

RFID



US Department of Defense RFID Compliance

Solutions for passive RFID tags in the defense logistics supply chain

The United States Department of Defense has been a pioneer in exploiting radio frequency identification (RFID) tagging in their supply chain. The DoD now mandate RFID tagging for some shipments. To meet this requirement shipping companies need a way to add RFID tags to their shipments. For companies not already using RFID this can be a challenge. CoreRFID has been working with customers to provide simple, easy to implement approaches that solve these problems.

Passive Tags for DoD Supply Contracts

The US DoD has published a requirement for all shipments to certain locations and for defined product classes to be identified with ultra high frequency RFID tags. The locations concerned are 17 Defense Distribution Depots across the USA. The product classes include such items as packaged rations, clothing and personal equipment, packaged chemical products, medical material and repair parts. So far, DoD only mandates tagging of the shipment case (or container) and the pallet but DoD have also announced their intention to require tagging at the item level.

In order to comply, companies supplying equipment to the DoD have to ensure that:

1. The data encoded is unique
2. Tags are readable at the time of shipment
3. The Advanced Shipment Notice contains details of the tags
4. Tags are fitted in the appropriate location on packing



DoD RFID Coding

To help companies comply with this directive CoreRFID has developed applications that support DoD RFID coding. DoD Coding can be done using a PC software package which, together with an appropriate tag reader/writer and UHF RFID tags, lets companies add the correct data to the tags for their product packaging. The PC software creates tags using the customer CAGE (Commercial & Government Entity) code and allows users to enter a Works Order number so that each tag can be cross referenced to their existing systems. The data that has been written to tags is made available as a file for import into the user's own logistics or MRP system so that it can be used to update information transmitted to the DoD with the Advanced Shipment Notice. Reports are available summarising tag writing sessions.

The DoD Coding application takes care of translating conventional character codes (ASCII) to the binary values required by the CAGE code.

Where a handheld computer is required to check tags at the point of shipment, the application can also allow the items expected to be found on an Advanced Shipment Note (ASN) to be checked against the list of those expected.

CoreRFID can supply a DoD tag reader / writer, a range of DoD compatible tags (conforming to UHF EPC Global Class 1 / Gen 2 standard) and portable computers with tag readers for use with a portable solution.

"(RFID offers) supplier benefits: improved planning, faster responses, streamlined business processes, improved efficiency in recall of defective items." United States Department of Defense, Suppliers' Passive RFID Information Guide, V 14.0

Specifications : Software

DoD Coding Application supports:

- PC based (Windows XP or Windows 7) system with desktop tag reader/writer
- Case and pallet tagging (future implementation of item tagging when specifications published)
- Data export linking tag data to ASN
- Standard report: tag data within ASN within date.
- Enquiry: ASN for given tag code

DoD Coding Portable Application (optional) supports:

- Windows Mobile based system with portable tag reader
- Import of expected tag lists for an ASN
- Readability check of tags
- Reconciliation of tag id's to expected tags

Specifications : Hardware

CoreRFID has selected hardware components from leading RFID equipment providers that offers compatibility with the US DoD standards and conforms to EU legislation for operation within the UK. CoreRFID works with leading RFID technology vendors.

Tag Reader/Writer for DoD Coding:

- Support for EPCglobal Class 1 Gen 2 with Anti-Collision and DRM
- USB connection to notebook or desktop PC
- Support for worldwide UHF regulations & certified for FCC (USA) and ETSI (Europe) regulatory specifications
- Read distance to 12 inches (31 cm)
- Dimensions: 97 mm L x 61 mm W x 25 mm H (3.8 in L x 2.4 in W x 1.0 in H)

Tags:

- EPCglobal Class 1 Gen 2 standard
- Versions for wooden pallet attach, self adhesive and on-metal mounting.

Support

CoreRFID provides support for the DoD Coding approach through our UK based support operations with telephone and on-line support facilities.

About CoreRFID

CoreRFID provides software range of RFID based solutions and the essential RFID technologies. Contact us at:

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The Benefits

CoreRFID's approach to DoD coding provides:

- Simple to use, easy to implement system.
- No disruption to existing logistics applications.
- Compliance with DoD RFID Guide V14.0 standards.
- Future proofed upgrade path to item level encoding.
- Full support by with training and technical support available.



The DOD Coding RFID reader/writer can be plugged in to any PC or laptop USB port.