

SLOVENSKI STANDARD SIST EN 300 676-2 V1.4.1:2010

01-julij-2010

Talni VHF ročni, mobilni in fiksni radijski oddajniki, sprejemniki in sprejemnikioddajniki za VHF aeronavtično mobilno storitev, ki uporablja amplitudno modulacijo - 2. del: Harmonizirani EN, ki zajema bistvene zahteve člena 3.2 direktive R&TTE

Ground-based VHF hand-held, mobile and fixed radio transmitters, receivers and transceivers for the VHF aeronautical mobile service using amplitude modulation; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive Teh STANDARD PREVIEW

(standards.iteh.ai)

SIST EN 300 676-2 V1.4.1:2010 https://standards.iteh.ai/catalog/standards/sist/92440959-78a4-4095-9a51-8cffc165bdb3/sist-en-300-676-2-v1-4-1-2010

Ta slovenski standard je istoveten z: EN 300 676-2 Version 1.4.1

ICS:

33.060.20 Sprejemna in oddajna Receiving and transmitting

oprema equipment

49.090 Oprema in instrumenti v On-board equipment and

zračnih in vesoljskih plovilih instruments

SIST EN 300 676-2 V1.4.1:2010 en

SIST EN 300 676-2 V1.4.1:2010

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 300 676-2 V1.4.1:2010 https://standards.iteh.ai/catalog/standards/sist/92440959-78a4-4095-9a51-8cffc165bdb3/sist-en-300-676-2-v1-4-1-2010

ETSI EN 300 676-2 V1.4.1 (2010-04)

Harmonized European Standard (Telecommunications series)

Ground-based VHF hand-held, mobile and fixed radio transmitters, receivers and transceivers for the VHF aeronautical mobile service using amplitude modulation; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 300 676-2 V1.4.1:2010 https://standards.iteh.ai/catalog/standards/sist/92440959-78a4-4095-9a51-8cffc165bdb3/sist-en-300-676-2-v1-4-1-2010



Reference

REN/ERM-JTFEA-001-2

Keywords aeronautical, AM, DSB, radio, testing, VHF

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 Teh Sous-Préfecture de Grasse (06) N° 7803/88 (standards.iteh.ai)

SIST EN 300 676-2 V1.4.1:2010 https://standards.iteh.ai/catalog/standards/sist/92440959-78a4-4095-9a51-8cffc165bdl/mportant notice_v1-4-1-2010

Individual copies of the present document can be downloaded from: http://www.etsi.org

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at http://portal.etsi.org/tb/status/status.asp

If you find errors in the present document, please send your comment to one of the following services: http://portal.etsi.org/chaircor/ETSI_support.asp

Copyright Notification

No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

> © European Telecommunications Standards Institute 2010. All rights reserved.

DECTTM, **PLUGTESTS**TM, **UMTS**TM, **TIPHON**TM, the TIPHON logo and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.

3GPP[™] is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners. LTE™ is a Trade Mark of ETSI currently being registered

for the benefit of its Members and of the 3GPP Organizational Partners.

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Contents

Annex	B (informative): The EN title in the official languages	14
Annex	HS Requirements and conformance Test specifications Table (HS-RTT)	12
5.3.2.7	Cross modulation rejection	11
5.3.2.6		
5.3.2.5	<u> </u>	
5.3.2.4		
5.3.2.3		
5.3.2.2	· ·	
5.3.2.1	Sensitivity	
5.3.2	Receiver test specifications	
5.3.1.6		
5.3.1.5	1.	
5.3.1.4	J	
5.3.1.3		
5.3.1.2	Carrier power (conducted)	
5.3.1.1	Frequency error	
5.3.1	Transmitter test specifications	
5.3	Essential radio test suites	
5.2	Interpretation of the measurement results	
5 5.1	Environmental conditions for testing	
5	Testing for compliance with technical requirements	C
4.2.2.7	Cross modulation rejection	9
4.2.2.6	Conducted spurious emissions	9
4.2.2.5	Blocking or desensitisation	9
4.2.2.4	Adjacent channel rejection. Spurious response rejection. Intermodulation response rejection. Blocking or desensitisation.	9
4.2.2.3	Spurious response rejection	9
4.2.2.2	Adjacent channel rejection	9
4.2.2.1	Sensitivity	
4.2.2	Receiver requirements (standards iteh.ai)	9
4.2.1.6	Keying transient frequency behaviour (Applicable to base stations only)	9
4.2.1.5	Intermodulation attenuation (Applicable to Base stations only)	8
4.2.1.4	Conducted spurious emissions	8
4.2.1.3	Adjacent channel power	
4.2.1.2	r · · · · · · · · · · · · · · · ·	
4.2.1.1	Frequency error	
4.2.1	Transmitter requirements	
4.2	Conformance requirements	
4.1	Environmental profile	8
4	Technical requirements specifications	8
3.1 3.2	Definitions	
	Definitions and abbreviations	
2.2	Informative references.	
2.1	Normative references	
2	References	e
1	Scope	6
Introd	uction	_
Forew	ord	5
Intalla	ctual Property Rights	5

ETSI EN	300 676-2 \	V1.4.1 (2010-04)
---------	-------------	------------------

Annex C (informative):	Bibliography	15
History		16

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 300 676-2 V1.4.1:2010</u> https://standards.iteh.ai/catalog/standards/sist/92440959-78a4-4095-9a51-8cffc165bdb3/sist-en-300-676-2-v1-4-1-2010

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://webapp.etsi.org/IPR/home.asp).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

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

The present document is part 2 of a multi-part deliverable covering the Ground-based VHF hand-held, mobile and fixed radio transmitters, receivers and transceivers for the VHF aeronautical mobile service using amplitude modulation; as identified below:

Part 1: "Technical characteristics and methods of measurement";

Part 2: "Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

(standards.iteh.ai) National transposition dates				
Date of adoption of this EN: SIST EN 300 676-2 V1.4.12010 https://standards.iteh.ai/catalog/standards/sist/92440959-78a4-4095-9a51- Date of latest announcement of this EN (doa); dob3/sist-en-300-676-2-v1-4-1-2010 31 July 2010				
Date of latest publication of new National Standard or endorsement of this EN (dop/e): 31 January 2011				
Date of withdrawal of any conflicting National	Standard (dow): 31 January 2012			

Introduction

The present document is part of a set of standards developed by ETSI and is designed to fit in a modular structure to cover all radio and telecommunications terminal equipment within the scope of the R&TTE Directive. The modular structure is shown in EG 201 399 [i.3].

1 Scope

The present document applies to DSB AM ground base stations, with channel separations of 8,33 kHz or 25 kHz intended for analogue speech or intended for ACARS data communication. The scope of the present document is limited to ground based stations, ground mobile and hand-held radios for ground use. These radio equipment types are capable of operating in all or any part of the aeronautical frequency band between 118 MHz and 136,975 MHz.

The present document is intended to cover the provisions of Directive 1999/5/EC [i.1] (R&TTE Directive), article 3.2, which states that "... radio equipment shall be so constructed that it effectively uses the spectrum allocated to terrestrial/space radio communications and orbital resources so as to avoid harmful interference".

In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the R&TTE Directive as well as essential requirements under the Single European Sky Interoperability Regulation (as amended) [i.2] and related implementing rules may apply to equipment within the scope of the present document.

NOTE: A list of such ENs is included on the web site http://www.newapproach.org.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.
- Non-specific reference may be made only to a complete document or a part thereof and only in the following cases:
 - if it is accepted that it will be possible to use all future changes of the referenced document for the purposes of the referring document alog/standards/sist/92440959-78a4-4095-9a51-
 - for informative references. 8cffc165bdb3/sist-en-300-676-2-v1-4-1-2010

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.

2.1 Normative references

The following referenced documents are indispensable for the application of the present document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

- [1] ETSI EN 300 676-1 (V1.4.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Ground-based VHF hand-held, mobile and fixed radio transmitters, receivers and transceivers for the VHF aeronautical mobile service using amplitude modulation; Part 1: Technical characteristics and methods of measurement".
- [2] ETSI EN 300 113-1 (V1.6.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land mobile service; Radio equipment intended for the transmission of data (and/or speech) using constant or non-constant envelope modulation and having an antenna connector; Part 1: Technical characteristics and methods of measurement".
- [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".

2.2 Informative references

The following referenced documents are not essential to the use of the present document but they assist the user with regard to a particular subject area. For non-specific references, the latest version of the referenced document (including any amendments) applies.

- [i.1] Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity; amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council of 29/09/2003.
- [i.2] Regulation (EC) 552/2004 of the European Parliament and Council of 10 March 2004 on the interoperability of the European Air Traffic Management network (the interoperability Regulation). Official Journal L 096, 31/03/2004 P. 0026 0042; amended by Regulation (EC) No 1070/2009 of the European Parliament and of the Council of 21/10/2009. Official Journal L 300/34, 14/11/2009.
- [i.3] ETSI EG 201 399: "Electromagnetic compatibility and Radio spectrum Matters (ERM); A guide to the production of candidate Harmonized Standards for application under the R&TTE Directive".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in the R&TTE Directive [i.1] and the following apply:

(standards.iteh.ai)

aeronautical mobile service: mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate 676-2 V1.4.1.2010

conducted measurements: measurements which are made using a direct RF connection to the equipment under test

radiated measurements: measurements which involve the measurement of a radiated field

environmental profile: range of environmental conditions under which equipment within the scope of the present document is required to comply with the provisions of the present document

ground base station: aeronautical station equipment, in the aeronautical mobile service, for use with an external antenna and intended for use at a fixed location

hand-held: radio equipment with integral batteries, designed to be hand portable and operated hand-held

integral antenna equipment: radio communications equipment with an antenna integrated into the equipment without the use of an external connector and considered to be part of the equipment

NOTE: An integral antenna may be internal or external to the equipment. In equipment of this type, a 50 Ω RF connection point should be provided for test purposes. A connection point for an AF modulating input and for AF output measurements should also be provided.

mobile station: radio equipment designed for permanent or temporary vehicle installation and operation, including provision for vehicle DC power supply, and connections for external antenna, PTT key, microphone, speaker and/or headphone

non-integral antenna equipment: radio communications equipment with a connector intended for connection to an antenna

portable station: radio equipment with integral battery for independent hand-carried use

NOTE: Provisions may be made for connections of an external antenna, PTT key, microphone, headphone and charger, but principally to be operated as a self contained unit