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Standards

Irish Standard  
I.S. EN 16656:2014

# Information technology - Radio frequency identification for item management - RFID Emblem (ISO/IEC 29160:2012, modified)

**I.S. EN 16656:2014**

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

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## Information technology - Radio frequency identification for item management - RFID Emblem (ISO/IEC 29160:2012, modified)

Technologies de l'information - Identification par radiofréquence (RFID) pour la gestion d'objets - Emblème RFID (ISO/CEI 29160:2012, modifié)

Informationstechnik - Identifizierung von Waren mittels Hochfrequenz (RFID) für das Management des Warenflusses - RFID-Emblem (ISO/IEC 29160:2012, modifiziert)

This European Standard was approved by CEN on 8 May 2014.

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 CEN-CENELEC Management Centre or to any CEN member.

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**EN 16656:2014 (E)**

## **Foreword**

This document (EN 16656:2014) has been prepared 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of an identical text or by endorsement, at the latest by December 2014, and conflicting national standards shall be withdrawn at the latest by December 2014.

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

The modifications to ISO/IEC 29160:2012 are indicated by a vertical line in the margin.

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

## **Introduction**

Radio frequency identification (RFID) is a technology that touches all aspects of the supply chain, from manufacturing all the way to the end-use consumer.

It is important for industrial users, retailers and consumers to know when an RFID tag is present. To this end, the RFID Emblem specified in this International Standard provides the public with a readily identifiable method to inform users of the presence of RFID.

The RFID Emblem provides a visible identification of RFID transponders, interrogators, and tagged items. Visible signs inform consumers whether an item or product contains an RFID tag. Therefore, this meets one of the main requirements for consumer privacy protection.

The RFID Emblem is a public-domain object intended to augment rather than replace other emblems and logos such as recycling and CE. The RFID Emblem requires no fee for use nor does it have any membership or other use restriction or requirement, other than compliance with this International Standard.

**EN 16656:2014 (E)****1 Scope**

This European Standard specifies the design and use of the RFID Emblem: an easily identified visual guide that indicates the presence of radio frequency identification (RFID). It does not address location of the RFID Emblem on a label. Specific placement requirements are left to application standards developers.

It also specifies an RFID Index, which can be included in the RFID Emblem and which addresses the complication added by the wide range of RFID tags (frequency, protocol and data structure). The RFID Index is a two-character code that provides specific information about compliant tags and interrogators. Successful reading of RFID tags requires knowledge of the frequency, protocol and data structure information provided by the RFID Index.

**2 Normative references**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO/IEC 19762 (all parts), *Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary (ISO/IEC 19762 (all parts))*

**3 Terms, definitions, symbols and abbreviations**

For the purposes of this document, the terms, definitions, symbols and abbreviations given in EN ISO/IEC 19762 (all parts) apply.

**4 The RFID Emblem****4.1 General**

The RFID Emblem's genesis was the AIM RFID Emblem, developed by the AIM Global RFID Experts Group (REG). The RFID Emblem consists of a unique, public-domain emblem with a two-character code (RFID Index) to indicate the frequency range and, in certain cases, the data structure contained within the encoded RFID transponder. A generic emblem without the RFID Index is permitted. Due to the incompatibility of different types of RFID, the use of the generic emblem is discouraged.

The RFID Emblem may be used in conjunction with other logos or indicia that indicate specific applications of RFID.

**4.2 RFID Index**

Two-character codes are used to identify the frequency, the air interface protocol, the defining agency for the data, and the data on the tag. This is referred to as the RFID Index. The first character defines the frequency, air interface protocol and defining authority, the second character defines the data structure.

To help installation planners identify encoding or reading equipment suitable for a particular frequency and data structure, a "generic" code with an asterisk (\*) as the second character is assigned for each grouping. This code shall only be used on interrogators and shall not be used on labels or tags. Currently assigned two-character codes are given in Annex A. Codes not currently assigned are reserved for future use.

**4.3 Representation**

The two representations of the RFID Emblem are dark-on-light and light-on-dark, as illustrated below. Examples of the RFID Emblem for use on RFID-enabled printers/encoders and interrogators, and for use on labels are also illustrated.



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