

<b>STN</b>	<b>Zariadenia s krátkym dosahom (SRD) pracujúce vo frekvenčnom rozsahu od 25 MHz do 1 000 MHz Časť 1: Technické charakteristiky a metódy merania</b>	<b>STN EN 300 220-1 V3.1.1</b>  87 0220
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Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 1: Technical characteristics and methods of measurement

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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# ETSI EN 300 220-1 V3.1.1 (2017-02)



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

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## Foreword

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

The present document is part 1 of a multi-part deliverable covering Short Range Devices (SRD), as identified below:

- Part 1: "Technical characteristics and methods of measurement";**
- Part 2: "Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU for non specific radio equipment";
- Part 3-1: "Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Low duty cycle high reliability equipment, social alarms equipment operating on designated frequencies (869,200 MHz to 869,250 MHz)";
- Part 3-2: "Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Wireless alarms operating in designated LDC/HR frequency bands 868,60 MHz to 868,70 MHz, 869,25 MHz to 869,40 MHz, 869,65 MHz to 869,70 MHz";
- Part 4: "Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Metering devices operating in designated band 169,400 MHz to 169,475 MHz".

Other parts may be added in the future, as necessary, using the present document as a basis for Technical characteristics and methods of measurement.

<b>National transposition dates</b>	
Date of adoption of this EN:	27 January 2017
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Date of withdrawal of any conflicting National Standard (dow):	31 October 2017

## Modal verbs terminology

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# Introduction

The present document includes improvements to the previous version of the standard that take advantage of technical developments within the SRD industry. It also serves the purpose of providing the requirements and associated measurement methods to improve the intra- SRD co-existence and promote efficient spectrum use.

The attention of the reader is brought on the fact that the present document includes "reference limits" which may be called by harmonised standards but which can also be different if requested for a specific application environment.

The present document is structured as follows:

Clause 2 provides references.

Clause 3 provides definitions of terms and abbreviations used.

Clause 4 provides conformance specifications.

Clause 5 specifies the list of parameters, reference limits and tests.

Annex A (normative): Technical performance of the test equipment.

Annex B (normative): Test Fixture, contains specifications for the test fixture.

Annex C (normative): Test sites and arrangements for radiated measurement, contains specifications concerning radiated measurements.

Annex D (informative): Bibliography.

Annex E (informative): Change History.

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# 1 Scope

The present document specifies technical characteristics and test methods to be used in the conformance assessment of Short Range Device equipment in the frequency range 25 MHz to 1 GHz.

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## 2 References

### 2.1 Normative 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.

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

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

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

- [1] Recommendation ITU-T O.153 (10/92): "Basic parameters for the measurement of error performance at bit rates below the primary rate".
- [2] ETSI TS 103 060 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Method for a harmonized definition of Duty Cycle Template (DCT) transmission as a passive mitigation technique used by short range devices and related conformance test methods".

### 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] CISPR 16 (2006) (parts 1-1, 1-4 and 1-5): "Specification for radio disturbance and immunity measuring apparatus and methods; Part 1: Radio disturbance and immunity measuring apparatus".
- [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] ETSI TR 100 028 (all parts) (V1.4.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics".
- [i.4] ETSI TR 102 273-2 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Improvement on Radiated Methods of Measurement (using test site) and evaluation of the corresponding measurement uncertainties; Part 2: Anechoic chamber".
- [i.5] ETSI TR 102 273-3 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Improvement on Radiated Methods of Measurement (using test site) and evaluation of the corresponding measurement uncertainties; Part 3: Anechoic chamber with a ground plane".

- [i.6] ETSI TR 102 273-4 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Improvement on Radiated Methods of Measurement (using test site) and evaluation of the corresponding measurement uncertainties; Part 4: Open area test site".

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