

MH10.8.8 – 2006



Radio Frequency Identification for Packages, Parcels, and Flat Mail

Approved: 19 May 2006

Abstract

This standard provides guidance for the use of radio-frequency identification (RFID) for the handling and tracking of packages, parcels, and flat mail. The standard identifies minimum data requirements as well as semantic and syntactical recommendations. This standard further provides specific recommendations for the air interface communications of RFID devices based on the application requirements identified by the carriers.

Developed by:

MH10 Committee, Unit-Loads and Transport-Packages

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American National Standards Institute, Inc.

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Foreword (This foreword is not part of American National Standard MH10.8.8-2006)

Increasingly, commercial and government letter, parcel, and small package carriers are finding needs to have interoperable methods of handling, processing, and tracking of items sent through postal and logistics services. Many industries have adopted the framework of a specific standard, American National Standards (ANS) MH10.8.1, in their implementation of shipper-to-consignee information with respect to optically readable media. This standard addresses the carrier implementation of the MH 10/SC8 standards while expanding the applications to radio frequency identification.

Internationally, the ISO TC 122 (Packaging)/TC 104 (Freight Containers) Joint Working Group – Supply Chain Applications of RFID is addressing standards for product packages (ISO 17366) and transport units (ISO 17365). There is a close coordination between the efforts of the international community and the development of this standard.

At the time of approval, the MH10 Committee consisted of the following members:

AIM, Inc.	Integrated Business Communications Alliance
American Trucking Associations	Intermec Technologies
American Wood Packaging Association	International Cargo Handling Coordination Association
APA – The Engineered Wood Association	International Safe Transit Association
Association of American Railroads	Material Handling Industry
Assoc. of Professional Material Handling Consultants	Material Handling Management Society
Association of American Railroads	National Wood Pallet & Container Association
ASTM	Plastic Drum Institute
Automotive Industry Action Group	Q.E.D. Systems
CompTIA	Rack Manufacturers Institute
Containerization & Intermodal Institute, Inc.	Reusable Industrial Packaging Association
Electronics Industries Association	Steel Shipping Container Institute
Fibre Box Association	Textile Bag Manufacturers Association
Flexible Intermediate Bulk Containers Association	U.S. Dept. of Agriculture
Food Marketing Institute	U.S. Dept. of Defense Logistics
Glass Packaging Institute	U.S. Forest Products Laboratory
Graphic Communications Association	Uniform Code Council
Industrial Metal Containers & Wire Decking (IMC&WD)	United Fresh Fruit & Vegetable Association
Institute of Packaging Professionals	United Parcel Service

At the date of approval of this standard, the MH10.8 Committee consisted of the following members:

AIAG	High Tech Aid
Allied Labels and Ribbons	IBM
ATA	Intermec
Boeing	Motorola
Bruno Associates	QED Systems
Canada Post	Strategic Consulting Services
CDO	Telecordia Tech/ATIS BCSC
DLA	Texas Instruments
DoD AIT Project Office	Uniform Code Council
Federal Express	UPS
General Motors	USAF
Hand Held Products	USPS

Suggestions for improvement, and questions regarding interpretation of this standard will be welcome. They should be sent to: MH 10 Committee (MHIA), Material Handling Industry of America, 8720 Red Oak Blvd., Suite 201, Charlotte, NC, 28217-3992 or mhstandards@mhia.org.

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PARCELS, AND FLAT MAIL**

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RADIO FREQUENCY IDENTIFICATION FOR PACKAGES, PARCELS, AND FLAT MAIL

1 SCOPE

This standard provides guidance for the use of radio-frequency identification (RFID) for the handling and tracking of packages, parcels, and flat mail from the pickup to the delivery of the item. This standard does not address any warehousing or inventory control requirements of package logistics.

The standard identifies minimum data requirements as well as semantic and syntactical recommendations. This standard further provides specific recommendations for the air interface communications of RFID devices based on the application requirements identified by the carriers.

This standard does not supersede or replace any applicable safety or regulatory marking or labeling requirements. The standard is to be applied in addition to any other mandated labeling requirements. This standard covers all mailable items other than letter mail.

In this document the term label refers to an adhesively applied media capable of being marked with information in machine-readable and/or human-readable form and does not apply to direct marking on the package or to RFID embedded in the packaging material.

2 NORMATIVE REFERENCES

ISO/IEC 15418	GS1 Application Identifiers and ASC MH10.8 Data Identifiers
ISO/IEC 15434	Information technology – Automatic identification and data capture techniques – Syntax for high capacity ADC media
ISO/IEC 15459-1	Information Technology – Unique identification – Part 1: Unique identification of transport units
ISO/IEC 15459-2	Information Technology – Unique identification – Part 2: Registration procedures
ISO/IEC 15459-3	Information Technology – Unique identification – Part 3: Common rules for unique identification
ISO/IEC 15459-4	Information Technology – Unique identification – Part 4: Unique item identification for supply chain management
ISO/IEC 15961	Information technology – Radio frequency identification (RFID) for item management – Data protocol: application interface
ISO/IEC 15962	Information technology – Radio frequency identification (RFID) for item management – Data protocol: data encoding rules and logical memory functions