

SLOVENSKI STANDARD SIST EN 302 264 V2.1.1:2017

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Naprave kratkega dosega - Transportna in prometna telematika (TTT) - Radarska oprema kratkega dosega, ki deluje v pasu od 77 GHz do 81 GHz - Harmonizirani standard, ki zajema bistvene zahteve člena 3.2 direktive 2014/53/EU

Short Range Devices - Transport and Traffic Telematics (TTT) - Short Range Radar equipment operating in the 77 GHz to 81 GHz band - Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU

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33.060.99 Druga oprema za radijske komunikacije Other equipment for radiocommunications

35.240.60 Uporabniške rešitve IT v prometu IT applications in transport

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Short Range Devices;
Transport and Traffic Telematics (TTT);
Short RangetRadar equipment operating
in the 77 GHz to 81 GHz band;
Harmonised Standard covering the essential requirements
of article 3.2 of Directive 2014/53/EU

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ETSI

650 Route des Lucioles F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C Association à but non lucratif enregistrée à la Sous-Préfecture de Grasse (06) N° 7803/88

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Foreword

This Harmonised European Standard (EN) has been produced by ETSI Technical Committee Electromagnetic compatibility and Radio spectrum Matters (ERM).

The present document has been prepared under the Commission's standardisation request C(2015) 5376 final [i.7] to provide one voluntary means of conforming to the essential requirements of Directive 2014/53/EU on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC [i.2].

Once the present document is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of the present document given in table A.1 confers, within the limits of the scope of the present document, a presumption of conformity with the corresponding essential requirements of that Directive and associated EFTA regulations.

The present document covers short range radar equipment operating in the 77 GHz to 81 GHz range.

The present document covers the essential requirements of article 3.2 of the Directive 2014/53/EU [i.2].

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National transposition dates				
Date of adoption of this EN:	11 April 2017			
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Date of withdrawal of any conflicting National Standard (dow):	31 January 2019			

Modal verbs terminology

In the present document "shall", "shall not", "should", "should not", "may", "need not", "will", "will not", "can" and "cannot" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

"must" and "must not" are NOT allowed in ETSI deliverables except when used in direct citation.

Introduction

The present document, together with ETSI EN 303 396 [1], covers the assessment of certain types of equipment as defined herein.

1 Scope

The present document specifies the technical requirements and methods of measurement for Short Range Devices (SRD) working as broadband devices with at least 50 MHz occupied bandwidth in the 77 GHz to 81 GHz frequency range, intended for Transport and Traffic Telematics (TTT) applications. Applications include but are not limited to e.g. Short Range Radar (SRR) for obstacle detection, stop&go, blind spot detection, parking aid, backup aid and precrash.

The present document covers transmitters intended to operate in the frequency range as defined in the EC Decision 2004/545/EC [i.5] and the ECC Decision ECC/DEC/(04)03 [i.6].

The present document:

- a) contains the technical characteristics and test methods for short range radar equipment fitted with integral antennas operating in 77 GHz to 81 GHz range;
- b) covers short range radar vehicle applications in the 77 GHz to 81 GHz range. It covers integrated transceivers and separate transmit/receive modules;
- c) integrated multi-mode transceivers defined in ETSI EG 203 367 [i.9], transmitters and receivers in the 76 GHz to 77 GHz range which comply with ETSI EN 301 091-1 [i.8] and which use the 77 GHz to 81 GHz range for one or several operation modes, within one EUT cycle or in different vehicle operation modes.

For such sensors, the 77 GHz to 81 GHz operation modes should be available for testing separately from the 76 GHz to 77 GHz operation modes.

The present document does not necessarily include all the characteristics which may be required by a user, nor does it necessarily represent the optimum performance achievable.

In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 303 396 [1], the provisions of the present document take precedence.

These radio equipment types are capable of operating in all or part of the frequency bands given in table 1. SIST EN 302 264 V2.1.1:2017

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Permitted ranges of operation	
Transmit	77 GHz to 81 GHz
Receive	77 GHz to 81 GHz

The present document covers the essential requirements of article 3.2 of Directive 2014/53/EU [i.2] under the conditions identified in annex A.

2 References

2.1 Normative references

References are specific, identified by date of publication and/or edition number or version number. Only the cited version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at https://docbox.etsi.org/Reference/.

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The following referenced documents are necessary for the application of the present document.

[1] ETSI EN 303 396 (V1.1.1) (12-2016): "Short Range Devices; Measurement Techniques for automotive and surveillance radar equipment".

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1]	CEPT/ERC Recommendation 70-03: "Relating to the use of Short Range Devices (SRD)".
[i.2]	Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC.
[i.3]	CEPT/ERC/REC 74-01: "Unwanted emissions in the spurious domain".
[i.4]	ETSI EG 203 336: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Guide for the selection of technical parameters for the production of Harmonised Standards covering article 3.1(b) and article 3.2 of Directive 2014/53/EU".
[i.5]	Commission Decision 2004/545/EC on the harmonisation of radio spectrum in the 79 GHz range for the use of automotive short-range radar equipment in the Community.
[i.6]	ECC Decision (04)/03: "The frequency band 77-81 GHz to be designated for the use of Automotive Short Range/Radars".
[i.7]	Commission Implementing Decision C(2015) 5376 final of 4.8.2015 on a standardisation request to the European Committee for Electrotechnical Standardisation and to the European Telecommunications Standards Institute as regards radio equipment in support of Directive 2014/53/EU of the European Parliament and of the Council https://standards.ien.avcatalog.standards.stst/14a2002-0d/8-4931-902f-
[i.8]	ETSI EN 301 091-10. Short Range Devices, Transport and Traffic Telematics (TTT); Radar equipment operating in the 76 GHz to 77 GHz range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 1: Ground based vehicular radar".
[i.9]	ETSI EG 203 367: "Guide to the application of harmonised standards covering articles 3.1b and 3.2 of the Directive 2014/53/EU (RED) to multi-radio and combined radio and non-radio equipment".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in ETSI EN 303 396 [1] and the following apply:

ground based vehicles: vehicles using wheels or rails for movement

EXAMPLE: Includes but is not limited to passenger cars, busses, trucks, rail engines, trams, ships, constriction vehicle and aircraft while taxiing.

NOTE: For details see CEPT/ERC Recommendation 70-03 [i.1].