



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO/IEC 15426-2:2006

Information technology - Automatic  
identification and data capture  
techniques - Bar code verifier  
conformance specification - Part 2: Two-  
dimensional symbols (ISO/IEC 15426  
-2:2005)

## I.S. EN ISO/IEC 15426-2:2006

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

EN ISO/IEC 15426  
-2:2006/AC:2011

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<i>This document replaces:</i>	<i>This document is based on:</i> EN ISO/IEC 15426-2:2006	<i>Published:</i> 1 March, 2006
This document was published under the authority of the NSAI and comes into effect on: 10 May, 2006		ICS number: 35.040
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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

**EN ISO/IEC 15426-  
2:2006/AC**

April 2011

Avril 2011

April 2011

ICS 35.040

English version  
Version Française  
Deutsche Fassung

Information technology - Automatic identification and data capture techniques - Bar code verifier conformance specification - Part 2: Two-dimensional symbols - Technical Corrigendum 1 (ISO/IEC 15426-2:2005/Cor 1:2008)

Technologies de l'information - Techniques automatiques d'identification et de capture des données - Spécifications de conformité des vérificateurs de codes à barres - Partie 2: Symboles bidimensionnels - Rectificatif technique 1 (ISO/IEC 15426-2:2005/Cor 1:2008)

Informationstechnik - Automatische Identifikation und Datenerfassungsverfahren - Prüfanforderungen für Strichcodeprüfgeräte - Teil 2: Zweidimensionale Symbolgien (ISO/IEC 15426-2:2005/Cor 1:2008)

This corrigendum becomes effective on 20 April 2011 for incorporation in the three official language versions of the EN.

Ce corrigendum prendra effet le 20 avril 2011 pour incorporation dans les trois versions linguistiques officielles de la EN.

Die Berichtigung tritt am 20. April 2011 zur Einarbeitung in die drei offiziellen Sprachfassungen der EN in Kraft.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## **Foreword**

This document (EN ISO/IEC 15426-2:2006/AC:2011) has been prepared by Technical Committee JTC 1 "Information technology" in collaboration with Technical Committee CEN/TC 225 "AIDC technologies" the secretariat of which is held by NEN.

### **Endorsement notice**

The text of ISO/IEC 15426-2:2005/Cor 1:2008 has been approved by CEN as a EN ISO/IEC 15426-2:2006/AC:2011 without any modification.

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**I.S. EN ISO/IEC 15426-2:2006**  
**INTERNATIONAL STANDARD ISO/IEC 15426-2:2005**  
**TECHNICAL CORRIGENDUM 1**

Published 2008-04-15

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# **Information technology — Automatic identification and data capture techniques — Bar code verifier conformance specification —**

## **Part 2: Two-dimensional symbols**

TECHNICAL CORRIGENDUM 1

*Technologies de l'information — Techniques d'identification automatique et de capture de données —  
Spécifications de conformité des vérificateurs de codes à barres —*

*Partie 2: Symboles bidimensionnels*

*RECTIFICATIF TECHNIQUE 1*

Technical Corrigendum 1 to ISO/IEC 15426-2:2005 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

Page 11

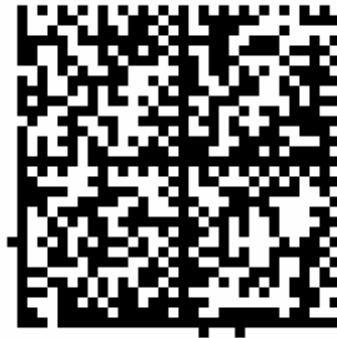
Replace Table A.2 with the following:

**Table A.2 — Fixed Pattern Damage grading of Figure A.3**

Segment	Module errors	Grade
L1	2	3
L2	1	3
QZL1	1	3
QZL2	2	3
Clock track and adjacent solid pattern	1 + 1	3
AG = 3,0		2
Therefore grade for Fixed Pattern Damage is 2		

Page 11

Replace Figure A.3 with the following:



**Figure A.3 — Test symbol for Fixed Pattern Damage (Data Matrix)**



ICS 35.040

English Version

Information technology - Automatic identification and data  
capture techniques - Bar code verifier conformance specification  
- Part 2: Two-dimensional symbols (ISO/IEC 15426-2:2005)

Technologies de l'information - Techniques d'identification  
automatique et de capture de données - Spécifications de  
conformité des vérificateurs de codes à barres - Partie 2:  
Symboles bidimensionnels (ISO/IEC 15426-2:2005)

Informationstechnik - Automatische Identifikation und  
Datenerfassungsverfahren - Prüfanforderungen für  
Strichcoderüfgeräte - Teil 2: Prüfgeräte für  
zweidimensionale Codes (ISO/IEC 15426-2:2005)

This European Standard was approved by CEN on 16 February 2006.

CEN 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 Central Secretariat or to any CEN 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 CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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**I.S. EN ISO/IEC 15426-2:2006**

**EN ISO/IEC 15426-2:2006 (E)**

**Foreword**

The text of ISO/IEC 15426-2:2005 has been prepared by Technical Committee ISO/IEC/JTC 1 "Information technology" of the International Organization for Standardization (ISO) and has been taken over as EN ISO/IEC 15426-2:2006 by Technical Committee CEN/TC 225 "AIDC technologies", the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2006, and conflicting national standards shall be withdrawn at the latest by September 2006.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

**Endorsement notice**

The text of ISO/IEC 15426-2:2005 has been approved by CEN as EN ISO/IEC 15426-2:2006 without any modifications.

# INTERNATIONAL STANDARD

# ISO/IEC 15426-2

First edition  
2005-03-15

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## Information technology — Automatic identification and data capture techniques — Bar code verifier conformance specification —

### Part 2: Two-dimensional symbols

*Technologies de l'information — Techniques d'identification  
automatique et de capture de données — Spécifications de conformité  
des vérificateurs de codes à barres —*

*Partie 2: Symboles bidimensionnels*

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Reference number  
ISO/IEC 15426-2:2005(E)



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Published in Switzerland

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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 15426-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

ISO/IEC 15426 consists of the following parts, under the general title *Information technology — Automatic identification and data capture techniques — Bar code verifier conformance specification*:

- *Part 1: Linear symbols*
- *Part 2: Two-dimensional symbols*

## Introduction

The technology of bar coding is based on the recognition of patterns encoded, in bars and spaces or in a matrix of modules of defined dimensions, according to rules defining the translation of characters into such patterns, known as the symbology specification. Symbology specifications may be categorised into linear symbols, on the one hand, and two-dimensional symbols on the other; the latter may in turn be sub-divided into «multi-row bar codes» sometimes referred to as «stacked bar codes», and «two-dimensional matrix codes».

Multi-row bar codes are constructed graphically as a series of rows of symbol characters, representing data and overhead components, placed in a defined vertical arrangement to form a (normally) rectangular symbol, which contains a single data message. Each row of the symbol has the characteristics of a linear bar code symbol and may be read by linear symbol scanning techniques.

Two-dimensional matrix symbols are usually rectangular arrangements of modules placed at the intersections of a grid of two (sometimes more) axes; the coordinates of each module need to be known in order to determine its significance, and the symbol must therefore be analysed two-dimensionally before it can be decoded.

Unless the context requires otherwise, the term «symbol» in this part of ISO/IEC 15426 may refer to either type of symbology.

The symbol, as a machine-readable data carrier, must be produced in such a way as to be reliably decoded at the point of use, if it is to fulfil its basic objective. Standard methodologies have been developed for measuring and assessing the quality of symbols for process control and quality assurance purposes during symbol production as well as afterwards.

Manufacturers of bar code equipment, the producers of bar code symbols and the users of bar code technology require publicly available standard conformance specifications for measuring equipment applying these methodologies, to ensure the accuracy and consistency of performance of this equipment.

This part of ISO/IEC 15426 is intended to be similar in technical content (*mutatis mutandis*) to the linear bar code verifier conformance standard, ISO/IEC 15426-1, on which it has been based. It should be read in conjunction with the symbology specification applicable to the bar code symbol being tested, which provides symbology-specific detail necessary for its application.





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