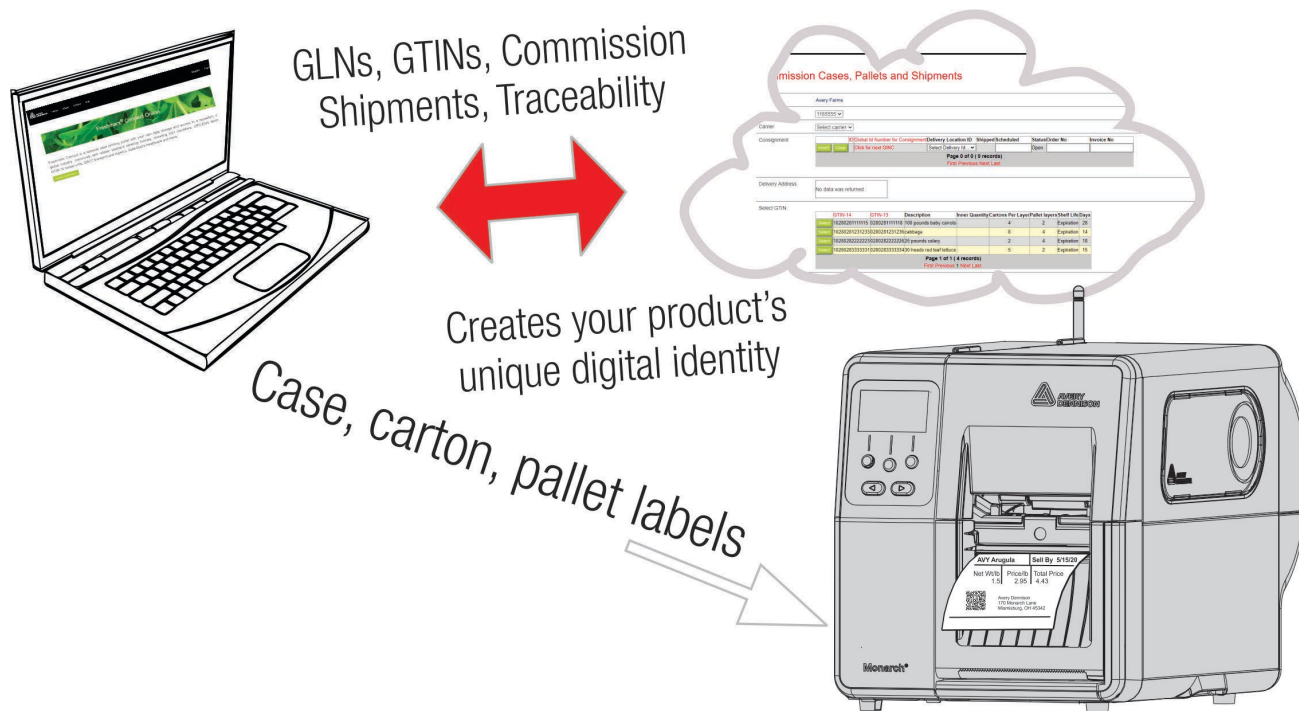


FRESHMARX® CONNECT USER MANUAL

Freshmarx Connect is a Web-hosted food-traceability application that allows you to setup Global Location Numbers (GLNs), Global Trade Item Numbers (GTINs), and commission cases, pallets, and shipments. It creates the digital identity (record) of your product in the supply chain. Use an Avery Dennison® Monarch® Tabletop RFID Printer 2 (ADTP2) to print case/carton/pallet labels containing GS1 Standard data.



Freshmarx Connect requires preliminary setup. This may be done by your Avery Dennison Representative. It is not covered in this document:

- ♦ Registering users
- ♦ Obtaining a GS1 Company prefix.
The GS1 company prefix is your company's unique identification number. If you have many products, your company may need more than one GS1 company prefix.
- ♦ Set up Global Location Numbers (GLNs).
- ♦ Set up Global Trade Item Numbers (GTINs).
Create these numbers for all products. For example, you sell cabbage and cauliflower. Create an Item GTIN for a head of cabbage and an Item GTIN for a head of cauliflower.

Use this document to

1. [Connect your printer.](#)
2. [Log into Freshmarx Connect.](#)
3. [Enable RFID.](#)
4. [Print labels.](#)

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System Requirements

The PC (running Freshmarx Connect) must use

- ◆ Microsoft® Windows® 10 (or greater)
- ◆ Supported Web Browsers:
 - Google Chrome Version 83 (or greater)
 - Internet Explorer® 11 (or greater)

Connecting the Printer

Connect your printer using WiFi, Ethernet, serial or a USB cable to the PC and run Freshmarx Connect. Printing is done using a Windows Print Driver. Create a generic text printer that points to the connected port.

1. Connect a USB cable from the PC (running Freshmarx Connect) to the printer.
 2. Turn on the printer.
 3. On your PC, open Settings, then Devices.
 4. Select Printers & scanners. Select **+ Add a printer or scanner**. Your PC searches for available printers.
 5. Click *The printer that I want isn't listed*.
 6. Select *Add a local printer or network printer with manual settings*. Click **Next**.
 7. Select *Use an existing port*; select the port that appeared after connecting the ADTP2 printer. For example, USB001 (Virtual printer port for USB). Click **Next**.
 8. Select *Generic* as the Manufacturer and *Generic/Text Only* for the printer. Click **Next**.
-  If the Generic/Test Only driver does not appear in the list, then click **New Driver**. Select Manufacturer as Generic, and Printers as Generic/Text Only.
9. Enter a name for the printer. For example, "My ADTP2." Click **Next**.
 10. Select *Do not share this printer*. Click **Next**.
 11. Decide if you want this printer to be your default and click **Finish**.
- Select *Use the driver that is currently installed*. Click **Next**. The printer is installed.

Using the ADTP2 Printer

Use our standard 4 x 2 or 4 x 6 labels with an AD229 inlay. For other supply types, contact your Avery representative for more information.

Loading Supply

Load supply according to your printer's operating manuals.

After connecting the printer and loading supplies, make sure the printer is ready to receive data - the displays shows **Ready**.

About RFID Supplies



RFID supplies can be damaged by static electricity. Ground yourself by touching metal, such as the printer's metal base, before handling the RFID supplies.

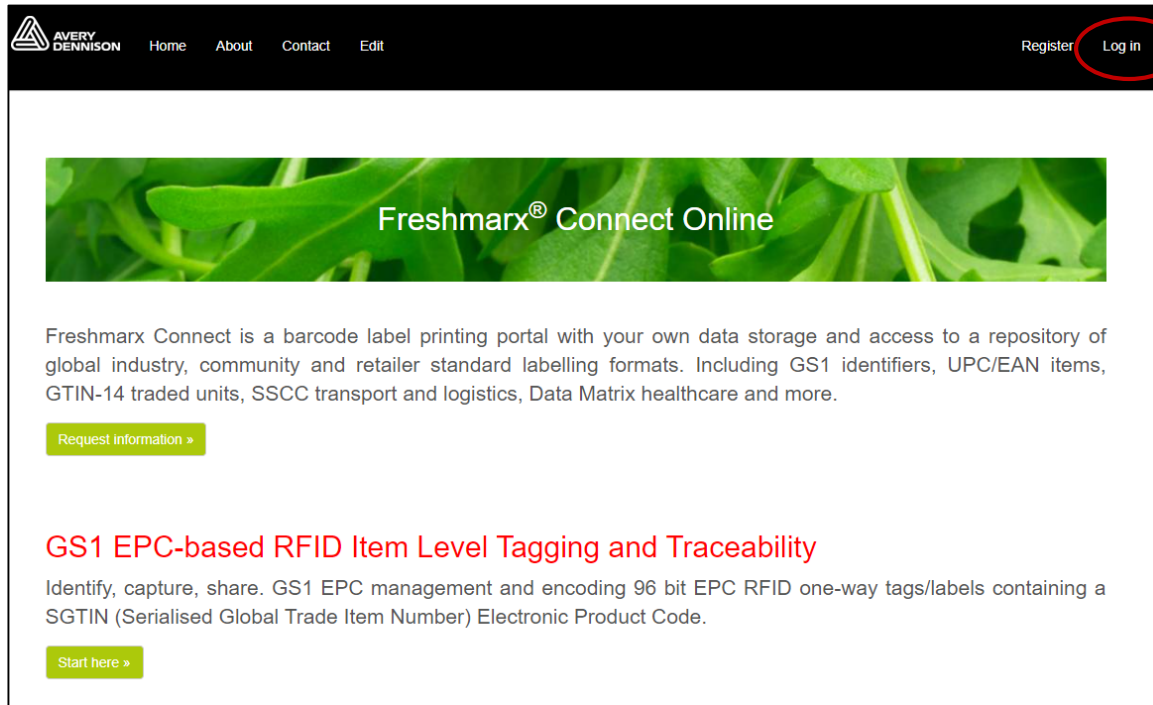
Printing over the RFID inlay causes printing irregularity and may impact bar code print quality.



Logging into Freshmarx Connect

Check with your manager for your login credentials.

1. Using a web browser, navigate to Freshmarx Connect:
<https://freshmarxconnect.applications.atma.cloud>
2. Select **Log in** from the upper right corner.



3. Enter your email address.
4. Enter your password.
5. Click **Log in**.



You cannot have two registered accounts using the same company prefix.

6. Click **Start here>>** to use Freshmarx Connect. You see the main menu:

[Decode EPC Tag](#) ▶ [Global Location Numbers \(GLNs\)](#) [Global Trade Item Numbers Non-Retail \(GTIN-14s\)](#) [Traceability](#)

Resetting Your Password

To reset your password:

1. From the Login page, click **Forgot Password**.
2. Enter your email address and click **Submit**.
3. Open the email and follow the link provided. *The email link expires after five (5) minutes.* The link goes to the Reset Password page.
4. Enter the new password, confirm the password and click **Set Password**. Your password is reset and you return to the Login page.
5. Login with your new password.



Enabling RFID Encoding

To use supplies with an RFID inlay (AD229, for example), you must send the printer a command to enable RFID encoding (programming).

After connecting the printer, load supplies and make sure the printer is ready to receive data - the displays shows **Ready**.

1. Log into Freshmarx Connect and select **Online Configuration** from the bottom menu.



2. Enter the following MPCLII string into the box provided:

{I,Y,0,0,-3,-5,1,205,225,170,0,0,260,1,0|}

This command enables RFID and sets the RFID parameters for the inlay.

A screenshot of the MPCLII command string input interface. It features a large text box on the right containing the command string **{I,Y,0,0,-3,-5,1,205,225,170,0,0,260,1,0|}**. On the left, there is a smaller input field with the placeholder text 'Enter MPCLII command string ...'. Below this field is a button labeled 'Send to printer', which is circled in red.

3. Click **Send to printer**.



These settings are a recommended starting point. Use the printer's Easy Setup menu to adjust your RFID settings if necessary. Refer to the printer's *System Administrator's Guide* for more information.



Printing Labels

Select **Traceability** from the main menu to print labels for shipping cartons, etc.

Decode EPC Tag ▶ Global Location Numbers (GLNs) Global Trade Item Numbers Non-Retail (GTIN-14s) **Traceability**

When you have a product ready to ship, use the Traceability menu to

- ♦ generate the required Global ID Number for Consignment (GINC)
- ♦ print shipping labels
- ♦ dispatch (finalize) the digital identity for each shipment.

1. Select **Traceability**. Your vendor name and warehouse appear.

Commission Cases, Pallets and Shipments

Vendor: Avery Farms

Warehouse: 1165555 ▼

Carrier: Select carrier ▼

Consignment

ID	Global Id Number for Consignment	Delivery Location ID	Shipped	Scheduled	Status	Order No	Invoice No
Insert	Click for next GINC	Select Delivery Id... ▼			Open		

Page 0 of 0 (0 records)
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Delivery Address: No data was returned

2. Select the Carrier.
3. In the Consignment section, select **Click for next GINC**. The next sequential number is automatically generated.
4. Select the Delivery Location ID.
5. Enter the Scheduled Delivery Date as MM/DD/YYYY.
6. Enter the Order Number and the Invoice Number if known. These are not required fields.
7. Click **Insert**.

Consignment

	ID	Global Id Number for Consignment	Delivery Location ID	Shipped	Scheduled	Status	Order No	Invoice No
Insert		11655550000013	Warehouse Fresh ▼		06/18/2020	Open	123	45
Select	Edit	273 11655550000011	0280283332214	6/3/2020	6/3/2020	Despatched	15	14
Select	Edit	269 11655550000008	0280281112566		6/10/2020	Open	5	6
Select	Edit	268 11655550000007	0280285412365	6/1/2020	6/3/2020	Despatched	1	2
Select	Edit	267 11655550000006	0280283332214		5/29/2020	Open	5	8
Select	Edit	266 11655550000005	0280283332214		5/28/2020	Open	12	22
Select	Edit	264 11655550000004	0280281112566		5/5/2020	Open	11	21

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The delivery address appears.

Delivery Address	Delivery Location ID	0280285412365
	Name	Warehouse Fresh
	Street 1	500 Central Ave
	Street 2	
	Town	Miamisburg
	State	OH
	Post/Zip Code	45424
	Country	United States

- In the GTIN section, click **Select** to pick the product to ship. The optional pallet details appear.

Select GTIN

	GTIN-14	GTIN-13	Description	Inner Quantity	Cartons Per Layer	Pallet layers	Shelf Life	Days
	10280281111115	0280281111118	100 pounds baby carrots		4	2	Expiration	28
Select	10280281231233	0280281231236	cabbage		8	4	Expiration	14
Select	10280282222223	0280282222226	25 pounds celery		2	4	Expiration	18
Select	10280283333331	0280283333334	30 heads red leaf lettuce		5	2	Expiration	15

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Add optional pallet details, lot/batch number or shelf life.

8

0620

Lot Number

☒ Expiration

☐ Best Before

☐ Sell By

Your system region settings: English (United States)

7/17/2020

- Enter the Lot number (maximum 20 alphanumeric digits). Lot number is very important for recall purposes and overall traceability. It helps reduce waste when lot numbers follow the product through the supply chain because it can prove your items are not part of a recall.
- The Expiration, Best Before, or Sell By date is automatically calculated from your previously entered data (based on Item GTIN setup). Change this information as necessary.
- In the Pallets section, select **Click for next SSCC**. The Serial Shipping Container Code is automatically generated.

Pallets

	Pack Id	SSCC	URI	GLN	Case Count	Status	
Insert		Click for next SSCC				Open	
Close	334	0031165555000000087	urn:epc:id:sscc:1165555.3000000008	1165555000000	8	Open	Print

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- Click **Insert**. The GTIN-13, GTIN-14, URI, Lot number, Shelf Life, Shelf Date and Status appear.

Close	Delete	334	00311655550000000087	urn:epc:id:sscc:1165555.3000000008	1165555000000	8	Open	Print
Page 1 of 1 (1 records) First Previous 1 Next Last								

SGTIN	GTIN-13	GTIN-14	URI	Lot No	Shelf Life	Shelf Date	Status
	0280281111118	10280281111115	urn:epc:id:sgtin:0280281.111111.2016	0620	Expiration	2020-07-17	In process
	0280281111118	10280281111115	urn:epc:id:sgtin:0280281.111111.2017	0620	Expiration	2020-07-17	In process
	0280281111118	10280281111115	urn:epc:id:sgtin:0280281.111111.2018	0620	Expiration	2020-07-17	In process
	0280281111118	10280281111115	urn:epc:id:sgtin:0280281.111111.2019	0620	Expiration	2020-07-17	In process
	0280281111118	10280281111115	urn:epc:id:sgtin:0280281.111111.2020	0620	Expiration	2020-07-17	In process
	0280281111118	10280281111115	urn:epc:id:sgtin:0280281.111111.2021	0620	Expiration	2020-07-17	In process
	0280281111118	10280281111115	urn:epc:id:sgtin:0280281.111111.2022	0620	Expiration	2020-07-17	In process
	0280281111118	10280281111115	urn:epc:id:sgtin:0280281.111111.2023	0620	Expiration	2020-07-17	In process

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The URI contains the serial number and GTIN with a serialization, which makes each label unique for each case being labeled.

- At the bottom of the screen, select the format to print.
After selecting a format, click the thumbnail to show a larger preview of the label.
- Make sure the printer is connected and ready to receive data, then click **Print**.

Pallets	Insert	Cancel	Click for next SSCC	URI	GLN	Case Count	Status	
	Close	Delete	334	00311655550000000087	urn:epc:id:sscc:1165555.3000000008	1165555000000	8	Open
Page 1 of 1 (1 records) First Previous 1 Next Last								

The print job is sent to the connected printer. The labels are printed and encoded. Apply the labels to all the boxes.

- Once the labels are applied, click **Dispatch**. Dispatch finalizes the shipment and sends the EPCIS standard record to the third party software (selected earlier) to create the digital identity/record of that shipment. The shipment's information is viewable online (via your transparency provider).
- Repeat steps 3 – 15 for each item you ship.

0810055932504	10810055933003	urn:epc:id:sgtin:081
Page 1 of 1 (1 records) First		

Select label format for printing. Finish printing and complete to despatch...

Walmart PTI EPC LGTIN-128 (4020) ▼

[Dispatch](#)

Glossary

Freshmarx Connect uses the following abbreviations.

Dispatch	The final step in the Freshmarx Connect process. Once a shipment has been dispatched, it is locked/finalized and the permanent digital identity is sent to the specified transparency provider. The shipment's information is viewable online (via your transparency provider).
EPC	The Electronic Product Code™ is a numbering standard for items, similar to the UPC code for bar coding. For more information, refer to the <i>GS1 EPC Tag Data Standard Specification</i> .
EPCIS	The Electronic Product Code Information Services is a unique string of data (automatically generated by Freshmarx Connect) that is sent to third party software (transparency providers) to create the digital identity/record of each shipment. Searching the EPCIS allows the shared view of events (transparency) for this record. It can prove your items are not part of a recall. The EPCIS is one component of the URI (Uniform Resource Identifier).
GINC	The Global Identification Number for Consignment is automatically generated by Freshmarx Connect. It includes your GS1 Company prefix and a serialized number (from the freight carrier). This unique number identifies a logical group of goods for transportation.
GLN	The Global Location Numbers are <i>your customer's</i> shipping address and contact information. These numbers are set up in Freshmarx Connect's GLN section and not covered in this document.
GS1	The Global Standards One group is an international organization of members from many different sectors: food, retail, distribution, etc. GS1 develops and sets information standards for supply chain logistics, ecommerce, etc.
GS1 Company Prefix	The company prefix is your company's unique identification number, which is included in all global trade item numbers (GTIN) that you create for your products. Setting up a GS1 Company prefix is not covered in this document.
GTIN	The Global Trade Item Numbers are unique numbers that you create for your products. For example, an individual head of cabbage would have a GTIN number. These numbers are set up in Freshmarx Connect's GTIN section and not covered in this document.
LGTIN	The Lot GTIN includes the GTIN plus the batch or lot number (which is useful in product recalls).
PTI	The Produce Traceability Initiative was developed to provide case-level traceability (transparency) through the produce supply chain. Walmart mandates their suppliers comply with this initiative. For more information, refer to the web site: https://www.producetraceability.org/



Traded GTIN	The Traded GTIN is the product you ship to customers that includes the number of cartons per layer and/or layers per pallet. The traded GTIN allows you to setup different units of the same product. For example, cases of cabbage and/or pallets of lettuce. These numbers are set up in Freshmarx Connect's GTIN section and not covered in this document.
SGTIN	The Serialized Global Trade Item Number includes the GTIN plus a serialized number. This number is automatically generated by Freshmarx Connect. The SGTIN shows the different units of the same product. Currently, the SGTIN is 96-bits of EPC data.
SSCC	The Serial Shipping Container Code is automatically generated by Freshmarx Connect. It contains the GS1 company prefix and a serialized number which identifies objects within a shipping container. Currently, the SSCC is 96-bits of EPC data.
URI	The Uniform Resource Identifier is a unique string of data (automatically generated by Freshmarx Connect) for use in information systems. It contains the EPC and SSCC data. Searching the URI allows the shared view of events (transparency) for this record. It can prove your items are not part of a recall.



