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**Smart Cards;  
UICC-Terminal interface;  
Physical, electrical and logical test specification;  
Part 2: UICC features  
(Release 9)**

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## Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Smart Card Platform (SCP).

It is based on work originally done in the 3GPP in TSG-terminals WG3.

The contents of the present document are subject to continuing work within TC SCP and may change following formal TC SCP approval. If TC SCP modifies the contents of the present document, it will then be republished by ETSI with an identifying change of release date and an increase in version number as follows:

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  - 0 early working draft;
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- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

The present document is part 2 of a multi-part deliverable covering the Test specification for the Terminal/Integrated Circuit Card (ICC) interface, as identified below:

Part 1: "Terminal features";

**Part 2: "UICC features".**

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## Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

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## Introduction

The present document defines test cases for the UICC relating to the Terminal/UICC interface, as specified in ETSI TS 102 221 [1].

The aim of the present document is to ensure interoperability between the terminal and the UICC independently of the respective manufacturer, card issuer or operator.

Application specific tests for applications residing on an UICC are specified in ETSI TS 131 121 [3].

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)  
Full standard:  
<https://standards.iteh.ai/catalog/standards/sist/3f5ebb7d-6d9b-471f-a609-8deab655a915/etsi-ts-102-230-2-v9.1.0-2016-06>

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# 1 Scope

The present document covers the minimum characteristics which are considered necessary for the UICC in order to provide compliance to ETSI TS 102 221 [1].

The present document specifies the test cases for:

- the electrical characteristics of the UICC;
- the initial communication establishment and the transport protocols;
- the communication layers between the UICC and the UICC-enabled terminal.

Test cases for the USB ICC relating to ETSI TS 102 221 [1] interface as well as test cases for SWP/HCI relating to ETSI TS 102 613 [19] and ETSI TS 102 622 [i.1] are out of scope of the present document.

---

## 2 References

### 2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <https://docbox.etsi.org/Reference/>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

- [1] ETSI TS 102 221: "Smart Cards; UICC-Terminal interface; Physical and logical characteristics".
- [2] ETSI TS 121 111: "Universal Mobile Telecommunications System (UMTS); USIM and IC card requirements (3GPP TS 21.111 Release 5)".
- [3] ETSI TS 131 121: "Universal Mobile Telecommunications System (UMTS); LTE; UICC-terminal interface; Universal Subscriber Identity Module (USIM) application test specification (3GPP TS 31.121)".
- [4] ISO/IEC 9646-7: "Information technology -- Open Systems Interconnection -- Conformance testing methodology and framework -- Part 7: Implementation Conformance Statements".
- [5] ETSI TS 102 223: "Smart Cards; Card Application Toolkit (CAT)".
- [6] Void.
- [7] ISO/IEC 7810: "Identification cards -- Physical characteristics".
- [8] ISO/IEC 7811-1: "Identification cards -- Recording technique -- Part 1: Embossing".
- [9] ISO/IEC 7816-1: "Identification cards - Integrated circuit cards -- Part 1: Cards with contacts -- Physical characteristics".
- [10] ISO/IEC 7816-2: "Identification cards -- Integrated circuit cards -- Part 2: Cards with contacts -- Dimensions and location of the contacts".
- [11] ISO/IEC 7816-3: "Identification cards -- Integrated circuit cards -- Part 3: Cards with contacts -- Electrical interface and transmission protocols".