



SLOVENSKI STANDARD

DSIST ETS 300 372:1999

01-a UFW1999

FUX]g_UcdfYa U]b`g]ghYa]`f9GL!`HY\ b] bY`_fU_hf]gh_Y]b`a Yf]bY`a YrcXY`nU
dca cfg_Y`dfcglc`d`Uj U`c` Y`gUHY`]hg_Y`Uj`U`b]_Y`fUU`bi`Y`f9D`F6`LZ`_]cVfUhi`Y`c`j
dUgi`%Z` ; \`n`dfY`c`[Y`cgHUY`cbUfb]`gUHY`]rcj

Radio Equipment and Systems (RES); Technical characteristics and methods of measurement for maritime float-free satellite Emergency Position Indicating Radio Beacon (EPIRB) operating in the 1,6 GHz band through geostationary satellites

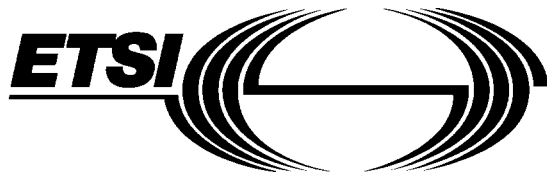
Ta slovenski standard je istoveten z: ETS 300 372 E1.% - *!\$*

ICS:

33.060.20	Sprejemna in oddajna oprema	Receiving and transmitting equipment
-----------	-----------------------------	--------------------------------------

DSIST ETS 300 372:1999

en



EUROPEAN
TELECOMMUNICATION
STANDARD

ETS 300 372

May 1996

Source: ETSI TC-RES

Reference: DE/RES-01009

ICS: 33.060.20

Key words: EPIRB, maritime, radio, satellite

**Radio Equipment and Systems (RES);
Technical characteristics and methods of measurement for
maritime float-free satellite Emergency Position Indicating Radio
Beacon (EPIRB) operating in the 1,6 GHz band
through geostationary satellites**

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

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

*

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 1996. All rights reserved.

Contents

Foreword	7
1 Scope	9
2 Normative references	9
3 Definitions and abbreviations	10
3.1 Definitions	10
3.2 Abbreviations	10
4 General requirements	10
4.1 Scope	10
4.2 Operating conditions	11
4.3 Remote control	11
4.4 Accessories	11
4.5 Mechanical and electrical construction	11
4.6 Indication of activation	12
4.7 Lanyard	12
4.8 Colour and surface quality	12
4.9 Low duty cycle light	12
4.10 Frequencies	12
4.11 Controls	12
4.11.1 General	12
4.11.2 Manual activation and deactivation	12
4.11.3 Satellite EPIRB test	13
4.12 Labelling	13
4.13 Operating instructions	13
4.14 Power source	14
4.15 Antenna characteristics	14
5 Test conditions, power sources and ambient temperatures	14
5.1 General	14
5.2 Test fixture	14
5.3 Test power source	15
5.4 Normal test conditions	15
5.4.1 Normal temperature and humidity	15
5.4.2 Normal test voltage	15
5.5 Extreme test conditions	15
5.5.1 Extreme temperatures	15
5.5.1.1 Upper extreme temperature	15
5.5.1.2 Lower extreme temperature	15
5.5.2 Extreme test voltages	15
5.5.2.1 Upper extreme test voltages	15
5.5.2.2 Lower extreme test voltage	15
5.6 Procedure for tests at extreme temperatures	15
5.7 Test sequence	15
5.8 Test frequencies	16
5.9 Measurement uncertainty	16
6 Environmental tests	16
6.1 General	16
6.2 Performance check	16
6.3 Vibration test	17
6.3.1 Definition	17
6.3.2 Method of measurement	17
6.3.3 Requirement	17
6.4 Temperature tests	17

6.4.1	Definition.....	17
6.4.2	Dry heat cycle	18
6.4.2.1	Internally mounted equipment.....	18
6.4.2.1.1	Method of measurement	18
6.4.2.1.2	Requirement.....	18
6.4.2.2	Externally mounted equipment.....	18
6.4.2.2.1	Method of measurement	18
6.4.2.2.2	Requirement.....	18
6.4.3	Damp heat cycle	18
6.4.3.1	Method of measurement.....	18
6.4.3.2	Requirement	19
6.4.4	Low temperature cycle.....	19
6.4.4.1	Internally mounted equipment.....	19
6.4.4.1.1	Method of measurement	19
6.4.4.1.2	Requirement.....	19
6.4.4.2	Externally mounted equipment.....	19
6.4.4.2.1	Method of measurement	19
6.4.4.2.2	Requirement.....	19
6.5	Ruggedness test	20
6.5.1	Definition.....	20
6.5.2	Method of measurement.....	20
6.5.3	Requirements	20
6.6	Hose stream test	20
6.6.1	Definition.....	20
6.6.2	Method of measurement.....	20
6.6.3	Requirements	20
6.7	Buoyancy test.....	20
6.7.1	Definition.....	20
6.7.2	Method of measurement.....	21
6.7.3	Requirements	21
6.8	Stability test	21
6.8.1	Definition.....	21
6.8.2	Method of measurement.....	21
6.8.3	Limit	21
6.9	Corrosion test.....	21
6.9.1	Definition.....	21
6.9.2	Method of measurement.....	21
6.9.3	Requirements	22
6.10	Drop test into water	22
6.10.1	Definition.....	22
6.10.2	Method of measurement.....	22
6.10.3	Requirement	22
6.11	Immersion test.....	22
6.11.1	Definition.....	22
6.11.2	Method of measurement.....	22
6.11.3	Requirement	23
6.12	Thermal shock.....	23
6.12.1	Definition.....	23
6.12.2	Method of measurement.....	23
6.12.3	Requirement	23
6.13	Solar radiation test	23
6.13.1	Definition.....	23
6.13.2	Method of measurement.....	23
6.13.3	Requirements	24
6.14	Oil resistance test.....	24
6.14.1	Definition.....	24
6.14.2	Method of measurement.....	24
6.14.3	Requirements	24
6.15	Antenna mismatch	25
6.15.1	Definition.....	25
6.15.2	Method of measurement.....	25
6.15.3	Requirement	25

7	Transmitter	25
7.1	Carrier frequency	25
	7.1.1 Definition	25
	7.1.2 Method of measurement	25
	7.1.3 Limit	25
7.2	Radiated power	25
	7.2.1 Definition	25
	7.2.2 Method of measurement	26
	7.2.3 Limit	26
7.3	Power in test fixture	26
	7.3.1 Definition	26
	7.3.2 Method of measurement	26
	7.3.3 Limit	26
7.4	Spurious emissions	26
	7.4.1 Definition	26
	7.4.2 Method of measurement	27
	7.4.3 Limit	27
7.5	Frequency shift	27
	7.5.1 Definition	27
	7.5.2 Method of measurement	27
	7.5.3 Limit	27
7.6	Bit-clock stability	27
	7.6.1 Definition	27
	7.6.2 Method of measurement	27
	7.6.3 Limit	27
7.7	Transmission period	28
	7.7.1 Definition	28
	7.7.2 Method of measurement	28
	7.7.3 Limit	28
7.8	Effective luminous intensity of the low duty cycle light	28
	7.8.1 Definition	28
	7.8.2 Method of measurement	28
	7.8.3 Limit	28
8	Release mechanism	28
8.1	General	28
	8.1.1 Design requirements	28
	8.1.2 Operation	29
	8.1.3 Temperature range	29
	8.1.4 Labelling	29
8.2	Automatic release of the satellite EPIRB	29
	8.2.1 Definition	29
	8.2.2 Method of measurement	29
	8.2.3 Requirement	30
Annex A (normative): 121,5 MHz Homing Transmitter		31
A.1	General	31
	A.1.1 Class of emission	31
	A.1.2 Modulation frequency	31
	A.1.3 Transmitter duty cycle	31
	A.1.4 Sweep repetition rate	31
A.2	Frequency error	31
	A.2.1 Definition	31
	A.2.2 Method of measurement	31
	A.2.3 Limit	31
A.3	Modulation duty cycle	31
	A.3.1 Definition	31
	A.3.2 Method of measurement	31
	A.3.3 Limit	32

A.4	Modulation factor	32
A.4.1	Definition	32
A.4.2	Method of measurement	32
A.4.3	Limit.....	32
A.5	Peak effective radiated power	32
A.5.1	Definition	32
A.5.2	Method of measurement	32
A.5.3	Limit.....	32
A.6	Spurious emissions	33
A.6.1	Definition	33
A.6.2	Method of measurement	33
A.6.3	Limit.....	33
History	34