PERFORMANCE SPECIFICATION FOR
SHORT RANGE DEVICES

OPERATING IN THE 4.2 – 4.8 GHz

AND/OR 6 – 8.5 GHz BANDS

EMPLOYING ULTRA-WIDEBAND

TECHNOLOGY



FOREWORD

- 1. This specification is prescribed under section 32D of the Telecommunications Ordinance (Cap 106) ("the Ordinance") to set out set out the technical requirements for Short Range Devices (SRD) operating in the 4.2 4.8 GHz and/or 6 8.5 GHz bands employing ultra-wideaband technology. Radiocommunications apparatus falling into the scope of this specification shall meet the stipulated requirements.
- 2. Under the Ordinance, the possession or use of any radiocommunications apparatus or any apparatus emitting radio frequency energy must be covered by an appropriate licence issued by the Communications Authority (CA) with the exception of those specifically exempted from licensing under the Ordinance, such as those covered by the Telecommunications (Telecommunications Apparatus)(Exemption from Licensing) Order.
- 3. At present, the Office of the Communications Authority (OFCA) operates a Hong Kong Telecommunications Equipment Evaluation and Certification (HKTEC) Scheme. Details of the HKTEC Scheme can be found in the information note OFCA I 421. Under the Scheme, suppliers or manufacturers of the radiocommunications apparatus may apply for certification of their apparatus against this specification. The application procedures for certification of radiocommunications apparatus can be found in the information note OFCA I 401. A prescribed label may be affixed to the certified equipment. Details of the labelling arrangement can be found in the Standardisation Guide HKCA 3211.
- 4. The CA may amend any part of this specification as and when it deems necessary.
- 5. In case of doubt about the interpretation of this specification, the methods of carrying out the test and the validity of statements made by the equipment manufacturers or suppliers about the equipment, the decision of the CA shall be final.
- 6. The HKCA specifications and information notes issued by the CA can be downloaded from OFCA's website at http://www.ofca.gov.hk. Enquiries about this specification may be directed to:

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AMENDMENT HISTORY

Item	Issue No.	Paragraph	Descriptions
1.	Issue 1 August 2018	All	First release

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- 1. Scope of Specification
- 2. Electrical Safety Requirements
- 3. Technical Requirments
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1. SCOPE OF SPECIFICATION

This specification defines the minimum performance requirements for Short Range Devices (SRD) operating in the 4.2 - 4.8 GHz and/or 6 - 8.5 GHz frequency bands employing ultra-wideband technology (hereafter referred to as "the equipment").

2. ELECTRICAL SAFETY REQUIREMENTS

If the equipment is for connection to the public telecommunications networks, it shall comply with the electrical safety requirements set out in HKCA 2001 "Compliance Test Specification - Safety and Electrical Protection Requirements for Subscriber Telecommunications Equipment" issued by the Communications Authority (CA).

3. TECHNICAL REQUIREMENTS

3.1 The equipment shall meet the following technical requirements:

(a) Frequency bands: 4.2 - 4.8 GHz and/or

 $6 - 8.5 \, \mathrm{GHz}$

(b) Maximum mean spectral power density (e.i.r.p.):

-41.3 dBm/MHz

- 3.2 The equipment shall meet the technical requirements in accordance with the appropriate standard in the following list:
 - (i) ETSI 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"
 - (ii) ETSI 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"
 - (iii) ETSI 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"
 - (iv) ETSI 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"

(v) Code of Federal Regulations (USA); Title 47 Telecommunication; Chapter 1 Federal Communications Commission, Part 15 Radio Frequency Devices: Subpart F— "Ultra-Wideband Operation"

4. EVALUATION REQUIREMENTS

Compliance of the equipment with the technical requirements shall be evaluated in accordance with the procedures specified in any one of the standards stated in clause 3.2.

5. REFERENCE

- (i) ETSI 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"
- (ii) ETSI 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"
- (iii) ETSI 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"
- (iv) ETSI 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"
- (v) Code of Federal Regulations (USA); Title 47 Telecommunication; Chapter 1 Federal Communications Commission, Part 15 Radio Frequency Devices: Subpart F— "Ultra-Wideband Operation"