
**Identification cards — Recording
technique —**

**Part 8:
Magnetic stripe — Coercivity of 51,7
kA/m (650 Oe)**

*Cartes d'identification — Technique d'enregistrement —
Partie 8: Zone magnétique — Coercivité de 51,7 kA/m (650 Oe)*

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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. 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.

ISO/IEC 7811 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology, SC 17, Cards and personal identification*.

This second edition cancels and replaces the first edition (ISO/IEC 7811-8:2008), which has been technically revised. Major changes from the first edition are as follows:

- The primary standard cards held by Q-Card are used to calibrate the manufacture of secondary reference cards. Other primary standard cards held by PTB and Card testing International (CTI) are used as backup to replace cards held by Q-Card as they wear out.
- The supplier of secondary reference cards has changed from PTB to Q-Card.

ISO/IEC 7811 consists of the following parts, under general title *Identification cards — Recording technique*:

- *Part 1: Embossing*
- *Part 2: Magnetic stripe — Low coercivity*
- *Part 6: Magnetic stripe — High coercivity*
- *Part 7: Magnetic stripe — High coercivity, high density*
- *Part 8: Magnetic stripe — Coercivity of 51,7 kA/m (650 Oe)*
- *Part 9: Tactile identifier mark*

Introduction

This part of ISO/IEC 7811 is similar to ISO/IEC 7811-2, except that its higher coercivity requires higher energy to encode the data. The user of ISO/IEC 7811-8 is encouraged to review the entire standard for revisions and updates. The major differences from ISO/IEC 7811-2 are listed below.

- In terms of coercivity, this part of ISO/IEC 7811 media (51,7 kA/m, 650 Oe) is between ISO/IEC 7811-2 (23,9 kA/m, 300 Oe) and ISO/IEC 7811-6 (minimum 199 kA/m, 2 500 Oe).
- The primary application for 51,7 kA/m (650 Oe) is for hotel guest room entry systems worldwide.
- For [Table 1](#) values, this part of ISO/IEC 7811 specifies different values for $I_{\min}$ (6,5 FR) and $I_{\max}$ (8 FR).
- Encoding techniques, specification, and error detection are not specified in this part of ISO/IEC 7811.
- Wherever possible, the same definitions, criteria, and test methods are used in ISO/IEC 7811-2, ISO/IEC 7811-6, and this part of ISO/IEC 7811.

Notes in this part of ISO/IEC 7811 are only used for giving additional information intended to assist understanding or use, and do not contain provisions or requirements to which it is necessary to conform in order to be able to claim compliance with this part of ISO/IEC 7811.

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