

**VHF air-ground Digital Link (VDL) Mode 2;
Technical characteristics and methods of measurement
for ground-based equipment;
Part 3: Harmonized EN covering the essential requirements
of article 3.2 of the R&TTE Directive**

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ETSI EN 301 841-3 V1.1.1 \(2011-11\)](https://standards.iteh.ai/catalog/standards/etsi/fe009831-06f0-46c8-823a-2ae4c0b0981e/etsi-en-301-841-3-v1-1-1-2011-11)

<https://standards.iteh.ai/catalog/standards/etsi/fe009831-06f0-46c8-823a-2ae4c0b0981e/etsi-en-301-841-3-v1-1-1-2011-11>



Reference

DEN/ERM-JTFEA-006

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
Sous-Préfecture de Grasse (06) N° 7803/88

(<https://standards.iteh.ai>)
Document Preview

Important notice

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/chaicor/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 2011.
All rights reserved.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.
3GPP™ and **LTE™** are Trade Marks of ETSI 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

Intellectual Property Rights	5
Foreword.....	5
Introduction	5
1 Scope	6
2 References	6
2.1 Normative references	6
2.2 Informative references	6
3 Definitions and abbreviations.....	7
3.1 Definitions	7
3.2 Abbreviations	8
4 Technical requirements specifications	8
4.1 Environmental profile.....	8
4.2 Conformance requirements	9
4.2.1 Transmitter requirements	9
4.2.1.1 Frequency error	9
4.2.1.1.1 Requirement	9
4.2.1.1.2 Conformance	9
4.2.1.2 Manufacturer's declared output power	9
4.2.1.2.1 Requirement	9
4.2.1.2.2 Conformance	9
4.2.1.3 Adjacent channel power	9
4.2.1.3.1 Requirement	9
4.2.1.3.2 Conformance	9
4.2.1.4 Conducted spurious emissions	9
4.2.1.4.1 Requirement	9
4.2.1.4.2 Conformance	9
4.2.1.5 Cabinet radiation	9
4.2.1.5.1 Requirement	9
4.2.1.5.2 Conformance	9
4.2.1.6 Void.....	10
4.2.1.7 Intermodulation attenuation	10
4.2.1.7.1 Requirements	10
4.2.1.7.2 Conformance	10
4.2.1.8 RF power release time.....	10
4.2.1.8.1 Requirement	10
4.2.1.8.2 Conformance	10
4.2.1.9 Void.....	10
4.2.1.10 Transient behaviour of the transmitter	10
4.2.1.10.1 Receiver to transmitter turn-around time.....	10
4.2.1.10.2 Transmitter to receiver turn-around time.....	10
4.2.1.11 Modulation Accuracy - Symbol constellation error	10
4.2.1.11.1 Requirement	10
4.2.1.11.2 Conformance	11
4.2.2 Receiver requirements	11
4.2.2.1 Sensitivity	11
4.2.2.1.1 Requirement	11
4.2.2.1.2 Conformance	11
4.2.2.2 Co-channel interference	11
4.2.2.2.1 Requirement	11
4.2.2.2.2 Conformance	11
4.2.2.3 First adjacent channel rejection.....	11
4.2.2.3.1 Requirement	11
4.2.2.3.2 Conformance	11

4.2.2.4	Spurious response rejection of signals within the VHF aeronautical band	11
4.2.2.4.1	Requirement	11
4.2.2.4.2	Conformance	11
4.2.2.5	Spurious response rejection of signals outside the VHF aeronautical band	11
4.2.2.5.1	Requirement	11
4.2.2.5.2	Conformance	11
4.2.2.6	In-band Intermodulation response rejection	12
4.2.2.6.1	Requirement	12
4.2.2.6.2	Conformance	12
4.2.2.7	Blocking or desensitization	12
4.2.2.7.1	Requirement	12
4.2.2.7.2	Conformance	12
4.2.2.8	Conducted spurious emission	12
4.2.2.8.1	Requirement	12
4.2.2.8.2	Conformance	12
4.2.2.9	Cabinet radiation	12
4.2.2.9.1	Requirement	12
4.2.2.9.2	Conformance	12
5	Testing for compliance with technical requirements	12
5.1	Environmental conditions for testing	12
5.1.1	Normal and extreme test conditions	12
5.1.2	Test power source	13
5.2	Interpretation of the measurement results	13
5.3	Essential radio test suites	14
5.3.1	Transmitter test specifications	14
5.3.1.1	Frequency error	14
5.3.1.2	Manufacturer's declared output power	14
5.3.1.3	Adjacent channel power	14
5.3.1.4	Conducted Spurious emissions	14
5.3.1.5	Cabinet Radiation	14
5.3.1.6	Void	14
5.3.1.7	Inter-modulation attenuation	14
5.3.1.8	RF power release time	14
5.3.1.9	Void	14
5.3.1.10	Transient behaviour of the transmitter	14
5.3.1.10.1	Receiver to transmitter turn-around time	14
5.3.1.10.2	Transmitter to receiver turn-around time	14
5.3.1.11	Modulation accuracy - Symbol constellation error	14
5.3.2	Receiver test specifications	15
5.3.2.1	Sensitivity	15
5.3.2.2	Co-channel interference	15
5.3.2.3	Adjacent channel rejection	15
5.3.2.4	Spurious response rejection of signals within the VHF aeronautical band	15
5.3.2.5	Spurious response rejection of signals outside the VHF aeronautical band	15
5.3.2.6	In-band Intermodulation rejection	15
5.3.2.7	Blocking or desensitization	15
5.3.2.8	Conducted spurious emission	15
5.3.2.9	Cabinet Radiation	15
Annex A (normative):	HS Requirements and conformance Test specifications Table (HS-RTT)	16
Annex B (informative):	The EN title in the official languages	18
Annex C (informative):	Bibliography	19
History		20