هيئة الاتصالات وتقنية المعلومات
Communications & Information Technology Commission

CITC Technical Specification

Specification for Ultra Wideband Equipment

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Contents

Scope

This specification applies to ultra wideband equipment.

UWB devices are using a bandwidth of least 500 MHz to transmit radio signals in very short distances.

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Any previous version of this technical specification is withdrawn.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
30 – 1600 MHz	-90 dBm/MHz EIRP	UWB	EN 302 065 EN 301 489-32 EN 301 489-33	
1.6 – 2.7 GHz	-85 dBm/MHz EIRP	UWB	EN 302 065 EN 301 489-32 EN 301 489-33	
2.7 – 3.4 GHz	-70 dBm/MHz EIRP	UWB	EN 302 065 EN 301 489-32 EN 301 489-33	

3.4 – 3.8 GHz	-80 dBm/MHz EIRP	UWB	EN 302 065 EN 301 489-32 EN 301 489-33	
3.8 – 6 GHz	-70 dBm/MHz EIRP	UWB	EN 302 065 EN 301 489-32 EN 301 489-33	
6 – 8.5 GHz	-41.3 dBm/MHz EIRP	UWB	EN 302 065 EN 302 500 EN 301 489-32 EN 301 489-33	
8.5 – 10.6 GHz	-65 dBm/MHz EIRP	UWB	EN 302 065 EN 301 489-32 EN 301 489-33	
>10.6 GHz	-85 dBm/MHz EIRP	UWB	EN 302 066 EN 301 489-32 EN 301 489-33	

Licensing Requirements

No licensing requirements apply.

Additional Requirements

There is no additional requirements for this technical specification.

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 302 065-4
Short Range Devices (SRD) using Ultra Wide Band technology (UWB); Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 4: Material Sensing devices using UWB technology below 10,6 GHz

EN 302 065-3
Short Range Devices (SRD) using Ultra Wide Band technology (UWB); Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 3: Requirements for UWB devices for ground based vehicular applications

EN 302 065-2
Short Range Devices (SRD) using Ultra Wide Band technology (UWB); Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 2: Requirements for UWB location tracking

EN 302 065-1
Short Range Devices (SRD) using Ultra Wide Band technology (UWB); Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 1: Requirements for Generic UWB applications

EN 302 066

Short Range Devices (SRD); Ground- and Wall- Probing Radio determination (GPR/WPR) devices; Harmonised Standard for access to radio spectrum

EN 302 500-2

Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD) using Ultra WideBand (UWB) technology; Location Tracking equipment operating in the frequency range from 6 GHz to 9 GHz; Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive

EN 302 500-1

Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD) using Ultra WideBand (UWB) technology; Location Tracking equipment operating in the frequency range from 6 GHz to 9 GHz; Part 1: Technical characteristics and methods of measurement

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 301 489-33

Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 33: Specific conditions for Ultra-WideBand (UWB) devices; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU

EN 301 489-32

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) standard for radio equipment and

services; Part 32: Specific conditions for Ground and Wall Probing Radar applications

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	10/01/2010
	Issue 2	02/03/2021