PD IEC TR 63447-1:2023

BSI Standards Publication

Form factor of smart mobile devices

Part 1: Impact on multimedia services

Documents
Document Sharing Hub

Full document details: PD IEC TR 63447-1:2023

National foreword

This Published Document is the UK implementation of IEC TR 63447-1:2023.

The UK participation in its preparation was entrusted to Technical Committee EPL/100, Audio-visual equipment.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

This publication is not to be regarded as a British Standard.

© The British Standards Institution 2023
Published by BSI Standards Limited 2023

ISBN 978 0 539 22354 5

ICS 33.160.60

Compliance with a Published Document cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 December 2023.

Amendments/corrigenda issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: PD IEC TR 63447-1:2023

IEC TR 63447-1

Edition 1.0 2023-12

TECHNICAL REPORT

Form factor of smart mobile devices – Part 1: Impact on multimedia services

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 33.160.60

ISBN 978-2-8322-7878-9

Warning! Make sure that you obtained this publication from an authorized distributor.

® Registered trademark of the International Electrotechnical Commission

Documents
Document Sharing Hub

Full document details: PD IEC TR 63447-1:2023

CONTENTS

FOREWORD 3
INTRODUCTION 5
1 Scope 6
2 Normative references 6
3 Terms, definitions and abbreviated terms 6
3.1 Terms and definitions 6
3.2 Abbreviated terms 7
4 Overview 7
4.1 General 7
4.2 SMD history 7
4.3 Usage trends of SMD 8
4.4 Multimedia services 9
5 Impact of SMD form factors on multimedia services 10
5.1 Camera 10
5.2 Display 11
5.2.1 Display size changes 11
5.2.2 Various screen form factors 12
5.2.3 Deformable screen 13
5.3 Touchscreen 14
5.4 Waterproofness 15
6 Potential new work items for IEC TC 100 16
Bibliography 17

Figure 1 – Percentage of average SMD usage time per media in the USA 8
Figure 2 – Percentage of average time spent with media in the world (smartphone) 9
Figure 3 – Cameras in SMD 10
Figure 4 – Example of camera lens structure to reduce the prominent shape 10
Figure 5 – Example of changeable front camera structure 11
Figure 6 – SMD display trend 12
Figure 7 – Notch display 12
Figure 8 – Pin hole and teardrop display 12
Figure 9 – Dual punch hole display 13
Figure 10 – Various SMD folding types 14
Figure 11 – Usage example of rollable SMD 14
Figure 12 – Example of finger touch and pen touch 15

Table 1 – Classification of touch pen 15

Documents
Document Sharing Hub

Full document details: PD IEC TR 63447-1:2023

INTERNATIONAL ELECTROTECHNICAL COMMISSION

FORM FACTOR OF SMART MOBILE DEVICES –

Part 1: Impact on multimedia services

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.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

IEC TR 63447-1 has been prepared by subcommittee Technical Area 1: Terminal for audio, video and data services and content, of IEC technical committee 100: Audio, video and multimedia systems and equipment. It is a Technical Report.

The text of this Technical Report is based on the following documents:

Draft	Report on voting
100/4033/DTR	100/4067/RVDTR

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

The language used for the development of this Technical Report is English.

Documents
Document Sharing Hub

Full document details: PD IEC TR 63447-1:2023

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 63447 series, published under the general title *Form factor of smart mobile devices*, 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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

Documents
Document Sharing Hub

Full document details: PD IEC TR 63447-1:2023