GS1 Barcode Chart

Barcode	Display	Capacity	Data Structure	Usage	Usage Examples
EAN-8	`2012 3451`	8 Digits	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).	Used on small retail items such as cosmetics, that cross point-of-sale applications.
UPC-A	`6 14141 00734 9`	12 Digits	GTIN-12	The UPC-A encodes a GTIN-12 to uniquely identify a product and is most commonly used for retailer point-of-sale within North America, although able to be used globally.	Used on retail items that cross point-of-sale applications.
UPC-E	`0 123459 6`	12 Digits	GTIN-12	The UPC-E allows the use of certain GTIN-12s 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.	Used on small retail items such as cosmetics, packs of chewing gum, and cigarettes.
EAN-13	`9 876543 210128 >`	13 Digits	GTIN-13	The EAN-13 is used for marking products often sold at retail point-of-sale. It encodes the Global Trade Item Number (GTIN-13) and is more commonly used outside of North America, although able to be used globally.	Used on retail items that cross point-of-sale applications such as periodicals, magazines, and books.
ITF-14	`2 06 14141 98765 2`	14 Digits	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 corrugated material.	Used on cases and pallets to identify trade items in general distribution environments.
GS1 DataBar® Stacked Omnidirectional	`(01) 0 0614141 987658`	14 Digits	GTIN-8 GTIN-12 GTIN-13	The GS1 DataBar Stacked Omnidirectional is used to condense the GTIN® into a more compact 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.	Used on very small consumer items (i.e., loose produce).
GS1 DataBar Truncated	`(01) 0 0614141 987658`	14 Digits	GTIN-12 GTIN-13	The GS1 DataBar Truncated is designed for very small item identification and is mainly used within the healthcare industry. It cannot be scanned with POS scanners.	Used on unit dose pharmaceuticals.
GS1-128	`(00) 0 0614141 0000987658`	Up to 48 characters	Concatenated strings 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 Serial Shipping Container Code (SSCC) on logistic labels.	Used on cases, pallets, and logistic units in general distribution.
GS1 DataBar Expanded Stacked	`(01)00614141007349` `(17)301231` `(10)A1B2C3`	Up to 74 numeric or 41 alphabetic characters	Concatenated strings 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.	Used for additional information such as expiration date on fresh foods, and also used on coupons in North America.
GS1 DataMatrix	`(01)00614141007349` `(17)301231` `(10)A1B2C3`	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 healthcare items.	Used for direct part marking of surgical instruments.
QR Code		High character capacity	GS1 Digital Link URI syntax	QR Code and Data Matrix are two-dimensional barcodes used within the GS1 System of Standards to encode GS1 Digital Link URIs to extend product packaging to brand-authorized online information and experiences.	Scanned by consumers using mobile devices to access product information on the web.
Data Matrix					

■ GTIN-Only ■ GS1 Element String Syntax ■ GS1 Digital Link URI Syntax

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