GLN (Global Location Number)

How to format a GLN
Format of GS1 standards

• All GS1 numbers (UPC, GTIN, SSCC, GLN) essentially have 3 parts:
  – **Company Prefix** = a number assigned and managed by GS1 that uniquely identifies a company from any other company across the globe.
  – **Reference Number** = assigned by the owner of the Company Prefix to identify what is being numbered (e.g. a pallet, a case, an item, a location, etc.)
  – **Check Digit** = an algorithm that serves as a “checks and balances” to ensure preceding digits were entered correctly.

NOTE: All three parts must not be separated in order to maintain uniqueness.
## GS1 Data Structures

<table>
<thead>
<tr>
<th></th>
<th>UPC 12 digits</th>
<th>GTIN 12 - 14 digits</th>
<th>SSCC 18 digits</th>
<th>GLN 13 digits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Prefix</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Reference Number</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Check Digit</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Indicator</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Used For</strong></td>
<td>Item</td>
<td>Item/Case</td>
<td>Pallet</td>
<td>Location</td>
</tr>
</tbody>
</table>

**NOTE:** The Company Prefix can vary from 6 digits to 9 digits. As such, the reference # will also vary depending on the size of the Company Prefix.
GLN (Global Location Number)

13 DIGITS LONG

Position 13 = 0 for U.S. and Canadian companies

Position 2 - 12 = Combination of Company Prefix and Location Reference #

Position 1 = Check Digit
Algorithm to serve as a “checks and balances” to ensure preceding digits are accurate

IF Length of Company Prefix THEN Length of Reference Number

##### = 6 digits
####### = 7 digits
######### = 8 digits
######### = 9 digits
##### = 5 digits
##### = 4 digits
### = 3 digits
## = 2 digits

* It is for this reason that the Company Prefix is said to be “variable-length”.

Example: GLN (Global Location Number)

<table>
<thead>
<tr>
<th>LOCATION 1</th>
<th>LOCATION 2</th>
<th>LOCATION 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>614141 00001 6</td>
<td>614141 00002 3</td>
<td>614141 00003 9</td>
</tr>
</tbody>
</table>

NOTE: the 1st digit of the GLN will be a “0” for companies within U.S. or Canada

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>COMPANY PREFIX</th>
<th>REFERENCE #</th>
<th>CHECK DIGIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCATION 1</td>
<td>614141</td>
<td>000001</td>
<td>6</td>
</tr>
<tr>
<td>LOCATION 2</td>
<td>614141</td>
<td>000002</td>
<td>3</td>
</tr>
<tr>
<td>LOCATION 3</td>
<td>614141</td>
<td>000003</td>
<td>9</td>
</tr>
</tbody>
</table>
GLN (Global location numbers)

Can be:
- Companies
- Farms
- Distribution Centers
- Pack Houses
- Billing Offices
- Ship To
- Ship From
- Other........