

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE  
COMITÉ INTERNATIONAL SPÉCIAL DES PERTURBATIONS RADIOÉLECTRIQUES

GENERIC EMC STANDARD  
NORME GÉNÉRIQUE EN CEM

**Electromagnetic compatibility (EMC) –  
Part 6-8: Generic standards – Emission standard for professional equipment in  
commercial and light-industrial locations**

**Compatibilité électromagnétique (CEM) –  
Partie 6-8: Normes génériques – Norme d'émission pour les matériels  
professionnels utilisés dans des environnements commerciaux et  
de l'industrie légère**



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## CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references .....	7
3 Terms, definitions and abbreviated terms .....	9
3.1 Terms and definitions.....	9
3.2 Abbreviated terms.....	12
4 Classification of equipment.....	13
5 Measurements and conditions during testing .....	14
6 Documentation for the user.....	14
7 Applicability .....	15
8 Emission requirements .....	15
9 Measurement uncertainty .....	15
10 Compliance with this document .....	15
11 Emission test requirements.....	16
Annex A (informative) Examples of emission classification of equipment and mapping to the immunity standard.....	22
Annex B (normative) Testing of DC powered systems .....	23
Annex C (informative) Rationale for alternative test levels at the DC power port .....	25
C.1 General.....	25
C.2 Necessity of alternative test methods in generic standards .....	25
C.3 Limit justification in table clause 5.2.....	25
C.3.1 Proportional relation approach.....	25
C.3.2 Current-to-voltage conversion approach .....	26
C.3.3 Setting the final limit.....	27
Annex D (informative) Special measures and mitigation techniques .....	28
Bibliography.....	30
Figure 1 – Example of ports.....	11
Figure C.1 – Equivalent circuit of test set-up for measurement of disturbance voltages.....	26
Figure C.2 – Limit proposals of the two different approach and the final limit compromise .....	27
Table 1 – Test arrangements of EUT .....	14
Table 2 – Required highest frequency for radiated measurement.....	16
Table 3 – Requirements for radiated emissions – Enclosure port .....	18
Table 4 – Requirements for conducted emissions – Low voltage AC mains port.....	19
Table 5 – Requirements for conducted emissions – DC power port.....	20
Table 6 – Requirements for conducted emissions, other wires ports .....	21
Table A.1 – Examples of emission classification of equipment to immunity standard against product type and its intended environment.....	22
Table B.1 – Conducted testing requirements of DC powered equipment.....	24
Table B.2 – Conditional requirements for the start frequency of test at DC power ports for tests defined in table clause B1.4 to B1.7 .....	24

Table C.1 – DC power port, terminal disturbance voltage limits for class A GCPCs, measured on a test site, proportion relation approach .....	26
Table C.2 – DC power port, terminal disturbance voltage limits for class A GCPCs, measured on a test site, current-to-voltage conversion approach .....	27
Table C.3 – DC power port, terminal disturbance voltage limits for class A GCPCs, with rated throughput $\leq 20$ kVA .....	27
Table D.1 – Examples of special measures and mitigation techniques, for the enclosure port .....	28
Table D.2 – Examples of special measures and mitigation techniques, for the various wired ports .....	29

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ELECTROMAGNETIC COMPATIBILITY (EMC) –

## Part 6-8: Generic standards – Emission standard for professional equipment in commercial and light-industrial locations

## FOREWORD

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International Standard IEC 61000-6-8 has been prepared by CISPR subcommittee H: Limits for the protection of radio services.

The text of this document is based on the following documents:

CDV	Report on voting
CIS/H/401/CDV	CIS/H/414/RVC

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61000 series, published under the general title *Electromagnetic compatibility (EMC)*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
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## INTRODUCTION

IEC 61000 is published in separate parts according to the following structure:

### **Part 1: General**

General considerations (introduction, fundamental principles)

Definitions, terminology

### **Part 2: Environment**

Description of the environment

Classification of the environment

Compatibility levels

### **Part 3: Limits**

Emission limits

Immunity limits (insofar as they do not fall under the responsibility of the product committees)

### **Part 4: Testing and measurement techniques**

Measurement techniques

Testing techniques

### **Part 5: Installation and mitigation guidelines**

Installation guidelines

Mitigation methods and devices

### **Part 6: Generic standards**

### **Part 9: Miscellaneous**

Each part is further subdivided into several parts published either as International Standards or technical reports/specifications, some of which have already been published as sections. Others will be published with the part number followed by a dash and a second number identifying the subdivision (example: IEC 61000-6-1).

## ELECTROMAGNETIC COMPATIBILITY (EMC) –

### Part 6-8: Generic standards – Emission standard for professional equipment in commercial and light-industrial locations

#### 1 Scope

This generic EMC emission standard is applicable only if no relevant dedicated product or product family EMC emission standard has been published.

This part of IEC 61000 for emission requirements applies to electrical and electronic equipment intended for use in commercial and light-industrial (see 3.1.3) locations. This document applies to equipment that satisfy the following restrictions of use:

- is defined as professional equipment (see 3.1.13),
- is professionally installed and maintained (see 3.1.14 and Clause 6),
- is not intended to be used in residential locations (see 3.1.16).

IEC 61000-6-3 applies to electrical and electronic equipment intended for use at commercial and light-industrial locations that do not satisfy these restrictions.

The intention is that all equipment used in the residential, commercial and light-industrial environments are covered by IEC 61000-6-3 or IEC 61000-6-8. If there is any doubt, the requirements in IEC 61000-6-3 apply.

Emission requirements within the frequency range 0 Hz to 400 GHz are covered.

The conducted and radiated emission requirements in the frequency range up to 400 GHz are considered essential and have been selected to provide an adequate level of protection of radio reception in the defined electromagnetic environment. Not all disturbance phenomena have been included for testing purposes but only those considered relevant for the equipment intended to operate within the locations included within this document.

The emission requirements in this document are not intended to be applicable to the intentional transmissions and their harmonics from a radio transmitter as defined by the ITU.

NOTE 1 Safety considerations are not covered by this document.

NOTE 2 In special cases, situations will arise where the levels specified in this document will not offer adequate protection; for example where a sensitive receiver is used in close proximity to an equipment. In these instances, employ special mitigation measures to reduce any impact.

NOTE 3 Disturbances generated in fault conditions of equipment are not covered by this document.

NOTE 4 Equipment which complies with IEC 61000-6-3 are suitable for use within these defined locations.

#### 2 Normative references

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.

IEC 61000-3-2:2018, *Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)*