Barcode Generator FAQs

What is Barcode Generator?

Developed at the request of our users, Barcode Generator is GS1 Canada’s new all-in-one tool that enables users to quickly and efficiently create a variety of high-resolution barcode symbols based on their GS1 GTINs.

This provides a more streamlined and efficient process enabling users to receive their GTINs and create their barcodes in a one-stop shop through GS1 Canada.

How do I use Barcode Generator?

Simply enter your licensed GS1 GTIN and, with the click of a button, you can quickly generate barcode symbols that adhere to global standards – such as correct quiet zones and height-to-width ratios. Just incorporate them into your product packaging or shipping labels and your product information can be scanned by trading partners around the world.

What barcode symbologies does Barcode Generator support?

The Barcode Generator supports the following barcode symbols:

- UPC-A
- EAN-13
- ITF-14
- GS1 DataBar Expanded
- GS1 DataBar Expanded Stacked
- GS1-128

Additional symbologies will be supported in future releases. Visit www.gs1ca.org/Barcode-Generator for updates.

How do I know my symbols from Barcode Generator are correct?

The barcode symbols generated will comply with all the global standards best practices, such as correct height to width ratios and required quiet zones.

It is the responsibility of the user, however, to enter in all the correct information to ensure they are getting the right barcode for a product.

If barcodes are distorted by poor quality ink, stock or symbol placement, they can become difficult to scan. We recommend sending products in to GS1 Canada’s Barcode Scan Verification service to ensure they can be scanned in most point-of-sale environments.
How do I determine which barcode symbology to print?

Selecting the right barcode symbol is critical to the success of your barcode implementation plan because you need to be sure it is capable of being accurately scanned and captured by your trading partners and for all relevant business processes.

Here are a few tips:

- If you need to barcode a trade item that will be scanned at the retail point-of-sale (POS), the first symbol of choice is the EAN/UPC symbol. This symbol is guaranteed to be scanned by most POS systems all over the world.
- If you are printing a barcode with variable information like serial numbers, expiry dates, or measures, then you will use GS1-128, GS1 DataBar Expanded, or GS1 DataBar Expanded Stacked.
- If you need to barcode an outer case to be scanned in a logistics environment, and you want to print directly on corrugated carton, ITF-14 may be the choice for you.

For additional information, review this [barcode guide](#) or explore the [Learning Zone](#).

How do I apply the barcodes to the products?

There are several ways to apply a barcode to an item. Depending on your particular needs, you can:

- Integrate the barcode symbol into your packaging design and artwork
- Use pre-printed labels
- Print the barcodes directly onto the packaging

[Follow this guide](#) for more details on barcode placement or [this guide for designers, printers and packagers](#).

What are the benefits of Barcode Generator?

**Global Standards** - GS1 Canada-generated barcodes align with global standards, ensuring a reliable source of barcode images that comply with all regulatory requirements, rules and formats and scan correctly every time.

With Barcode Generator, you can be confident that your barcode image will scan correctly the first time, every time, ensuring your product is accurately traced.

**Increased Operational Efficiency** – Improve speed-to-market, save resources and increase consistency with one standards based tool. Quickly and easily create high-resolution barcodes from the same place you get your GTINs.

**Standardized Content** – Using standardized content ensures interoperability across systems, as well as visibility and traceability throughout the entire supply chain.
Barcode Generator supports the most widely used barcodes in the industry – with new symbols being supported in future releases. With Barcode Generator, you remove guesswork, save time and avoid costly mistakes by ensuring your barcode meets [global standards specifications](#).

**Barcode Scan Verification Service** – To make sure you or your solution provider correctly incorporated and printed your barcodes, you can use [GS1 Canada’s Barcode Scan Verification Service](#) to test that they can be scanned by a variety of point-of-sale scanners to ensure that each one passes the "real-world" test.

**What are Application Identifiers? When do I use them?**

GS1 Application Identifiers (AIs) are numeric prefixes used in barcodes to define the meaning and format of encoded data elements. They help the machine scanning the barcode how to interpret the information it reads and enables a single barcode to contain multiple data elements such as an expiry date, batch or lot number, or serial number.

Application Identifiers are used when creating GS1-128 and GS1 DataBars.

Barcode Generator supports the six most commonly used Application Identifiers (AIs). Each Application Identifier is a standard two, three, or four-digit numeric code. In the human readable format, Application Identifiers appear in brackets before the data elements such as:

```
[01]12345678901234
```

**Do I have to use/include all Application Identifiers for my product?**

No. The only Application Identifiers you need to have are those required by your trading partners to do business. You can leave the others blank.

Your GTIN (Application Identifier 01) is included by default.

**Which Application Identifiers are supported by Barcode Generator?**

Barcode Generator currently supports the following Application Identifiers (AIs):

<table>
<thead>
<tr>
<th>Application Identifier</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Global Trade Item Number</td>
</tr>
<tr>
<td>10</td>
<td>Batch or Lot Number</td>
</tr>
</tbody>
</table>
I was told I needed to provide Application Identifier (01) but I don’t see it in Barcode Generator. How can I enter it?

Application Identifier (01) is the GTIN itself for the product you are creating a barcode for. It is automatically applied in any barcode symbology that supports AIs. See the image below.

![Application Identifier](image)

Why have my Application Identifiers been rearranged in the barcode?

Barcode Generator arranges the Application Identifiers in a way that optimizes the barcode’s scanning performance and readability.

Any rearrangement of Application Identifiers is done to prevent them from being cut off at the end of the barcode. If they do get cut off, they can no longer be scanned and thus impairs the barcode.

What does Barcode Generator cost?

There is no cost to any current GS1 Canada subscriber who wants to use Barcode Generator.

What image types do my barcode symbols come in?

There are two formats for which you can generate an image. Encapsulated PostScript (EPS) and Scalable Vector Graphic (SVG) will each generate a vector-based image. An SVG image will open in your internet browser whereas an EPS image can only be
opened with graphic editing software. Graphic editing software is required for SVG as well in the event the user wants to edit the barcode symbol.

**Can I save my generated barcodes?**

No. You are not able to save generated barcode symbols within the tool at this time.

In the meantime, we recommended downloading your barcode symbol and then saving it onto your personal computer for future easy access and application (as long as it is being used for the exact same product).

**Can I edit the details of a barcode that I’ve created?**

No. Once a barcode image is created and/or downloaded, you cannot make any edits to it. You will need to create a new barcode image if any changes do need to be made.

**I need to generate a barcode that is not available in the Barcode Generator, what do I do?**

Please contact GS1 Canada so we can consider adding this capability to a future enhancement of the tool. In the meantime, you can review our approved barcode solution providers here.

Once you have selected a printer, you will also need to decide on other elements such as the barcode placement on your product, the colour of the barcode, and the barcode size. For help in all these areas review our 10 Steps to Barcode Implementation Plan available on myGS1.