GS1 DIY Self-Learning Materials

How to assign GS1 barcode numbers

GS1 Malaysia Berhad
7th Edition
Preface

This DIY Self Learning Material will provide you with details on:

- The **Types** of GS1 Identification Keys
- **Generating** GS1 identifiers
- **Assigning** GS1 identifiers
Types of GS1 Identification Keys

Assigned GS1 Keys / Barcode Numbers

- Global Trade Item Number (GTIN)
  - GTIN-13
  - GTIN-14
- Global Location Number (GLN)
  - GLN No.

And Many More!
Breakdown of a GTIN-13

Global Trade Item Number (GTIN)

GS1 Company Prefix (GCP)

Country Prefix

Company Prefix

Running No.

Check Digit

955 543210 000 8
Breakdown of a GTIN-14

Carton Identifier (1 – 8) : Assigned as required by the member. It can use up to 8 separate carton indicators to indicate different carton sizes, as long as they contain the same product unit inside.
Barcode Number Generation Service

Need help generating your allocated barcode numbers? GS1 Malaysia provides an as-needed Barcode Number Generation Service for our members:

a. Standard License – 250 barcode numbers for RM 250.00
b. Standard License – 1,000 barcode numbers for RM 500.00
c. Small Block License – 10 barcode numbers for RM 100.00

Note: Generated Numbers are from your subscribed license(s) only!

Contact GS1 at membership@gs1my.org for further assistance.
GS1 Barcode Prefix Assignment

<table>
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<tr>
<th>GS1 Barcode Prefix Assignment</th>
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<tbody>
<tr>
<td>International Level</td>
</tr>
<tr>
<td>National Level</td>
</tr>
<tr>
<td>Company Level</td>
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</tbody>
</table>

114 other MOs

- Malaysia 955
- Singapore 888
- China 690 - 699
- Australia 930 - 939
- USA 001 - 019
- France 300 - 379
- Philippines 480
- New Zealand 940 - 949
- Ireland 539
- Belgium & Luxembourg 540 - 549
- Japan 450 - 459
- Hong Kong 489
- Taiwan 471

Scan for full list
Data Carrier = Barcode Symbol

What is a Barcode?
A series of dark bars and light spaces on a light background.

Why Use a Barcode?
Fast and accurate capture of information into a computerised system, with little to no human error.

Each dark bar and light space arrangement represents a number or character!
Different Types of GS1 Barcode Symbols

Product/ Retail Level Symbols

EAN-13

EAN-8

Mainly used in USA & Canada

UPC-A

UPC-E

ITF-14
Carton Level Symbol

GS1-128
Symbol for Traceability / Carton Level
Definition of a Retail Unit & Non Retail Unit

Product Level / Retail Unit

➢ Usually scanned in a retail environment, through a Point of Sale (POS) System.
➢ Uses **GTIN-13** for identification.
➢ Standard barcode symbol = **EAN-13**

Carton Level / Non-Retail Unit

➢ Trade item not intended for sale in a retail environment.
➢ Created to facilitate operations of handling, storing, shipping and etc. of product units.
➢ Uses the **GTIN-14** for identification.
➢ Standard barcode symbol = **ITF-14** or **GS1-128**
➢ If being traded at retail level, must be allocated with a GTIN-13 barcode number.
How to assign your Barcode Numbers
Most Basic Rule

1 PRODUCT TYPE / VARIANT (SKU) = 1 GTIN

1 Product cannot have more than 1 barcode number!

1 barcode cannot be assigned to more than 1 product type / variant!
Global Trade Item Number (GTIN) Allocation Rules

10 Simple Rules

- New Product Introduction
- New Formulation / Functionality
- New Net Content
- Dimension / Weight Change
- Add or Remove Certification Mark
Global Trade Item Number (GTIN) Allocation Rules

10 Simple Rules (Cont’)

Brand A ➔ Brand AA
Different Brand

Different Pack / Case Quantity

Time Critical / Promotional

Price on Pack / R.R.P.

Change in Pre-Defined Assortment
How to Assign Carton Barcode Numbers

This is called “Aggregation”, the hierarchical relationship between product items and carton items. Carton barcodes generated through this method do not use up your allocated block of barcode numbers.
How to Assign Carton Barcode Numbers

Product Level:
955 123456 123 C

Outer Carton Level:
1 955 123456 123 C

Product Level:
955 123456 123 C

Outer Carton Level:
2 955 123456 123 C

This is also "Aggregation". Carton barcodes generated through this method do not use up your allocated block of barcode numbers.
How to generate your Barcode Symbols
Need help generating barcode symbols? GS1 Malaysia can help

1. Approach GS1 Malaysia for assistance
2. RM 20 per symbol for 10 symbols OR
3. Use your VbG-PDSS vouchers
Want to learn more?

Attend GS1 Malaysia’s Capacity Building & Implementation Program to find out more!
Effective Implementation of GS1 Standards and Keys – FREE to attend!

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<th>Time</th>
<th>Highlights</th>
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<tbody>
<tr>
<td>Monday to Friday*</td>
<td>3.00 PM - 4.00 PM</td>
<td>• Learn how to assign GS1 barcode numbers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Upload your product information to our online repository for visibility &amp; authenticity.</td>
</tr>
<tr>
<td></td>
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<td>• Why an active GS1 Membership is important for your Business.</td>
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*Subject to change

JOIN US NOW ON ZOOM!
Migration to “Data-Rich 2D” Initiative (FOC)

Key Learnings:
- Learn about how GS1 supports the global migration towards the 2D Data matrix for greater product visibility, traceability and authentication.
- Case studies about successful 2D barcode usage & implementation in Healthcare and Retail around the world.

Migration to “Data-Rich 2D” Zoom Link: https://us06web.zoom.us/j/82513900764

*Subject to change
Verified by GS1 – Product Databank Support & Services

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| Every Thursday of the Month | 11.00 AM - 11.30 AM | • *WHAT is VbG-PDSS?  
• *WHY is VbG-PDSS so Important?  
• *The Services & Platforms Managed by VbG-PDSS |

VbG-PDSS Zoom Link: [https://us06web.zoom.us/j/8977066545](https://us06web.zoom.us/j/8977066545)

JOIN US NOW ON ZOOM!
GS1 Industry Focus Forums

### GS1 Malaysia Industry Focus Forums

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<th>TOPIC 2</th>
<th>TOPIC 3</th>
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<td>Supply Chain Optimisation and Regulatory Fulfilment using Global Location Number (GLN) and GS1 Services</td>
<td>Comply with Global Unique Device Identification (UDI) Regulation &amp; Directive of Healthcare using GS1 Standards</td>
<td>The Importance of GS1 Global Location Number (GLN)</td>
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**Key Learnings:**
- Comply with Retail Merchandising Requirements
- Fulfil Global Regulatory Compliance
- Track & Trace using the GS1 2D Datamatrix
- Achieve compliance with international directives and country-specific regulations on medical devices and pharmaceutical products
- Fulfilling regulatory compliance required by US FDA GUDID, EU EUDAMED, China NMPA, UAE BrandSync, and many more.
- Comply with international directives and country-specific regulations on location and entity identification such as the Russian certificate of conformity for all products originating outside of EAEU and the use of GLN by NPRA-MOH for COVID-19 vaccine track and trace.

*Chargeable:*
- 1-5 people – RM 500
- 6-10 people – RM 1000

Write to databank@gs1my.org to book your session!
In-House Business Consultation

Need a special tailor-made In-House Business Consultation session? GS1 Malaysia can provide advisory support for you to meet your specific needs.

Each session can be half-day or full day.

Scan here for the Fee Structure:
Official GS1 Communications Channels

Official GS1 Malaysia WhatsApp

+6014-3933 228
(Membership, Services & Support)

+6011-1616 8228
(Membership, Services & Support)

+6016-2455 228
(Strictly for Payment Only)

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(Strictly for Payment Only)

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