SLOVENSKI STANDARD
SIST EN 50413:2009/A1:2014

01-januar-2014

Osnovni standard za merjenje in izračunavanje izpostavljenosti ljudi električnim, magnetnim poljem in elektromagnetnim sevanjem (0 Hz - 300 GHz) - Dopolnilo A1

Basic standard on measurement and calculation procedures for human exposure to electric, magnetic and electromagnetic fields (0 Hz - 300 GHz)

Grundnorm zu Mess- und Berechnungsverfahren der Exposition von Personen in elektrischen, magnetischen und elektromagnetischen Feldern (0 Hz bis 300 GHz)

Norme de base pour les procédures de mesures et de calculs pour l'exposition des personnes aux champs électriques, magnétiques et électromagnétiques (0 Hz - 300 GHz)

Ta slovenski standard je istoveten z: **EN 50413:2008/A1:2013**

ICS:

17.220.20	Merjenje električnih in magnetnih veličin	Measurement of electrical and magnetic quantities
33.100.01	Elektromagnetna združljivost na splošno	Electromagnetic compatibility in general

SIST EN 50413:2009/A1:2014 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50413/A1

October 2013

ICS 17.220.20; 33.100.01

English version

Basic standard on measurement and calculation procedures for human exposure to electric, magnetic and electromagnetic fields (0 Hz - 300 GHz)

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

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Foreword

This document (EN 50413:2008/A1:2013) has been prepared by CLC/TC 106X "Electromagnetic fields in the human environment ".

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2014-09-02
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2016-09-02

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1 Modification to Table D.2

Replace *Table D.2 by the following corrected table:*

Table D.2 – Relationship between carrier, mean and peak power for the most usual modulation types in the case of maximum modulated signal

Type of transmission		Carrier power P_C			Mean power P_M			Peak envelope power P_P		
Main parameter	Example	Factor for the determination of								
		P_C	P_M	P_P	P_C	P_M	P_P	P_C	P_M	P_P
A 1 A	AM	1	0,5	1	2	1	2	1	0,5	1
A 1 B	telegraph	1	0,5	1	2	1	2	1	0,5	1
A ✶[c] C A ✶[c] E	AM sound	1	1,5	4	0,67	1	2,67	0,25	0,38	1
B ✶[c] B[b] B ✶[c] E[b] B ✶[c] W[b]	AM independent sidebands	-	-	-	-	1	1	-	1	1
C ✶[c] F[a]	AM-TV Negative Modulation CCIR, OIRT	-	-	-	-	1	1,85	-	0,54	1
F ✶[c] ✶[c]	FM	1	1	1	1	1	1	1	1	1
H ✶[c] A H ✶[c] B H ✶[c] E	SSB full carrier	1	2	4	0,5	1	2	0,25	0,5	1
J ✶[c] B[g]	SSB	-	-	-	0	1	2	0	0,5	1
J ✶[c] C[g]	suppressed	-	-	-	0	1	1	0	1	1
J ✶[c] E[g]	carrier	-	-	-	0	1	2	0	0,5	1
K ✶[c] A K ✶[c] E[f]	pulse	1	1,5	4/*d*	0,67	1	2,67/*d*	0,25*d*	0,38*d*	1
L ✶[c] A L ✶[c] E M ✶[c] A[f] M ✶[c] E P ✶[c] N	pulse length pulse phase pulse sequence.	1	1	1/*d*	1	1	1/*d*	*d*	*d*	1
R ✶[c] B[b] R ✶[c] C[b] R ✶[c] E[b]	SSB reduced/var. carrier	-	-	-	-	1	1	-	1	1
W ✶[c] W[d] G ✶[c] W[d] W ✶[c] W[d]	DRM DAB DVB-T	1	1	*C*	1	1	*C*	1/*C*	1/*C*	1
X ✶[c] W[e]	DRM+AM	1	1,5	4	0,67	1	2,67	0,25	0,38	1

a Carrier power P_C not clearly defined.

b It is assumed that the carrier is almost totally suppressed and that in the case of modulation with a tone in a sideband the peak power of the transmitter can be reached.

c Symbol not relevant for assessment.

d The crest factor *C* describes the power ratio between maximum transmitted peak power and whole channel power measured over the whole channel bandwidth (generally 1,5 MHz for DAB and 8 MHz for DVB). If *C* is given as voltage ratio (peak to mean voltage) it has to be divided by two or diminished by 3 dB.

e Both A3E and W7W in one channel.

f d = pulse duty factor.

g It is assumed that the carrier is almost totally suppressed