



## TWINIFY Platform Overview

In textile manufacturing and commercial laundry operations, each item—such as a towel, uniform, or linen—is embedded with an RFID tag, like Datamars' LaundryChip™. When this tag is assigned to product-specific data (such as customer, category, batch, or order), a Digital Twin is created: a digital replica of the physical textile item enriched with its metadata. This enables full traceability, process transparency, and data-driven control throughout the item's lifecycle.

Datamars, a pioneer in RFID technology since 1990, offers the LaundryChip™ series, designed to withstand the harsh conditions of industrial laundry. And now, with the new Twinify platform offering, textile manufacturers and laundry can unlock the full potential of these RFID chips by creating structured Digital Twins for every textile item—transforming manual tracking into an automated, cloud-managed process with validation, reporting, and seamless data integration.

**Twinify** is a secure, cloud-based SaaS platform built specifically to support and optimize this **RFID tag assignment process**. Designed for textile manufacturers and even laundry, Twinify connects to RFID readers, captures tag assignments, and manages workflows to ensure each tag is correctly linked to digital records. It acts as a central hub to validate, monitor, export, and manage all assignment data related to RFID-tagged textiles.

Thanks to the platform's defined process, validation checks, user roles and customisation on data attributes, it is adaptable to various customer needs & setup. In terms of the hardware setup, the platform can connect to different types of reader setups like tabletop, cabin, etc and offers software control to manage the assignment process optimally.

Currently, the recorded data is available to be viewed, searched, filtered directly through the platform apart from being downloadable directly via csv files.

## Key Platform Features

- Centralized, cloud-based SaaS architecture
- Customizable data attributes
- Flexible data input: UI or CSV upload
- Tag assignment and order session management via interface
- Near real-time order & product status tracking
- Remote reader control (Start/Stop)
- Advanced list views with search, filter, and sort
- Quick item preview with smart lookups
- Built-in validation & warnings for UI/CSV input
- CSV data export for reporting
- Role-based user access & permissions
- Secure device onboarding
- Live log monitoring
- Multi-station support (e.g. Tabletop, Cabins)
- 12-month data history retention

## Attribute Customization

When a customer onboards Twinify, we consult with them to understand the fields and nomenclature they use. After this step, we can customize the platform as per their needs & usage and add desired attributes.

## Pricing Plans

- All plans are subscription based and billed in monthly cycles
- Option for a yearly plan with fixed assignment usage & fixed price
- Option for a monthly plan with flexible assignment usage – pay per use
- The assignment for non-Datamars tags is possible and subject to extra charge

## Usage Notes & Limitations

- Cloudburst software needs to be running on the readers to use Twinify
- Only one session type allowed per reader at a time
- Reader operations (start/stop) must be controlled exclusively through the platform for optimal usage
- Define restriction zone around readers to prevent tag collision or incorrect scans
- High speed internet connection
- Impinj RFID reader supported – R220, R420, R700, others coming soon.
- Offline or smartphone-based operation currently not available
- Custom file export templates currently not available

## TWINIFY Platform Modules Overview

### User roles supported

- Manager
- Operator
- Data Operator
- Read only user

### Main Functional Modules:

- Product
- Customer
- Orders
- Create Assignment
- View Assignment
- Validation (*add-on*)

### Add on module & features

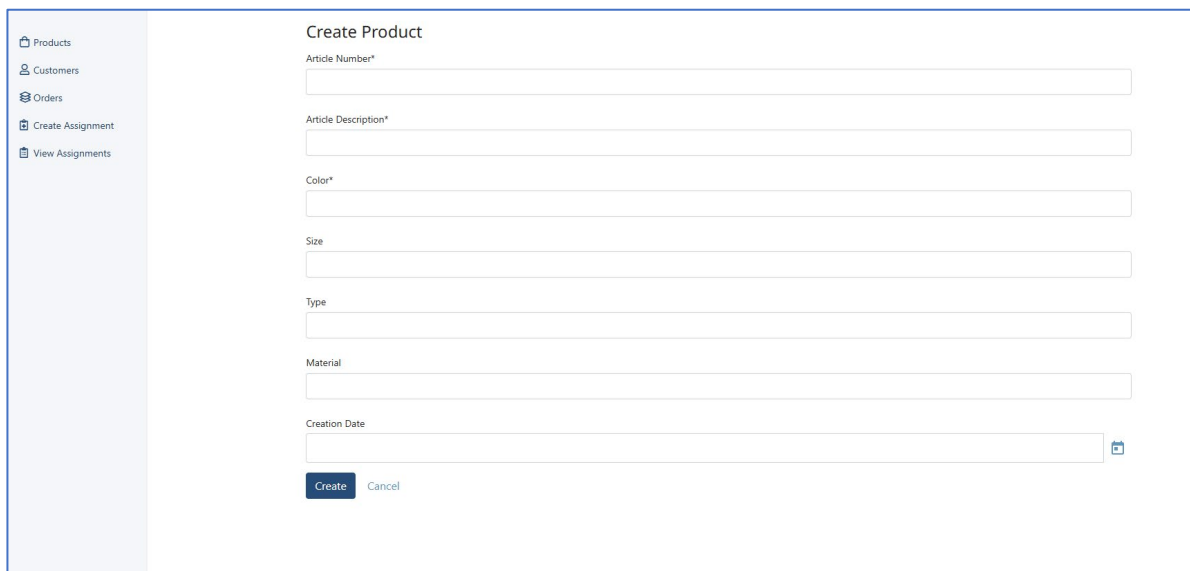
- Pallet Validation Module
  - *This add-on module helps generate reports that confirm & validate the contents of pallets in terms of RFID tags associated with a specific order, product, etc. Only works for the products assigned using Twinify with bundle size information.*
- Access management (*Coming Soon*)
- APIs (*Coming Soon*)

### Product Module

Article Number	Stock Availability	Article Description	Color	Size	Type	Material	Creation Date	Actions
2048	Available	Tshirt	Green	10x10	Tshirt	Wool	2023-06-27	<a href="#">View</a> <a href="#">Delete</a>
2047	Available	Hand Towel	Blue	XL	Shirt	Cotton	2021-01-16	<a href="#">View</a> <a href="#">Delete</a>
2046	Available	Tshirt	Green	100x100	Outerwear	Linen	2024-08-31	<a href="#">View</a> <a href="#">Delete</a>
2045	Available	Tshirt	Orange	100x100	Towel	Wool	2022-09-22	<a href="#">View</a> <a href="#">Delete</a>
2044	Available	Tshirt	Red	XL	Outerwear	Silk	2021-08-04	<a href="#">View</a> <a href="#">Delete</a>
2043	Available	White Shirt	Blue	S	Outerwear	Wool	2024-04-25	<a href="#">View</a> <a href="#">Delete</a>
2042	Available	Towel	Red	L	Shirt	Cotton	2022-09-08	<a href="#">View</a> <a href="#">Delete</a>
2041	Available	Trouser	Blue	S	Bottomwear	Silk	2020-05-18	<a href="#">View</a> <a href="#">Delete</a>
2040	Available	Tshirt	White	XL	Bottomwear	Silk	2024-08-24	<a href="#">View</a> <a href="#">Delete</a>
2039	Available	Tshirt	Purple	50x50	Trouser	Linen	2024-01-23	<a href="#">View</a> <a href="#">Delete</a>
2038	Available	White Shirt	Purple	50x50	Top	Polyester	2021-08-11	<a href="#">View</a> <a href="#">Delete</a>
2037	Available	Hand Towel	White	M	Shirt	Linen	2025-01-07	<a href="#">View</a> <a href="#">Delete</a>
2036	Available	Skirt	White	10x10	Shirt	Wool	2023-05-03	<a href="#">View</a> <a href="#">Delete</a>
2035	Available	Trouser	Purple	S	Tshirt	Linen	2022-12-13	<a href="#">View</a> <a href="#">Delete</a>

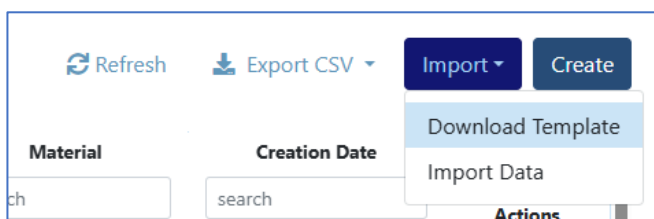
This is the module where the customer can define any attribute they would like to store, and record related to their products/articles against the individual EPC tags.

The attributes here are customisable meaning that depending on their need/workflow customer can record attribute like colour, size, material, etc. All this information can be made available in the downloaded file along with individual EPC tags after the assignment is done. For cases when a customer may want to remove a product temporarily or is adding products that are in draft form, they can make use of the status field using Draft or Archived status. Products having only Available status are available for assignments and use in orders. All fields in the module come up default functions of searching, sorting and multiple searches across different fields as well as possibility to download the data in csv file format.



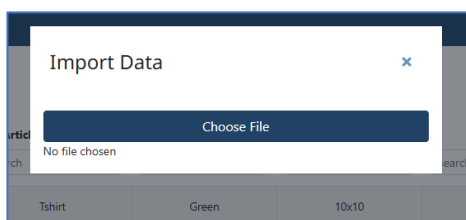
The screenshot shows the 'Create Product' form. On the left is a sidebar with navigation links: Products, Customers, Orders, Create Assignment, and View Assignments. The main form area has the following fields: Article Number\* (text input), Article Description\* (text input), Color\* (text input), Size (text input), Type (text input), Material (text input), and Creation Date (date picker). At the bottom of the form are 'Create' and 'Cancel' buttons.

In case customer requires to add bulk data, instead of using the simple interface, they can also upload the data via csv file.



The screenshot shows a table header with columns 'Material' and 'Creation Date'. Above the table are buttons for 'Refresh', 'Export CSV', 'Import', and 'Create'. A dropdown menu is open under the 'Import' button, showing options: 'Download Template' and 'Import Data'. Below the table, there is a 'search' input field and an 'Actions' column header.

The platform provides templates for inserting data. The customer needs to download this template csv file, and fill/copy data inside and upload it back to the platform. The data would be uploaded only if the validations are correctly passed like all required fields are present.



The screenshot shows a modal dialog box titled 'Import Data'. It contains a 'Choose File' button and the text 'No file chosen'. Below the dialog, a table is partially visible with columns 'Material', 'Color', and 'Size'. The first row shows 'Tshirt', 'Green', and '10x10'.

Note that user actions depend on the roles and permissions meaning that some actions would only be available for users with high permission/role.

## Customer Module

Products

Customers

Orders

Create Assignment

View Assignments

Manage Customers

Refresh

Export CSV

Import

Create

Customer ID	Customer Name	Contact Person	Contact Email	Company Headquarters	Office Address	Creation Date	Actions
CUST1047	Rodriguez-Brooks	Timothy Bernard	mark93@hotmail.com	Danielton	70281 Jorge Motorway Suite 301, New Katieberg, VT 53845	2021-05-27	<div></div> <div></div>
CUST1046	Rhodes, Price and Edwards	Lance Nolan	delgadoconnie@combs.biz	Ayersport	57717 Morgan View Apt. 135, North Ryan, KY 69327	2022-12-17	<div></div> <div></div>
CUST1045	Goodwin-Escobar	Heidi Wolfe	scott07@oneal.com	New Michaelhaven	PSC 5612, Box 8655, APO AA 91625	2024-09-28	<div></div> <div></div>
CUST1044	Wells, Solis and Turner	Christopher Reynolds	stephanie07@gmail.com	Josephstad	639 Jennifer Rapid Apt. 660, North Haley, NC 46577	2021-11-08	<div></div> <div></div>
CUST1043	Chen-Henderson	Melissa Perez	alicia78@hillinfo	Herreraside	2428 Trujillo Summit, Bakerhaven, WA 33669	2022-05-11	<div></div> <div></div>
CUST1041	Newman-Cochran	Marco Morris	ebruce@smith-lindsey.info	New Samuelview	944 Lewis Alley, Hamiltonton, WV 97071	2022-11-20	<div></div> <div></div>
CUST1040	Haynes-Rodriguez	Melanie Gardner	kayla17@hinton-hernandez.com	Port Janet	7353 Danielle Dam Suite 187, Lake Gabriellaberg, TN 95346	2023-10-20	<div></div> <div></div>
CUST1039	Watson, Perez and Fletcher	Cindy Castro	kking@hotmail.com	Sarahchester	42702 Matthew Brooks Suite 125, South Ryan, GA 10470	2023-02-04	<div></div> <div></div>
CUST1038	Montgomery-Lewis	Danny Anderson	mdavis@yahoo.com	South Justin	2378 Angela Manor, Lauraville, VA 30754	2022-01-24	<div></div> <div></div>
CUST1037	Taylor, Barnes and Contreras	Daniel Hernandez	cardenasiera@yahoo.com	Lake Austin	72081 Garcia Divide Suite 632, Payneville, NC 04666	2021-06-11	<div></div> <div></div>
CUST1036	Gonzalez, Ellis and Jenkins	Hailey Herrera	evansbrian@miller.com	New Raymondbury	57807 Rangel Road, New Scottshire, KY 99086	2023-08-29	<div></div> <div></div>
CUST1035	Jones Inc	Scott Walsh	starkcaroline@hotmail.com	Morrisport	6532 Christopher Court, South Rhondaburgh, SD 82209	2022-05-27	<div></div> <div></div>
CUST1034	Sherman-Hunt	Tristan Woods	smithcolleen@gmail.com	Garnermouth	030 Krystal Cove Suite 641,	2023-02-27	<div></div> <div></div>

1

Total records: 47

200 items per page

Customer module as name suggest allows you to store information related to customers that is needed as per your workflow. Again, based on the needs this module is customisable meaning that you may choose to store fields like customer name, location, etc. At minimum the platform requires an identifier for the customer to be available for the purpose of use in orders module as we will see in next section. This module just like product modules offers both data insertion via interface and csv file uploads using the templates. All fields in the module come up default functions of searching, sorting and multiple searches across different fields as well as possibility to download the data in csv file format.

Note that user actions depend on the roles and permissions meaning that some actions would only be available for users with high permission/role.

## Orders Module

Manage Orders						
Order Number	Status	Customer ID	Notes	Article Number	Quantity	Actions
ORDR100	Open	CUST1046	Sample	2021	40	
				2039	30	
				2045	100	
BLKDDR	Closed	CUST1045	Sample	2037	500	
				2044	1000	
RTL159	Draft	CUST1027	Real assignment test	2023	30	
				2031	30	
NL2914	Open	CUST1009	NA	2019	300	
				2020	300	
BP931	Closed	CUST1004	NA	2003	6000	
B2234	Draft	CUST1047	NA	2002	600	
MCK123	Draft	CUST1047	Sample 2 articles	2040	900	
				2046	500	
				2048	1000	

This module is the core component needed for making assignments. The platform works on the logic that orders are created for the purpose of making assignments and the order themselves contain the information of what products to assign, how many quantities and for whom.

Create Order

Order Number\*

is a required property

Customer ID\*

is a required property

Notes\*

is a required property

Product Id

Quantity

+

\*

\*

is a required property

is a required property

Create

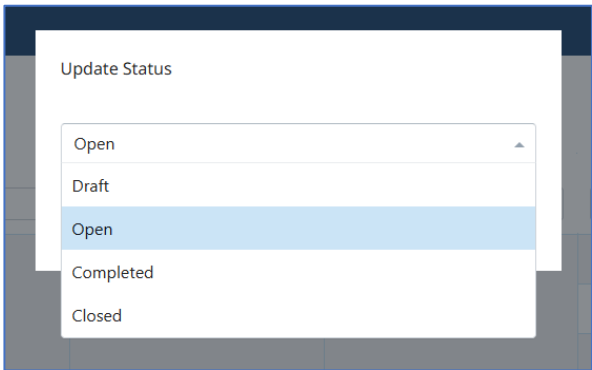
Cancel

So, this means that an order would need at least the following information to be picked up for the assignment process:

- Product identifiers
- Product quantity
- Customer identifier

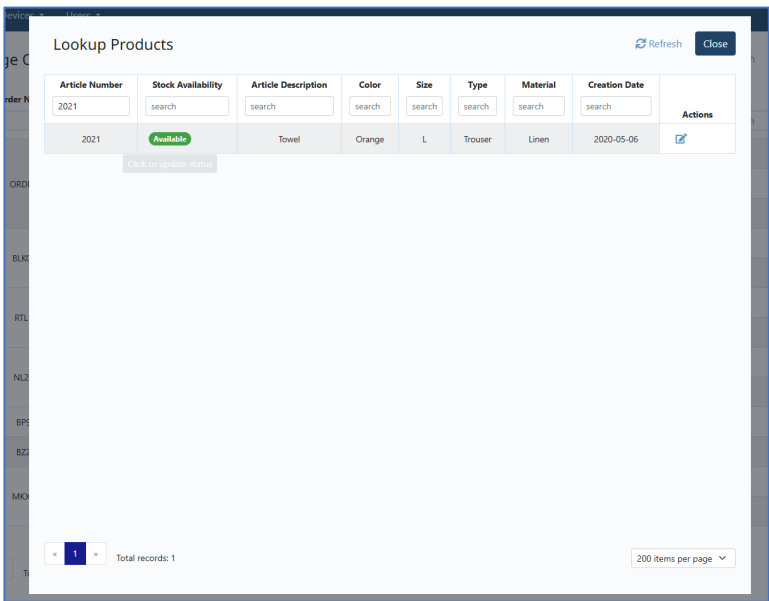
The detail of an order is made available to the assignment operator who does the assignment based on order numbers. This process is described in next module.

Order module offers status management that is helpful for managing the work related to assignment operations. Offered status are simple to use and understand and are following:



Status transitions and logic implemented related to possible actions and data attributes ensure that platform supports the operators to do assignment correctly and removes confusion related to common things like what is to be assigned or how much is to be assigned and so on.

The data entered for order is validated both when entered through the UI interface as well as file uploads for things like existing order number, valid customer id, valid product id, valid product status, product quantity, any other such fields that customer may opt for adding to orders etc.



The data is present clear and thanks to quick lookup view, users can search, filter and view data at a glance.

Note that user actions depend on the roles and permissions meaning that some actions would only be available for users with high permission/role.

## Create assignment Module

This module is made for operators who carry out the actual physical process of assignment of the data to RFID tags. The underlying principle of the platform is that orders containing information about what, how much and for whom to assign and that order is then picked by the operator, and they perform the process of reading the RFID tags on the textiles and assigning them through the platform. As a minimum it's needed that operators are aware of order number available to them for which they need to make the assignment. There is also possibility to customise the information available & visible here on customer onboarding

### Create Assignment

Order Number*	Customer*	Product Number*
<input type="text"/>	<input type="text"/>	<input type="text"/>
is a required property	is a required property	is a required property
Reading Station*	Site Name*	Product Description*
<input type="text"/>	<input type="text"/>	<input type="text"/>
is a required property	is a required property	is a required property
Product Color*	Product Type*	Product Size*
<input type="text"/>	<input type="text"/>	<input type="text"/>
is a required property	is a required property	is a required property
Product Quantity*	Customer Name*	Reader Status*
<input type="text"/>	<input type="text"/>	<input type="text"/>
is a required property	is a required property	is a required property
MAC Address*		
<input type="text"/>		
is a required property		
<input type="button" value="Create"/> <input type="button" value="Cancel"/>		

As shown in the create assignment screen above, the information needed to start the process is order number.



Lookup Orders						
Order Number	Status	Customer ID	Notes	Article Number	Quantity	Actions
<input type="text" value="search"/>	<input type="text" value="search"/>	<input type="text" value="search"/>	<input type="text" value="search"/>	<input type="text" value="search"/>	<input type="text" value="search"/>	
ORDR100	Open	CUST1046	Sample	2021	40	select
				2039	30	
				2045	100	
NL2914	Open	CUST1009	NA	2019	300	select
				2020	300	
OD924	Open	CUST1042	5000 Assignments	2048	1000	select
				2000	1000	
				2003	1100	
				2042	900	
HZ1235	Open	CUST1045	Test	2046	1000	select
				2042	900	
				2045	200	

Once order number is selected, the customer id is automatically filled based on the information previously entered in the orders.

### Create Assignment

Order Number\*

Customer\*

Product Number\*  


is a required property

Reading Station\*  


is a required property

Site Name\*  


is a required property

Product Description\*  


is a required property

Next selection is about product number for the order. Twinify provides the possibility to have multiple products available for assignment in a single order. In that case the operator needs to click on the product number, and they will be presented with curated list of products that are available for assignment for the specific order.

Lookup Products								
Article Number	Stock Availability	Article Description	Color	Size	Type	Material	Creation Date	Actions
<input type="text" value="search"/>	<input type="text" value="search"/>	<input type="text" value="search"/>	<input type="text" value="search"/>	<input type="text" value="search"/>	<input type="text" value="search"/>	<input type="text" value="search"/>	<input type="text" value="search"/>	
2020	Available	Trouser	Black	M	Trouser	Cotton	2020-11-27	select
2019	Available	Jacket	Black	50x50	Tshirt	Cotton	2022-01-30	select

Upon selection of the product number, the product details are filled automatically and can be customised on the time of onboarding by customer. The filled data is present to help operators verify the assignment is being done for right product.

### Create Assignment

Order Number\*

NL2914

×

▼

Customer\*

CUST1009

×

▼

Product Number\*

2019

×

▼

Reading Station\*

is a required property

Site Name\*

is a required property

Product Description\*

Jacket

Product Color\*

Black

Product Type\*

Tshirt

Product Size\*

50x50

Product Quantity\*

300

Customer Name\*

CUST1009

Reader Status\*

is a required property

MAC Address\*

is a required property

Create

Cancel

Next and final step before making assignment is to select the actual reader which would be used for this purpose. This is because Twinify allows to add multiple readers, multiple users and multiple locations meaning there can be assignments done from different places. The platform continuously checks for validations like in case the readers are not available or in use, the operator is notified upon the reader selection.

### Create Assignment

Order Number\*

NL2914

×

▼

Customer\*

CUST1009

×

▼

Product Number\*

2019

×

▼

Reading Station\*

R220

×

▼

Site Name\*

Lamone

▼

Product Description\*

Jacket

Product Color\*

Black

Product Type\*

Tshirt

Product Size\*

50x50

Product Quantity\*

300

Customer Name\*

CUST1009

Reader Status\*

OFFLINE

MAC Address\*

00:16:25:12:1D:DA

Create

Cancel

⚠

The selected **Reading Station** is not online.

Once the operator is ready, they can press create and enter the assignment session view. This is the place where they will see the EPC from the RFID tags listed and ready for assignment as they move the products/items over the reader. The interface offers a modern, informative and simple layout.

Software control for Start and Stop reader are present to control the reader and collect the EPCs. When EPC are collected, the operator needs to click on assign EPCs

button and data would be recorded and mapped to the EPC with the selected product id and for the specified order.

The operator also gets the option to discard the EPCs if they have read some by mistake and on top of that, the system always reports and checks for duplicates and existing EPC in the record when the Assign EPC action is performed. When operator wants to exit, they can click on close the sessions and the data would be recorded for the specific session under the selected order.

Dashboard

Devices

Users

Create Assignment

Order Number\*

ORDR100

Reading Station\*

R220

Product Color\*

Purple

Product Quantity\*

30

MAC Address\*

00:16:25:12:1D:DA

Create

Cancel

LiveRead Assignment

X Close

Attributes

Order Number:

ORDR100

Site Name:

Lamone

Product Type:

Trouser

Customer:

CUST1046

MAC Address:

00:16:25:12:1D:DA

Product Number:

2039

Product Description:

Tshirt

Product Size:

50x50

Customer Name:

CUST1046

Reading Station:

R220

Product Color:

Purple

Product Quantity:

30

Reader Status:

ONLINE

Start

Pause

Session ID: 17118EBD59

EPC recorded: 0

Reading window: -

Total EPCs: 30

Assigned EPCs: 0

Remaining EPCs: 30

Product Number

2039

ID	EPC	Order Number	Product Number
No Data			

0 results

Assign EPC

Discard EPC

Close Session

View assignments

When assignments are done either completed or partially, the data for the assignment is made available in the view assignments area.

The data for the assignments is made available at order level meaning that for each order, there are records of the different sessions that were done and the total EPC recorded.

Products

Customers

Orders

Create Assignment

View Assignments

View Assignments

Refresh

Create

Order Number	Total Sessions	Total Epcs	Assigned Epcs	Actions
<div>search</div> <div>ORDR100</div>	<div>search</div> <div>1</div>	<div>search</div> <div>170</div>	<div>search</div> <div>26</div>	<div><div></div><div></div><div></div><div></div></div>
<div>search</div> <div>BLKODR</div>	<div>search</div> <div>1</div>	<div>search</div> <div>1500</div>	<div>search</div> <div>450</div>	<div><div></div><div></div><div></div><div></div></div>

The user can click on details and view data related to sessions that took place for assignment for the orders as well as summary of the order and products that were part of the order along with assignment status.

All Sessions For Order: BLKODR

Refresh

Export CSV

Click to view details

Articles

Order Status: Closed

Product Number	EPCs	Assigned EPCs	All EPCs Assigned
2044	1000	450	No
2037	500	0	No

Session ID	Date	Order Number	User	Total Epcs	Assigned Epcs	Duration	Actions
04AC593D68	30 Apr 2025, 18:57 PM	BLKODR	Umar Farooque	1000	450	2 minutes	<div>View</div> <div>Print</div>

On all the lists in this module, there are functions for sorting, filtering and multiple searching available for easily finding the data needed. On top of that the download options are also available that allows to export data in csv files which can then be manipulated as needed.

The platform provides powerful data rendering capabilities which allows to view specific EPC data and has some meta functions like recording time taken for each session which can help the customer to time and improve their assignment workflow.

All EPCs For Session ID: 04AC593D68

Refresh

Export CSV

EPC	Product Number	Reading Station	Site Name	Product Description	Product Color	Product Type	Product Size	Customer	Reader Status	MAC Address
E2801190A5030065B284EAB5	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA
E2801190A5030065B2824C59	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA
E2801190A5030065B2878F37	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA
E2801190A5030065B21DF169	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA
300ED89F335001C51DD3B1A8	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA
E2801190A5030065B2806F99	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA
E2801190A5030065B284F5D9	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA
E2801190A5030065B27F37EE	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA
E2801190A5030065B28860FF	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA
E2801190A5030065B27FA2B2	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA
E2801190A5030065B283F4D6	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA
E2801190A5030065B27F634A	2044	R220	Lamone	Tshirt	Red	Outerwear	XL	CUST1045	ONLINE	00:16:25:12:1D:DA

1

2

3

4

5

...

9

Total records: 450

50 items per page

Close