



Smart Programmer SP10 Application Notes in Library Environment

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Overview

Today many libraries have implemented or are considering the implementation of RFID technology. It is the intention of this paper to discuss the issues that need to be addressed during implementation of RFID in a library and demonstrate the benefits of using the Intelletto SP10 to help ease the challenges of the tagging project.

About Smart Programmer – SP10

The SP10 facilitates the implementation of RFID in a library by easing the process of RFID encoding and tagging.

Most popular 13.56 MHz band air interface standards are covered by SP10. These standards include ISO 15693 and TI-Tagit.

Product has a small foot print of 6.75 " X 6.25" X 1.63" (L X W X H).



Use of SP10 as Tagging station

RFID tagging of a library collection is a major effort. Many libraries have multiple locations and each location may occupy multiple floors and/or cover a very large area. Therefore ease of mobility and ability to easily perform tagging in different locations is a fundamental requirement of any RFID tagging station. In addition the tagging station must validate the encoding of the RFID tag after the write has been performed. A versatile tagging station must have the following attributes in order to perform the above requirements:

- **A small foot print,**
This way it can be used in fairly small work spaces anywhere within the library. The SP10 has an optimized footprint. 6.75 “ X 6.25” X 1.63” (L X W X H)
- **Be light weight,**
So that it can be easily carried around and set up any where in the library. SP10 weighs around 1 lb.
- **It should not require a host PC,**
SP10 does not require a host PC. This further facilitates mobility, as there will be no need to carry a PC on a cart or a Laptop around to setup your tagging station. Tag encoding with the SP10 only requires a bar code scanner plugged into SP10’s serial port. The SP10 simply redirects the output of the barcode reader and writes it into the RFID tag without the need of a host computer.
- **Vendor-Interoperability,**
ISO28560-2, ISO28560-2 and Danish data model are the standard library encoding formats that are available on the SP10 today. Many libraries have already encoded all or part of their collection with pre-standard encodings which is specific to a single vendor. SP10 currently supports all standard encoding format as well as non-standard vendor specific encodings such as 3M, Tech-Logic and ITG formats.
- **Perform verification after encoding is performed,**
Tag verification with SP10 only requires a bar code scanner plugged into SP10’s serial port. The unit simply checks the output of the barcode reader against the contents of the RFID tag and provides visual indication on whether there is match between the two or not.
- **Operating the security (EAS or AFI) during write**
SP10 integrates security operation in the RFID write function. Therefore it allows the user to turn the security on or off during writing of the RFID tag. This will save staff time enabling them to perform both write and security operation at the same time. SP10 can operate both popular security features (EAS and AFI).
- **Operating the security independently**

The tagging workflow might require performing a security feature operation independent of writing to the RFID tag. SP10 has a stand alone security feature function that will allow for such an operation.

Typical Modes of Operation of SP10

Depending on which engine is loaded, the following modes of operation can exist in SP10.

- **Configuration Mode**

Allows the user to specify constant data for the encoding format. Such constant data can be Country Code, Owner Library Code, Content Parameter, Default Type of Usage, Default Set Information, Default Media Format.

- **Encode Mode**

Allows the user to encode the RFID tag – to be placed on top of the unit – from the barcode that is scanned through the barcode scanner. In this mode, additional constant data elements – if any – are concatenated to the item barcode, converted to proper encoding format and encoded into the RFID tag.

- **Stand Alone Security**

Allows the user to operate the security feature of the RFID tag to On without performing any encoding operation. SP10 is capable of performing both EAS and AFI operations.

- **Compare Mode**

Allows the user to scan a barcode and an RFID tag and tell whether the encoding has been done properly or not. This mode is generally useful in conducting QA efforts after the tagging process by performing spot checks to see if the tags are properly encoded.