



GS1 EPC Gen2v2 Hardware Certification Programme

Today more than ever it is important for supply chain stakeholders to be sure that their vendor's RFID devices conform to the latest version of GS1's EPC Gen2v2 standard and that they are interoperable with other RFID devices. The Gen2v2 Certification Programme provides this assurance.

EPC Gen2v2: Standard Overview

GS1's EPC "Gen2" air interface standard, first published in 2004, defines the physical and logical requirements for an RFID system of interrogators and passive tags, operating in the 860 MHz - 960 MHz UHF range. Over the past decade, Gen2 has established itself as the standard for UHF implementations across multiple sectors, and is at the heart of more and more RFID implementations. Gen2v2 represents the latest release of GS1's EPC air interface standard, which has been enhanced in response to the requirements of a global user community.

This latest version of the standard introduces a number of optional features including:

- "Untraceable" function to hide portions of data, restrict access privileges and reduce a tag's read range.
- Support for cryptographic authentication of tags and readers to verify identity and provenance, as well as reduce the risk of counterfeiting and unauthorized access.
- Enhanced User Memory for supplementary encodings (such as maintenance logging) during a product's life cycle.
- "Non-removable" flag for embedded tagging of electronics and sewn-in tagging of apparel, to indicate that a tag cannot easily be removed without compromising the tagged product's intended functionality.

GS1 offers conformance and interoperability testing, as well as certification of RFID hardware that implements the EPC Gen2v2 standard.

EPC UHF Gen2v2: Certification Benefits

GS1's EPC hardware certification programme provides supply chain stakeholders with the assurance that the RFID hardware they purchase conforms to GS1's Gen2v2 standard and that they are interoperable with other RFID Devices.

Solution providers whose EPC/RFID devices are certified by GS1 will be:

- Authorised to display the GS1 Certification seal on their website and marketing collateral
- Publicly listed on the GS1 website, providing potential customers with an overview of GS1-certified products <http://www.gs1.org/hardware-certification-program>
- Able to promote the fact that their product was tested on the basis of standardised conformance & interoperability requirements against a standardised test procedure

Contact Information

For further information on procedures or to schedule conformance testing, please contact certification@epcglobalinc.org.

For more general information on the EPC UHF Gen2v2 standard, please visit: <http://www.gs1.org/epcrfid/epc-rfid-uhf-air-interface-protocol/2-0-1>