

RFID Asset Tag Data Structure Guide

Overview

This document outlines the standard structure and encoding of data within RFID asset tags. The format ensures consistent identification, traceability, and management of assets across the organization.

RFID Tag Data Format

Field	Length (Bytes)	Data Type	Description
Header	2	Hex	Identifies the type of the tag (e.g. Asset, Inventory)
Company Code	3	Alphanumeric	Unique code assigned to the company
Asset Type	1	Hex	Indicates asset category (e.g. Laptop, Vehicle, Tool)
Serial Number	6	Numeric	Sequential unique asset serial number
Date Code	3	Numeric (YYMMDD)	Asset registration or manufacturing date
Checksum	1	Hex	Simple validation checksum

Sample Tag Data

Tag Hex Encoded	Field Breakdown
AF01C2A7394053012405247B	- Header: AF01 - Company Code: C2A739 - Asset Type: 40 - Serial Number: 530124 - Date Code: 0524 (2024-05-24) - Checksum: 7B

Important Notes

- All RFID tag data must be encoded as per this structure for compatibility.
- Do **not** reuse serial numbers for different assets.
- Checksum validation helps ensure data integrity during read operations.
- Check for the latest version of this guide before procuring or encoding tags.
- Modifications to the data structure require updating all relevant tracking systems.

