

Identification cards — Contactless integrated circuit(s) cards — Proximity cards —

Part 2: Radio frequency power and signal interface

ICS 35.240.15

National foreword

This British Standard is the UK implementation of ISO/IEC 14443-2:2001+A1:2005, incorporating corrigendum November 2007.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to ISO/IEC text carry the number of the ISO/IEC amendment. For example, text altered by ISO/IEC amendment 1 is indicated by A1 A1.

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The UK participation in its preparation was entrusted to Technical Committee IST/17, Identification cards and related devices.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

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INTERNATIONAL STANDARD

ISO/IEC
14443-2

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Identification cards — Contactless integrated circuit(s) cards — Proximity cards —

Part 2: Radio frequency power and signal interface

*Cartes d'identification — Cartes à circuit(s) intégré(s) sans contact —
Cartes de proximité —*

Partie 2: Puissance de la fréquence radio et interface du signal



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Contents

Page

Foreword.....	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and abbreviated terms	2
5 Initial dialogue for proximity cards	3
6 Power transfer	3
6.1 Frequency	3
6.2 Operating field.....	3
7 Signal interface	3
8 Communication signal interface Type A	5
8.1 Communication PCD to PICC	5
8.1.1 Bit rate.....	5
8.1.2 Modulation.....	5
8.1.3 Bit representation and coding.....	7
8.2 Communication PICC to PCD	8
8.2.1 Bit rate.....	8
8.2.2 Load modulation	9
8.2.3 Subcarrier	9
8.2.4 Subcarrier modulation	9
8.2.5 Bit representation and coding.....	9
9 Communication signal interface Type B	10
9.1 Communication PCD to PICC	10
9.1.1 Bit rate.....	10
9.1.2 Modulation.....	10
9.1.3 Bit representation and coding.....	10
9.2 Communication PICC to PCD	11
9.2.1 Bit rate.....	11
9.2.2 Load modulation	11
9.2.3 Subcarrier	11
9.2.4 Subcarrier modulation	11
9.2.5 Bit representation and coding.....	11
10 PICC minimal coupling zone	12
Annex A (informative) Compatibility with other card standards	13

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

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In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 14443-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Identification cards and related devices*.

ISO/IEC 14443 consists of the following parts, under the general title *Identification cards — Contactless integrated circuit(s) cards — Proximity cards*:

- *Part 1: Physical characteristics*
- *Part 2: Radio frequency power and signal interface*
- *Part 3: Initialization and anticollision*
- *Part 4: Transmission protocol*

Annex A of this part of ISO/IEC 14443 is for information only.

Foreword to amendment 1

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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

Amendment 1 to ISO/IEC 14443-2:2001 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.

Introduction

ISO/IEC 14443 is one of a series of International Standards describing the parameters for identification cards as defined in ISO/IEC 7810 and the use of such cards for international interchange.

This part of ISO/IEC 14443 describes the electrical characteristics of two types of contactless interface between a proximity card and a proximity coupling device. The interface includes both power and bi-directional communication.

This part of ISO/IEC 14443 does not preclude the incorporation of other standard technologies on the card, such as those referenced in Annex A.

Contactless card standards cover a variety of types as embodied in ISO/IEC 10536 (close-coupled cards), ISO/IEC 14443 (proximity cards), ISO/IEC 15693 (vicinity cards). These are intended for operation when very near, nearby and at a longer distance from associated coupling devices respectively.

The International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) draw attention to the fact that it is claimed that compliance with this part of ISO/IEC 14443 may involve the use of patents.

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