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Anslutning av yttre strömförsörjningsenheter (EPS) till mobiltelefoner med möjlighet till datakommunikation – Specifikationer för interoperabilitet

*Interoperability specifications of common external power supply (EPS)
for use with data-enabled mobile telephones*

Som svensk standard gäller europastandarden EN IEC 62684:2018. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 62684:2018.

Nationellt förord

Europastandarden EN IEC 62684:2018

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62684, Second edition, 2018 - Interoperability specifications of common external power supply (EPS) for use with data-enabled mobile telephones**

utarbetad inom International Electrotechnical Commission, IEC.

EN från CENELEC som är identiska med motsvarande IEC-standarder och som görs tillgängliga för nationalkommittéerna efter den 1 januari 2018 får en beteckning som inleds med EN IEC istället för som tidigare bara EN.

Tidigare fastställd svensk standard SS-EN 62684, utgåva 1, 2011, gäller ej fr o m 2021-03-12.

ICS 29.200.00; 35.100.05; 35.200.00

Denna standard är fastställd av SEK Svensk Elstandard,
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Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

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Stora delar av arbetet sker internationellt

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Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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English Version

Interoperability specifications of common external power supply
(EPS) for use with data-enabled mobile telephones
(IEC 62684:2018)

Spécifications d'interopérabilité de l'alimentation externe
commune (EPS) avec des téléphones mobiles permettant
l'échange de données
(IEC 62684:2018)

Spezifikationen für die Interoperabilität eines einheitlichen
externen Stromversorgungsgeräts (EPS) für die
Anwendung bei datenübertragungsfähigen Mobiltelefonen
(IEC 62684:2018)

This European Standard was approved by CENELEC on 2018-03-12. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

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

European foreword

The text of document 100/2872/CDV, future edition 2 of IEC 62684, prepared by technical area 14: "Interfaces and methods of measurement for personal computing equipment", of IEC/TC 100: "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62684:2018.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2018-12-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-03-12

This document supersedes EN 62684:2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

Endorsement notice

The text of the International Standard IEC 62684:2018 was approved by CENELEC as a European Standard without any modification.

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

IEC 62680-1-2	NOTE	Harmonized as EN 62680-1-2.
IEC 62680-1-3	NOTE	Harmonized as EN 62680-1-3.
IEC 63002	NOTE	Harmonized as EN 63002.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60950-1	-	Information technology equipment - Safety - Part 1: General requirements	EN 60950-1	-
IEC 62368-1	-	Audio/video, information and communication technology equipment -- Part 1: Safety requirements	EN 62368-1	-
IEC 62680-1-1	-	Universal Serial Bus interfaces for data and power Part 1-1: Universal Serial Bus interfaces - common components - USB Battery Charging Specification, Revision 1.2 (TA 14)	EN 62680-1-1	-
IEC 62680-2-1	2015	Universal Serial Bus interfaces for data and power Part 2-1: Universal Serial Bus Specification, Revision 2.0 (TA 14)	-	-
IEC 62680-2-2	-	Universal Serial Bus interfaces for data and power Part 2-2: Universal Serial Bus - Micro-USB Cables and Connectors Specification, Revision 1.01 (TA 14)	EN 62680-2-2	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INTEROPERABILITY SPECIFICATIONS OF COMMON
EXTERNAL POWER SUPPLIES (EPS) FOR USE WITH
DATA-ENABLED MOBILE TELEPHONES****FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62684 has been prepared by technical area 14: Interfaces and methods of measurement for personal computing equipment, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision.

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

- a) Clause 1 is modified to include updated references to IEC Universal Serial Bus interface standards;
- b) Clause 2 is expanded to include references to IEC Universal Serial Bus interface standards;
- c) Subclause 4.1 is expanded to include requirements for non USB Micro-B plug DC plug connectors;

- d) Subclause 4.4 is modified to remove obsolete requirements for common mode noise and reference requirements of IEC Universal Serial Bus interface standards;
- e) Subclause 4.5 is modified to reference appropriate safety standards.

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

CDV	Report on voting
100/2872/CDV	100/2966/RVC

Full information on the voting for the approval of this International Standard 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.

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,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

INTEROPERABILITY SPECIFICATIONS OF COMMON EXTERNAL POWER SUPPLIES (EPS) FOR USE WITH DATA-ENABLED MOBILE TELEPHONES

1 Scope

This document specifies the interoperability of common external power supplies for use with data-enabled mobile telephones. It defines the common charging capability and specifies interface requirements for the external power supply.

Safety and EMC aspects are not covered by this document. Safety is covered by IEC 60950-1 or IEC 62368-1 and EMC is covered by regional /national standards.

This document defines interoperability based on legacy USB technologies and does not cover charging interfaces that implement IEC 62680-1-3 (USB Type-C™¹), IEC 62680-1-2 (USB PD) and IEC 63002.

NOTE: The content of this document is based on Annex II dated 12 January 2010 to the MoU regarding Harmonisation of a Charging Capability for Mobile Phone.

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 60950-1, *Information technology equipment – Safety – Part 1: General requirements*

IEC 62368-1, *Audio/video, information and communication technology equipment – Part 1: Safety requirements*

IEC 62680-1-1, *Universal Serial Bus interfaces for data and power – Part 1-1: Common components – USB Battery Charging Specification, Revision 1.2*

IEC 62680-2-1:2015, *Universal Serial Bus interfaces for data and power – Part 2-1: Universal Serial Bus specification, Revision 2.0*

IEC 62680-2-2, *Universal Serial Bus interfaces for data and power – Part 2-2: USB Micro-USB Cables and Connectors Specification, Revision 1.01*

¹ USB Type-C™ is a trademark of the USB Implementers Forum (USB-IF). This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of this product.