GS1 BARCODE CHART

GS1 Canada

GTIN Only
GS1 Element String Syntax
GS1 Digital Link URI Syntax

GTIN Only

Display	Numeric Digits	Data Structure	Usage
EAN-8	8	GTIN-8	The EAN-8 is used on small packages where the EAN-13 barcode would be too large. It encodes the Global Trade Item Number® (GTIN-8) and is also used by retailers to identify privately owned brand products sold only in their stores. **Example:** Used on small retail items such as cosmetics, that cross point of sale applications.
UPC-A	12	GTIN-12	The UPC-A uniquely identifies a product for retail checkout. It encodes the Global Trade Item Number (GTIN-12) and is also used by retailers to identify privately owned brand products sold only in their stores. **Example:** Used on retail items that cross point of sale applications.
UPC-E	12	GTIN-12	The UPC-E allows the use of U.P.C. barcodes on smaller packages where the UPC-A may not fit. It utilizes a zero-suppression method to compress the Global Trade Item Number (GTIN-12) into an 8-digit format. **Example:** Used on small retail items such as cosmetics, packs of chewing gum, and cigarettes.
EAN-13	13	GTIN-13	The EAN-13 is used for marking products often sold at retail point of sale and general distribution. It encodes the Global Trade Item Number (GTIN-13). Used on retail product marking world wide. Also used by retailers to identify privately owned brand products sold only in their stores. **Example:** Used on retail items that cross point of sale applications such as periodicals, magazines, and books, and also used on coupons outside of North America.
ITF-14	14	GTIN-12 GTIN-13 GTIN-14	The ITF-14 is generally used on higher packaging levels of a product, such as a case or carton. It lends itself well to be directly printed on corrugate material. It encodes three specific instances of the Global Trade Item Number (GTIN), (e.g., GTIN-12, GTIN-13, GTIN-14). **Example:** Used on standard product groupings such as a case of dish washing detergent (24 bottle count).
GS1 DataBar™ Truncated	14	GTIN-12 GTIN-13 GTIN-14	The GS1 DataBar Truncated is designed for very small item identification and is mainly used within the healthcare industry. It cannot be scanned with Flatbed POS scanners. It encodes three specific instances of the Global Trade Item Number (GTIN), (e.g. GTIN-12, GTIN-13, GTIN-14). **Example:** Used on unit dose pharmaceuticals.
GS1 DataBar Limited	14	GTIN-12 GTIN-13 GTIN-14	The GS1 DataBar Limited is designed for very small item identification and are mainly used within the healthcare industry. It cannot be scanned with Flatbed POS scanners. It is “limited” to the use of zero ‘0’ or one ‘1’ in the first data position. **Example:** Used on very small healthcare items such as ampoules.
GS1 DataBar Stacked Omnidirectional	14	GTIN-12 GTIN-13	The GS1 DataBar Stacked Omnidirectional is used to condense the GTIN information into a more compact and square barcode suitable for use on small packages and loose fresh produce. It has the capability for omnidirectional scanning. Retail point-of-sale accepts GTIN-12 and GTIN-13 structures. **Example:** Used on very small consumer items GTIN Only (i.e., loose produce).

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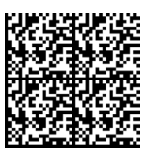
GS1 Element String Syntax

Display	Alpha/Numeric	Data Structure	Usage
GS1-128	Up to 48 characters	GTIN plus additional information using GS1 Application Identifiers	The GS1-128 uses a series of GS1 Application Identifiers (AIs) to include additional data such as Best Before Date, Batch/Lot Number, Quantity, Weight, and many other attributes. It also encodes the SSCC (Serial Shipping Container Code). **Example:** Used on large bulk items such as pallets or logistic units.
GS1 DataBar Expanded	Up to 74 numeric or 41 alphabetic characters	GTIN plus additional information using GS1 Application Identifiers	The GS1 DataBar Expanded is used for marking products that cross point of sale applications. It encodes any of the GS1 Identification Numbers plus supplementary AI Element Strings, such as Weight and Best Before Date, in a linear symbol that can be scanned omnidirectionally by suitably programmed scanners. **Example:** Used for additional information such as expiration date on fresh foods, and also used on coupons in North America. **Coupons are less prevalent in Canada than United States.* *In Canada coupons are processed by coupon clearing houses.*
GS1 DataBar Expanded Stacked	Up to 74 numeric or 41 alphabetic characters	GTIN plus additional information using GS1 Application Identifiers	The GS1 DataBar Expanded Stacked is used for marking products that cross point of sale applications. It encodes any of the GS1 Identification Numbers plus supplementary AI Element Strings, such as Weight and Best Before Date, in a ***stacked*** linear symbol that can be scanned omnidirectionally by suitably programmed scanners. **Example:** Used for additional information such as expiration date on fresh foods, and also used on coupons in North America. **Coupons are less prevalent in Canada than United States.* *In Canada coupons are processed by coupon clearing houses.*
GS1 DataMatrix	Up to 2,335 characters	Concatenated strings using GS1 Application Identifiers	The GS1 DataMatrix is a two-dimensional matrix symbol with specific healthcare applications in the GS1 System of Standards. It requires image-based scanners and it is currently specified primarily for Pharmaceutical and Cannabis products in Canada. **Example:** Used for direct part marking of surgical instruments.

GS1 Digital Link

Display	Capacity	Data Structure	Usage
 **Data Matrix with GS1 Digital Link**	3116 numeric 2335 alphanumeric	GS1 Digital Link URI Syntax	Data Matrix and QR Code are two-dimensional barcodes that are only used by the GS1 system to encode the GS1 Digital Link URI to extend product packaging to brand-authorized online information and experiences. **Example:** Scanned by consumers using mobile phones to access product information on the web.
QR Code with GS1 Digital Link	7089 numeric 4296 alphanumeric		

This list is a subset, not all inclusive. Symbols are not to scale.

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