

# Inventory Quantity Types

The Kibo Composable Commerce Platform (KCCP) allows you to track different inventory quantities for your products. This guide defines the quantity types, explains how they're calculated, and provides more details about the Future Available to Promise inventory type.

Type	Description
Available	The total quantity that's available to sell, or the amount on hand minus any allocated quantity.
Allocated	The quantity that shoppers have purchased and has not been fulfilled.
On Hand	The quantity that you have in stock in your warehouse.
Pending	The quantity that was overallocated and is waiting for inventory. This occurs anytime there is an allocation greater than the Available amount of inventory. Pending items will be "released" and automatically converted to Allocated when stock is available, which the system checks for every thirty minutes.
LTD	The inventory age, or lifetime to date, of the product.
Floor	The desired minimum to have in stock before ordering more inventory. This represents when inventory is getting low and should be replenished.
Safety Stock	How much inventory to set aside and not factor into the available quantity that can be fulfilled. You can configure Safety Stock values to be automatically set across UPC-Location records with the <a href="#">Safety Stock Rules</a> feature.
Excess	The inventory quantity available above the defined Excess Inventory Threshold. This is a calculated value based on the formula: Available minus Excess Inventory Threshold. Excess is never negative and only considers current available inventory, not incoming or future inventory.
Excess Inventory Threshold	The absolute maximum desired Available inventory for a given UPC at a specific Location. Any Available quantity above this threshold is considered Excess.
Future	The projected inventory you will receive within a certain time frame. This must be enabled via site settings, but is not currently displayed in the inventory table. See <a href="#">Future Inventory</a> for more details about how it is used.

# Inventory Calculations

It's important to understand how inventory quantities are calculated while you are refreshing and adjusting inventory levels.

The inclusion or exclusion of Safety Stock affects the total On Hand and Available inventory calculations.

If Safety Stock is not included, then those values are calculated as follows:

- $\text{On Hand} = \text{Allocated} + \text{Available} + \text{Pending}$
- $\text{Available} = \text{On Hand} - \text{Allocated} - \text{Pending}$

If Safety Stock is included, then the calculations are:

- $\text{On Hand} = (\text{Allocated} + \text{Available} + \text{Pending}) - \text{Safety Stock}$
- $\text{Available} = (\text{On Hand} - \text{Allocated} - \text{Pending}) - \text{Safety Stock}$

When an Excess Inventory Threshold is defined, below calculations are applied on Excess field:

- $\text{Excess} = \max(0, \text{Available} - \text{Excess Inventory Threshold})$

Excess is always calculated using current Available inventory only (future or incoming inventory is not included).



You can update inventory levels via the [Inventory UI](#), the [Refresh](#) and [Adjust](#) APIs, or the [file import process](#). By default, the `quantity` provided in the APIs or file import will be used as the On Hand value and the system will calculate the appropriate Available amount. If you want to change this behavior so that `quantity` is applied directly as the Available inventory value, contact [Kibo Support](#) to update your tenant configurations. This behavior also applies to updating [segmented](#) and [granular](#) inventory levels.