

# SLOVENSKI STANDARD

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SIST EN 62040-2:2006

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### Sistemi z neprekinjenim napajanjem - 2. del: Zahteve za elektromagnetno združljivost (EMC) (IEC 62040-2:2016)

Uninterruptible power systems (UPS) - Part 2: Electromagnetic compatibility (EMC) requirements (IEC 62040-2:2016)

Unterbrechungsfreie Stromversorgungssysteme (USV) - Teil 2: Anforderungen an die elektromagnetische Verträglichkeit (EMV) (IEC 62040-2:2016)

Alimentations sans interruption (ASI) - Partie 2 : exigences pour la compatibilité électromagnétique (CEM) (IEC 62040-2:2016)

**Ta slovenski standard je istoveten z: EN IEC 62040-2:2018**

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29.200	Usmerniki. Pretvorniki. Stabilizirano električno napajanje	Rectifiers. Convertors. Stabilized power supply
33.100.01	Elektromagnetna združljivost na splošno	Electromagnetic compatibility in general

**SIST EN 62040-2:2018**

**en**

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EUROPEAN STANDARD

EN IEC 62040-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2018

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English Version

## Uninterruptible power systems (UPS) - Part 2: Electromagnetic compatibility (EMC) requirements (IEC 62040-2:2016)

Alimentations sans interruption (ASI) - Partie 2: Exigences  
pour la compatibilité électromagnétique (CEM)  
(IEC 62040-2:2016)

Unterbrechungsfreie Stromversorgungssysteme (USV) -  
Teil 2: Anforderungen an die elektromagnetische  
Verträglichkeit (EMV)  
(IEC 62040-2:2016)

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

**EN IEC 62040-2:2018 (E)****European foreword**

The text of document 22H/232/FDIS, future edition 3 of IEC 62040-2, prepared by SC 22H "Uninterruptible power systems (UPS)" of IEC/TC 22 "Power electronic systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62040-2:2018.

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- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-04-09
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-07-09

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61000-4 series	NOTE	Harmonized as EN 61000-4 series.
IEC 61204 series	NOTE	Harmonized as EN 61204 series.
CISPR 15:2013	NOTE	Harmonized as EN 55015:2013 (not modified).
CISPR 15:2013/A1:2015	NOTE	Harmonized as EN 55015:2013/A1:2015 (not modified).

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-2-2	2002	Electromagnetic compatibility (EMC) - Part 2-2: Environment - Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems	EN 61000-2-2	2002
IEC 61000-3-2	2014	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase)	EN 61000-3-2	2014
IEC 61000-3-12	2011	Electromagnetic compatibility (EMC) - Part 3-12: Limits - Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current > 16 A and ≤ 75 A per phase	EN 61000-3-12	2011
IEC 61000-4-2	2008	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	2009
IEC 61000-4-3	2006	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	2006
IEC 61000-4-4	2012	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2012
IEC 61000-4-5	2014	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2014
IEC 61000-4-6	2013	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	2014

## EN IEC 62040-2:2018 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-8	2009	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8	2010
IEC 62040-3	2011	Uninterruptible power systems (UPS) - Part 3: Method of specifying the performance and test requirements	EN 62040-3	2011
CISPR 11 (mod)	2015	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	EN 55011	2016
CISPR 16-1-1	2015	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus	-	-
CISPR 16-1-2	2014	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-2: Radio disturbance and immunity measuring apparatus - Coupling devices for conducted disturbance measurements	EN 55016-1-2	2014
CISPR 16-1-4	2010	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements	EN 55016-1-4	2010
+A1	2012		+A1	2012
CISPR 16-2-1	2014	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements	EN 55016-2-1	2014
CISPR 16-2-3	2010	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements	EN 55016-2-3 +AC	2010 2013
+A1	2010		+A1	2010
+A2	2014		+A2	2014
CISPR 22 (mod)	2008	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	EN 55022 +AC	2010 2011



# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Uninterruptible power systems (UPS) –  
Part 2: Electromagnetic compatibility (EMC) requirements**

**Alimentations sans interruption (ASI) –  
Partie 2: Exigences pour la compatibilité électromagnétique (CEM)**

INTERNATIONAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**IEC 62040-2**  
Edition 3.0 2016-11

**UNINTERRUPTIBLE POWER SYSTEMS (UPS) –****Part 2: Electromagnetic compatibility (EMC) requirements****INTERPRETATION SHEET 1**

This interpretation sheet has been prepared by subcommittee 22H: Uninterruptible power systems (UPS), of IEC technical committee 22: Power electronic systems and equipment.

The text of this interpretation sheet is based on the following documents:

FDIS	Report on voting
22H/232/FDIS	22H/236/RVD

Full information on the voting for the approval of this interpretation sheet can be found in the report on voting indicated in the above table.

**Interpretation of 5.3.2.4, Limits at the network ports****Introduction**

Sub-clause 5.3.2.4 states that the **network port** limits applicable to **UPS** of **category C1, C2** and **C3** are located in Table 1, Table 2 and Annex C.

It was not clear whether 5.3.2.4 applies to **network ports** that originate and terminate within the **enclosure port** of the **UPS** (i.e. to **network ports** connected exclusively to circuits or devices forming an integral part of the **UPS**).

**Interpretation**

The **network port** limits in Table 1, Table 2 and Annex C apply only to **network ports** for which connection to circuits or devices external to the **enclosure port** of the **UPS** is allowed. This includes, without limitation, connection to PSTN, ISDN, xDSL and Ethernet networks. The limits in Table 1, Table 2 and Annex C do not apply to **network ports** that originate and terminate within the **enclosure port** of the **UPS** (i.e. to **network ports** connected exclusively to circuits or devices forming an integral part of the **UPS**).



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## UNINTERRUPTIBLE POWER SYSTEMS (UPS) –

## Part 2: Electromagnetic compatibility (EMC) requirements

## FOREWORD

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International Standard IEC 62040-2 has been prepared by subcommittee 22H: Uninterruptible power systems (UPS), of IEC technical committee 22: Power electronic systems and equipment.

This third edition cancels and replaces the second edition published in 2005. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) the inclusion of **network port** limits in Table 1, Table 2 and Annex C for the sake of consistency with other standards;
- b) a change of quasi-peak limit for **category C3 UPS** in Table 2 for the sake of consistency with other standards;
- c) a clarification in Table 4 about the performance criteria for immunity tests;
- d) a revision of some test configurations in Annex A.