

Assigning a GTIN-12

Fact Sheet

The GTIN-12 is only issued in North America and Canada. However, GTIN-13 issued in Australia is the most used identification number in the GS1 system.

The GTIN-12 is formed using a U.P.C Company Prefix. A U.P.C Company prefix is derived from a GS1 Company Prefix that starts with zero ('0') by removing that leading zero.

Table 1: GTIN-12 structure

U.P.C. Company Prefix					Item reference						Check digit
N ₁	N ₂	N ₃	N ₄	N ₅	N ₆	N ₇	N ₈	N ₉	N ₁₀	N ₁₁	N ₁₂

The U.P.C Company Prefix is allocated by GS1 US. The length of the U.P.C Company Prefix varies.

The Item Reference is a non-significant number that is assigned by the member company. It is recommended that the Item Reference be assigned sequentially as it is purely for identification purposes and the individual digits in the number do not relate to anything. Each item should be numbered to the lowest level of identification, for example: size, colour, model, finish, type, style.

The Check Digit is mathematically calculated to ensure that the whole number is correct. Correct calculation is essential for successful scanning of the barcode:

- A Check Digit Calculator Program which will automatically calculate the Check Digit can be obtained from the GS1 Australia web site at www.gs1au.org
- For manual calculation of the Check Digit refer to the Manual Check Digit Calculation Fact Sheet.
- For either method of calculating the Check Digit use the GTIN-12 option.

Please note if you are a Single Number Member you need to upgrade your membership to a Full Membership if you want to apply for GTIN-12s.

Important: If you are trading in North America or Canada, before getting a GTIN-12, we would recommend you check with your trading partners or distributors if they will be able to manage with a 13-digit number. If yes, then you can continue using your GTIN-13s. If unsure call GS1 Australia in 1300 BARCODE for more information.



Note: Once a GTIN-12 has been assigned to a trade item, and it has been introduced to the market, under no circumstances must it be transferred or reused for any other trade item.

Barcodes:

A GTIN-12 can be encoded in a UPC-A barcode.

You can also encode GTIN-12 in an ITF-14, GS1-128, GS1 DataBar, GS1 DataMatrix, QR Code with GS1 Digital Link or DataMatrix with GS1 Digital Link. But ensure that you put 2 leading zeros to make it a 14-digit number to encode in these symbologies.

Note: Companies should check with their trading partners prior to implementing the use of any symbology.

Other Resources:

[UPC-A factsheet](#)