

# AIDC Translator Library 1.5

The most comprehensive software library available for encoding and decoding RFID and barcode data



All RFID applications must translate between business data and the binary information encoded in the different memory banks of the tag. But implementing the EPC Tag Data Standard and ISO/IEC 15962 is time consuming and error prone. Spending engineering time on this takes away from time spent making your product better.

# Let the AIDC Translator Library do the hard work for you

You already have been impressed by the power of the free web-based tool and you would like to build your own application, just licence the AIDC Translator Library. It's a commercial-grade software designed to handle all the RFID and barcode data translation your application needs. Its API is designed for rapid integration with any application. It "just works".

#### **Electronic Product Code**

All 20 EPC schemes and their 21 binary formats are supported. Translate easily back and forth between data formats. Barcode form, EPC Pure Identity URI (as used in EPCIS), EPC Tag URI (as used in ALE), and bits on the tag in bytes, words, or hexadecimal are translated seamlessly from one format to another.

#### **User Memory**

You want to handle data in the User Memory of RFID tags? AIDC Translator Library provides fast and efficient encoding and decoding based on the latest "Packed Objects" standard.

#### **TID Memory**

AIDC Translator Library helps you decoding the TID in order to know the tag maker and model, tag capabilities, and manufacturer's serial number.

The AIDC Translator Library is organised around five main classes that deal with different data format. Each of these classes can be interconnected to translate data from one format to another.



For example, these classes allow you to easily translate data from the output of a barcode scanner directly into bitstream encoded into the EPC memory of an RFID tag. You can also easily encode multiple AIs into the User memory bank using the Packed Object compaction method and much much more...





# **Designed for Integration**

The AIDC Translator Library is designed for fast integration into any Java, Scala, or other JVM-based software application, or any C#, VB, or other .NET application. It is delivered as a single JAR or DLL file that is easily imported into your development environment and included in your software application. Full web-based documentation is provided for all API methods. An ANSI C source-code edition is also available for embedded applications.

# **Fully Tested, Fully Supported**

The AIDC Translator Library undergoes extensive unit testing with every release, including over 14,000 test cases for the EPC alone. With the AIDC Translator library, you do not have to worry about whether some corner case has been missed. An annual maintenance contract provides you with rapid response to any questions or problems that may arise.

#### **Backed by the Recognised Expert on Tag Data**

The AIDC Translator Library was developed by Ken Traub, one of EPC Tag Data Standard's original editors, and an implementer of one of the first RFID middleware software products. Now owned by GS1 Global Office, the AIDC Translator Library will assure you to develop your software trustfully with regards to compliance with GS1 standards.

## **Specifications**

## **Standards Compliance**

- EPC Tag Data Standard 1.11
- ISO/IEC 15962 ("packed objects") EPC Formats

#### All the Data Format you need

- GS1 Element String (barcode)
- EPC Pure Identity URI (as used in EPCIS)
- EPC Tag URI (as used in ALE)
- EPC Raw URI
- EPC Binary Encoding, as
  - o Byte array
  - Word array
  - Hexadecimal string

#### All RFID memory banks

- EPC Memory
  - o All GS1 TDS EPC schemes
- User Memory
  - Full encoding/decoding using "Packed Objects" access method
  - EPC Tag Data Standard 1.11 and ISO/IEC 15962 compliant
  - All GS1 AIs supported
- TID Memory
  - o Tag make and model
  - o Manufacturer's serial number
  - Tag features

#### Licensing

- Two different licenses:
  - End User devoted to companies that want to translate data formats
  - OEM devoted to companies that want to embed the libraries in commercial software
- One-time license fees (no annual fees)
- Optional annual maintenance

# **Contact information:**

GS1 Global Office

helpdesk@gs1.org