

One page Guide - GS1 General Specifications

- Section 1. Basics and Principles of the GS1 System: Provides an introduction to the core components of the GS1 System

- Section 2 Application Identification: Provides a definition for each GS1 application using a template format. Each application is uniquely identified and contains a description, the associated GS1 Key, its definition and links to relevant data structures and attributes (Section 3), rules (Section 4), carrier specifications (Section 5), placement (section 6), and unique processing requirements (Section 7).

- Section 3 GS1 Application Identifier Definitions: Describes the meaning, structure, and function of the GS1 element strings so they can be correctly processed in users' application programs.

- Section 4 Application Rules: Provides the rules for use of GS1 Keys in their application environments. Differences in industries are included as well as the data relationship rules for Application Identifier use.

- Section 5 Data Carriers: Provides a detailed description of the data carriers that are endorsed by GS1. It includes symbol specification tables for use in the supply chain operational environment as well as the related barcode production and quality assessment required to achieve excellent scan rates.

- Section 6 Symbol Placement Guidelines: Provides guidance on symbol placement as well as transport label standards and tag standards.

- Section 7 AIDC Validation Rules: Provides rules for validating and processing GS1 Element Strings without human intervention. Check digit and calendar date algorithms are also included.

- Section 8 GS1 Standards Glossary of Terms: A standard vocabulary used throughout the GS1 System.

■ Section 5 Data Carriers:

5.1. Introduction

A data carrier is a means of representing data in machine readable form.

The following GS1 data carriers are used for UDI in hospitals:

- The **GS1-128 barcode** is a subset of the Code 128 barcode symbology. Its use is exclusively licensed to GS1. This extremely flexible symbology encodes Element Strings using Application Identifiers. – see 5.4. Linear Barcodes - GS1-128 Symbology Specifications
- The **GS1 DataMatrix** is the only version that supports GS1 System data structures, including Function 1 Symbol Character. Implementation of GS1 DataMatrix shall be done per approved GS1 System application standards, such as those for Regulated Healthcare Retail Consumer Trade Items. – see 5.7. Two Dimensional Barcodes – GS1 DataMatrix Symbology Specifications



Data may be carried in a single "concatenated" GS1-128 (best practice) or in two GS1-128s (allowed alternate).

GS1 DataMatrix is particularly suited to small spaces on Single Unit or Multiple Unit Packages and Direct Part Marking (DPM) on Single Units.

■ Section 6 Symbol Placement Guidelines:

6.1. Introduction

This section includes guidelines for the placement of barcodes on packages and containers. It gives the general principles that apply, mandatory rules, and recommendations for symbol placement on specific packaging and container types. Consistency of symbol placement is critical to successful scanning. With manual scanning, variation of symbol placement makes it difficult for the scanning operator to predict where the symbol is located, and this reduces efficiency. With automated scanning, the symbol must be positioned so that it will pass through the field of vision of a fixed scanner as it travels past.

Respecting the guidance in this section will result in the consistency and predictability required.

The guidelines in this global specification replace previous local recommendations; however, manufacturers should not scrap packaging that has been printed according to previous guidelines. When packaging is redesigned, the global specifications in this document SHALL be observed. If government regulatory guidelines are inconsistent with those in this manual, the government guidelines should always take precedence.

Note: Barcodes in this guideline that are used as examples are For Position Only and are not intended to denote correct symbol type, size, colour, or quality.

- ADD LINK TO GS1 GEN SPECS
- ADD LINK TO GTIN ALLOCATIONS RULES
- INCLUDE EXAMPLES FROM BBRAUN AND MEDTRONIC