

STN	Zariadenia na rádiový frekvenčnú identifikáciu pracujúce v pásme od 865 MHz do 868 MHz s úrovňami výkonu do 2 W a v pásme od 915 MHz do 921 MHz s úrovňami výkonu do 4 W Harmonizovaná norma pre prístup k rádiovému spektru	STN EN 302 208 V3.4.1 87 2208
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Radio Frequency Identification Equipment operating in the band 865 MHz to 868 MHz with power levels up to 2 W and in the band 915 MHz to 921 MHz with power levels up to 4 W; Harmonised Standard for access to radio spectrum

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

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**Radio Frequency Identification Equipment operating in the
band 865 MHz to 868 MHz with power levels up to 2 W and
in the band 915 MHz to 921 MHz with power levels up to 4 W;
Harmonised Standard for access to radio spectrum**

Reference

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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.10] 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.3].

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 replaces all previous versions of ETSI EN 302 208.

National transposition dates	
Date of adoption of this EN:	18 December 2023
Date of latest announcement of this EN (doa):	31 March 2024
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 September 2024
Date of withdrawal of any conflicting National Standard (dow):	30 September 2025

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1 Scope

The present document specifies technical characteristics and methods of measurements for Radio Frequency Identification (RFID) devices used in the frequency band 865 MHz to 868 MHz and 915 MHz to 921 MHz.

Power limits up to a maximum of 2 W e.r.p. are specified for this equipment in the frequency band 865 MHz to 868 MHz and up to a maximum of 4 W e.r.p. in the frequency band 915 MHz to 921 MHz.

NOTE 1: The term frequency band is used for reference to dedicated bands as described in ERC Recommendation 70-03 [i.9], while frequency range is used in the other cases.

The frequency usage conditions for RFID are EU wide harmonised in the band 865 MHz to 868 MHz according to Decision (EU) 2017/1483 [i.15] and in the band 915 MHz to 921 MHz according to Decision (EU) 2018/1538 [i.14]. According to Decision (EU) 2018/1538 [i.14], EU member states are requested to implement 3 channels only in the 915 MHz to 921 MHz band.

It should be noted that the frequency band 915 MHz to 921 MHz has only a limited implementation status within the European Union and the CEPT countries. ERC Recommendation 70-03 [i.9] provides in appendix 1 an overview of countries where the band is implemented.

The present document applies to RFID interrogators and tags operating together as a system. For each specified band, multiple high power channels are made available for use by interrogators. The tags respond with a modulated signal preferably in the adjacent low power channels. Interrogators may be used with either integral or external antennas.

The types of equipment covered by the present document are as follows:

- fixed interrogators;
- portable interrogators;
- batteryless tags;
- battery assisted tags;
- battery powered tags.

These types of radio equipment are capable of operating in the frequency ranges given in table 1 and table 2.

The present document contains requirements to demonstrate that the specified radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference.

NOTE 2: The relationship between the present document and essential requirements of article 3.2 of Directive 2014/53/EU [i.3] is given in annex A.

2 References

2.1 Normative references

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- [1] Void.

- [2] [IEEE/ANSI C63.5-2017](#): "American National Standard for Electromagnetic Compatibility-- Radiated Emission Measurements in Electromagnetic Interference (EMI) Control--Calibration and Qualification of Antennas (9 kHz to 40 GHz)".
- [3] Void.

2.2 Informative references

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- [i.1] Void.
- [i.2] Void.
- [i.3] [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.4] IEC 60489-3 Appendix J Second edition (1988): "Methods of measurement for radio equipment used in the mobile services. Part 3: Receivers for A3E or F3E emissions" (pages 156 to 164).
- [i.5] Void.
- [i.6] Void.
- [i.7] Void.
- [i.8] Void.
- [i.9] [ERC Recommendation 70-03](#): "Short Range Devices (SRD)".
- [i.10] [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.
- [i.11] Void.
- [i.12] Void.
- [i.13] ETSI TR 102 273 (all parts) (V1.2.1) (12-2001): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Improvement on Radiated Methods of Measurement (using test site) and evaluation of the corresponding measurement uncertainties".
- [i.14] [Commission implementing Decision \(EU\) 2018/1538](#) of 11 October 2018 on the harmonisation of radio spectrum for use by short-range devices within the 874-876 and 915-921 MHz frequency bands.
- [i.15] [Commission implementing Decision \(EU\) 2017/1483](#) of 8 August 2017 amending Decision 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices and repealing Decision 2006/804/EC.
- [i.16] [ERC Recommendation 74-01](#): "Unwanted emissions in the spurious domain", Approved 1998 amended 29 May 2019.
- [i.17] ISO/IEC 18046-2: "Information technology - Radio frequency identification device performance test methods - Part 2: Test methods for interrogator performance".

- [i.18] Void.
- [i.19] 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.20] ISO/IEC 18000-63: "Information technology - Radio frequency identification for item

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