional equipment only
1785 – 1795 MHz	50mW EIRP	Audio microphones	EN 301 840 EN 301 489-9	Digital operating mode only
1795 – 1800 MHz	20mW EIRP	Wireless Audio	EN 301 357 EN 301 489-9	Consumer equipment
1795 – 1800 MHz	20mW EIRP	Audio microphones	EN 300 422 EN 301 489-9	Professional equipment only
1795 – 1800 MHz	50mW EIRP	Audio microphones	EN 301 840 EN 301 489-9	Digital operating mode only

Licensing Requirements

Spectrum licensing requirements apply to professional equipment only.

Additional Requirements

Usage is restricted to indoor only except for applications intended to hearing impaired people.

References

The following referenced documents are indispensable for the application of this document. If no issue or revision number is quoted along with the title of a technical specification or standard, the latest published version should be used.

EN 300 220-2

Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 2: Harmonised Standard for access to radio spectrum for non specific radio equipment

EN 300 220-1

Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 1: Technical characteristics and methods of measurement

EN 300 422-2

Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; Part 2: Harmonized EN covering essential requirements under the R&TTE directive.

EN 301 357-2

Electromagnetic compatibility and Radio spectrum Matters (ERM); Cordless audio devices in the range 25 MHz to 2 000 MHz; Consumer radio microphones and in-ear monitoring systems operating in the CEPT harmonised band 863 MHz to 865 MHz; Part 2: Harmonised EN covering essential requirements under the R&TTE directive.

EN 301 840-2

Electromagnetic compatibility and Radio spectrum Matters (ERM); Digital radio microphones operating in the CEPT harmonised band 1 785 MHz to 1 800 MHz; Part 2: Harmonised EN covering essential requirements under the R&TTE directive.

EN 301 489-1

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements.

EN 301 489-9

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 9 Specific conditions for wireless microphones, similar Radio Frequency (RF) audio link equipment, cordless audio and in-ear monitoring devices.

History

For reference, the latest versions of the technical specifications are published on the CITC website www.citc.gov.sa.

Description	Status	Date
	Issue 1	11/03/2006
	Issue 2	10/01/2010
Merge of RI044 “Specification for Radio Microphones/In-Ear Monitoring and Ancillary Equipment” with RI053 “Specification for Wireless Audio Applications Equipment” into one technical specification.	Issue 3	02/03/2021