# SmartPack Container and SmartPack Trailer



# **Dashboard User Guide**

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Changes to the original guide are listed below:

Change	Date	Description
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MN-003476-02 Rev A	December 2020	Updated for Release 1.2
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# **About SmartPack**

## Introduction

This guide provides information on using the SmartPack<sup>TM</sup> Dashboard for SPX software version 1.5.



**NOTE:** Screens pictured in this guide are samples and can differ from actual screens.

## **Notational Conventions**

The following conventions are used in this document:

- Bold text identifies
  - Dialog box, window, and screen names
  - Drop-down list and list box names
  - Check box and radio button names
  - Icons on a screen
  - Key names on a keypad
  - Button names on a screen
- Bullets (•) indicate
  - Action items
  - Lists of alternatives
  - Lists of required steps that are not necessarily sequential
- Sequential lists (such as those that describe step-by-step procedures) appear as numbered lists.

### **Related Documents and Software**

The following documents provide more information about the SmartPack solution.

- TM1000 Load Monitoring Unit Installation and Configuration Guide (MN-003721-01) (SmartPack Container Only)
- TM2000 Load Monitoring Unit Installation and Configuration Guide (MN-003280-05) (SmartPack Container and SmartPack Trailer)

For the latest version of these guides and all guides, go to: <u>zebra.com/support</u>.

## **Service Information**

If you have a problem with your equipment, contact Zebra Global Customer Support for your region. Contact information is available at: <u>zebra.com/support</u>.

When contacting support, please have the following information available:

- Serial number of the unit
- Model number or product name
- Software type and version number.

Zebra responds to calls by email, telephone, or fax within the time limits set forth in support agreements.

If your problem cannot be solved by Zebra Customer Support, you may need to return your equipment for servicing and will be given specific directions. Zebra is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty.

If you purchased your Zebra business product from a Zebra business partner, contact that business partner for support.

# **Getting Started**

## Introduction

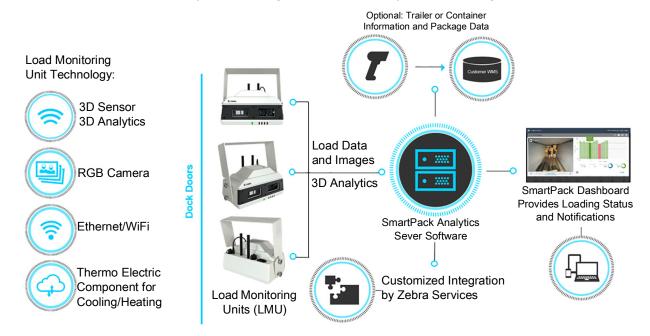
The SmartPack (SPX) Solution allows Transportation and Logistics (T&L) operators to gain greater insight into the efficiency of package handling operations. This solution is based on a special-purpose Zebra edge device called the Load Monitoring Unit (LMU) and SPX system software.

SmartPack Trailer targets the ground transportation industry and processes cargo directly into an on-the-road trailer. SPT captures operational data such as load density, trailer fullness, load images, and number of packages scanned and loaded per hour.

SPX actively detects trailer fullness, computes rates-of-work and other metrics in near real time, and generates alerts for operations staff.

## **SmartPack Solution Overview**

The SmartPack Dashboard is part of the larger SmartPack transportation and logistics solution.



### Load Monitoring Unit Technology

The Load Monitoring Unit (LMU) gathers metrics and images that increase visibility into operational results, streamline workforce needs, and optimize asset utilization.

The LMU is installed on dock doors or loading stations at loading facilities to monitor trailer and container load progress to provide critical load metrics. The LMU captures container load information using an on-board RGB camera, and a 3D sensor processes this data and sends the results to a server over a wired or wireless connection. The SmartPack Dashboard displays the data on a web-based interface.

#### SmartPack Dashboard Advantages

The SPC Container Dashboard and the SPT Trailer Dashboard provide the following advantages:

- · Simultaneous monitoring of multiple load points
- · Insights and data for use in process and safety initiatives
- · Near real-time visibility and business insight into inbound and outbound operations
- Live image capture for display on a centralized dashboard
- · Real-time load data analytics for improved efficiency in load operations

## Signing in to the SmartPack Dashboard

To sign in to the Dashboard:

1. Enter the URL provided by your account manager, for example:

https://spx-domain-name/spx-ui

You are redirected to the following sign-up window.

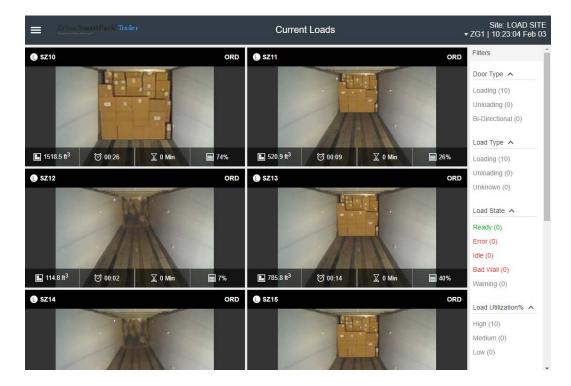
2. Enter your corporate FedEx email address. You are re-directed to authenticate via the FedEx authentication system.

Sign in with Google
Sign in
to continue to iap.googleapis.com
Email or phone
jane.reynolds@company.com
Forgot email?
To continue, Google will share your name, email address, language preference, and profile picture with lap.googleapis.com.
Create account Next

- 3. Select Next.
- 4. On The Sign In dialog box, enter your user name and password.

## **SmartPack Dashboard Main Window**

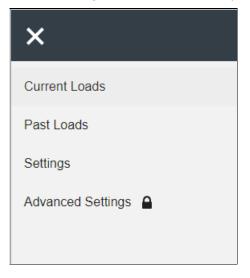
The main window of the Dashboard User Interface displays **Current Loads** in the default image view, which provides information on current container or trailer load information in image and chart format. The information can be searched, filtered, or expanded to view additional details.



## **Navigation Menu**

Use the navigation menu to view and configure information in **Current Loads**, **Past Loads**, and **Settings**. The administrator can also view and configure information in **Advanced Settings**.



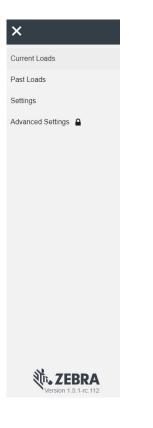


ltem	Description
Current Loads	Displays Current Loads window (loading, unloading, and bi-directional).
Past Loads	Displays Past Loads window (loading and unloading).
Settings	Displays: Basic Settings (language and units of measurement selections) Data Management options (stored data life span) Notes (add and manage notes).
Advanced Settings	Displays: Daily Report (specify e-mail recipients for daily reports containing information on the previous day's loads). Shifts (Shift Mode and start time; SmartPack Trailer only).

#### Table 1Navigation Menu

## Viewing the SmartPack Software Version

1. Select the Navigation icon 📃 . The bottom of the menu displays software version information.



2. Select **Settings**. Below the menu on the left appears a scrollable window that lists versions for all services.

Zehrs SmartPart / Trailer		Settings	Site: BG-SPT-LAB 09:52:55 Jun 24
Basic Settings		Language Selection	
Data Management Notes	Select a language The language must be diployed throughout the application English (United States) +		Save
		Measurement Configuration	
्री. ZEBRA	Select a unit of measurement  Metric units  Imperial units		
SPX Version: dev.77 = spxContainer- dev.24 = dev.24 = dev			Save

## **Dashboard Session Information**

Site name, date, time, and zone group appear in the top right corner of the SmartPack Dashboard. Select a different zone group to view and work with information for that zone.



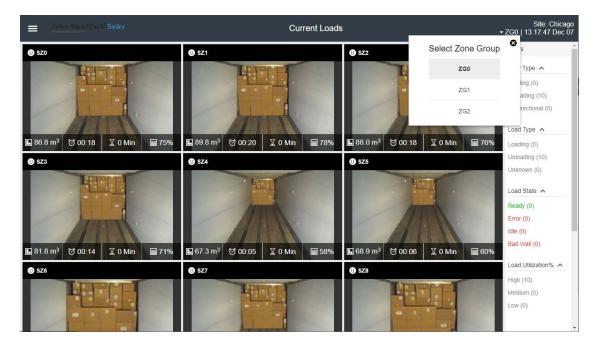
#### Selecting a Zone Group

Dock doors and load points are assigned to a zone group. Change the zone group to view the doors or load points assigned to that zone group in the dashboard.

When starting a SmartPack Dashboard session, carefully identify the zone to view in the dashboard to ensure the desired zone displays.

To select a zone group:

- 1. In the top right corner of the dashboard, select the small triangle next to the zone name.
- 2. On the **Select Zone Group** menu, select a zone. The SmartPack Dashboard changes to reflect the information for that zone.



# **Settings**

## Introduction

Select **Settings** from Navigation Menu icon to select the dashboard user interface language and unit of measurement, and manage data and notes.

## **Basic Settings**

To set the language and unit of measurement to use on the dashboard interface:

- **1.** Select the Navigation icon  $\equiv$  .
- 2. Select Settings.
- 3. Select Basic Settings.

Zebra SmartPack'Trailer		Settings	Site: EMEA FEDEX 18:33:23 Jul 07
Basic Settings		Language Selection	
Data Management	Select a language		
Notes	The language you select will be displayed throughout the application		
	English (United States) 👻		
			Save
		Measurement Configuration	
	Select a unit of measurement		
	Metric units		
	O Imperial units		
			Save

- 4. Under Select a language, select the drop-down arrow and select the desired language.
- 5. Select Save.
- 6. Under Select a unit of measurement, select either Metric units or Imperial units to be used on the dashboard.
- 7. Select Save.

## **Data Management**

To set how long to store SPX data:

- **1.** Select the Navigation icon  $\equiv$  .
- 2. Select Settings.
- 3. Select Data Management.

Zebra SmartPack <b>Trailer</b>	Set	tings	Site: SPX LOAD SITE 16:09:48 Oct 18
Basic Settings		Data Management	
Data Management	Stored Data Life Span		
Notes	Select how long data will be stored         Use the drop down bedwin badjust how long your SPX data is stored on servers. Data will be detected heldwin black that one month is used as a measure of 30 days.         Select your data lifespan         4 Months		Save

- 4. On the **Select your data lifespan** drop-down menu, select the number of months to store SPX data on the servers.
- 5. Select Save.

## Notes

To view a list of notes:

- **1.** Select the Navigation icon  $\equiv$  .
- 2. Select Settings.
- 3. Select Notes.

Zebra SmartPack"Trailer		Settings	Site: EMEA FEDEX 22:56:45 Jul 02
Basic Settings		List of Notes	
Data Management	+ Add Note		Q Filter notes
Notes			~
	🖋 Bad Wall	Published 👿 Show in dashboa	rd 🗹 Show in historical 🗙
	Column Loading	Published 🜌 Show in dashboa	rd 🗹 Show in historical 🗙
	Damaged Package	🛛 Published 🖾 Show in dashboa	rd 🗹 Show in historical 🗙
	🖌 Load Not Secure	🗹 Published 🗹 Show in dashboa	rd 🗹 Show in historical 🗙

### **Creating a New Note**

To create a new note:

1. On the List of Notes window, select Add Note to display the New Note dialog.

Zehen Smanfrach Trailer		Settings	Site: EMEA FEDEX 18:37:10 Jul 07
Basic Settings	List of Notes		
Data Management	+ Add Note		Q Filter notes
Notes			
	🖋 Bad Wali		Published Show in dashboard Show in historical X
	🖌 Column Loading	New Note	🛛 Published 🔯 Show in dashboard 🔯 Show in historical 🗙
	Damaged Package	Note message Note message is required. Publishing options	🖉 Published 💽 Show in dashboard 🖉 Show in historical 🗙
	Load Not Secure	Published Show in dashboard	🖉 Putilished 📓 Show in dashboard 📓 Show in historical 🗙
	Poor IC Placement	Show in historical	Published 🔯 Show in dashboard 🛃 Show in historical 🗙
秋 ZEBRA	Requires Follow-up	Cancel Clear Save	🛛 Published 🖉 Show in dashboard 🖉 Show in historical 🗙
SPX Version: 1.4.0 spx/config- 1.4.0-rc.11 service: spx/container- 1.4.0-rc.11 tracker-output- transformer:	Work Right/Safety Violation		Published 🗹 Show in dashboard 🖉 Show in historical 🗙

- 2. In Note Message, enter the note text to appear when applying the note to an image snapshot in the Image Details view. For example: Load Not Secure or Damaged Package.
- 3. Select the note publishing options: Published, Show in dashboard, Show in historical.
- 4. Select Save to add the note to the list of available notes.



NOTE: The Published option publishes the note to a database available to other users.

#### **Editing a Note**

To edit a note:

1. On the List of Notes window, select the pencil icon for the note to edit.

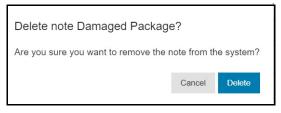
Zebra SmartPack <b>Trailer</b>	Settings	Site: EMEA FEDEX 22:56:45 Juli 02
Basic Settings	List of No	tes
Data Management	+ Add Note	Q Filter notes
Notes	0	<b>`</b>
	🖍 Bad Wali	Published 🗹 Show in dashboard 🗹 Show in historical 🗙
	Column Loading	🖉 Published 🗹 Show in dashboard 🗹 Show in historical 🗙
	Damaged Package	Published 🗹 Show in dashboard 🗹 Show in historical 🗙
	/ Load Not Secure	Published 🗹 Show in dashboard 🗹 Show in historical 🗙

- 2. On the Note Details dialog box, edit note details as desired.
- 3. Select Save.

## **Deleting a Note**

To delete a note:

1. On the List of Notes window, select the X next to the note to delete.



2. On the **Delete note** confirmation dialog box, select **Delete** to delete, or **Cancel** to cancel the action.

### **Filtering Notes**

To filter, or find, a note, on the **List of Notes** window, enter the name of the note in the **Filter notes** field on the right.

Zebra SmartPack' Trailer		Settings	Site: EMEA FEDEX 22:56:45 Jul 02
Basic Settings		List of Notes	
Data Management	+ Add Note		Q Filter notes
Notes			~
	🖋 Bad Wall		Published 🗹 Show in dashboard 🗹 Show in historical 🗙
	✓ Column Loading		Published 🖬 Show in dashboard 🖬 Show in historical 🗙
	🖋 Damaged Package		Published 🖬 Show in dashboard 🖬 Show in historical 🗙
	Load Not Secure		Published 🗹 Show in dashboard 🗹 Show in historical 🗙

As you type, matching items appear in the list.

## Advanced Settings (Administrator Only)

Advanced settings allow configuration of daily email reports and enabling single shift mode, which reports loads on a per calendar date.

### **Daily Report Settings**

- **1.** Select the Navigation icon  $\equiv$  .
- 2. Select Advanced Settings.
- 3. Select Daily Report.

Composition of the Alf Trader	Advanced Settings	Sile: Chicago 12:01:46 Dec 14
Daily Report	Daily Report	
Shifts	Send a Daily Report Email of Yesterday's Past Loads tere Respect Edit Respects	
	There are no daily reports yet. Subject: Daily Report for Illinois Site	
	Cancel Accept	

- 4. In the Daily Report window, select New Recipient.
- 5. Enter the requested information.
- 6. Select Accept. The Edit Recipients dialog closes and an entry displays in the Daily Report window.

Zebra SmartPack'Trailer	Advanced Settings	Site: Chicago 10:25:02 Dec 09
Daily Report	Daily Report	
Shifts	Send a Daily Report Email of Yesterday's Past Loads	
	To: 1 Recipient(s)	Ū

To edit recipient information, select the pencil icon next to the entry in the list.

#### **Shift Settings**

If the Single Shift Filter option is enabled in **Past Loads**, the filter uses the time reference set in **Single Shift Mode.** In this mode the dashboard prompts only for the dates of **Load Open** or **Load Close**, but not the times.

To configure the shift start:

- **1.** Select the Navigation icon  $\equiv$  .
- 2. Select Advanced Settings.
- 3. Select Shifts.
- 4. In the Shift Configuration window, select the toggle setting for Enable Single Shift Mode.

Zeinn SmartPack"Trailer	Advanced Settings	Site: Chicago 10:26:00 Dec 09
Daily Report	Shift Configuration	
Shifs	Enable Single Shift Mode	Save

The Single Shift Mode settings change to available.



**NOTE:** If **Enable Single Shift Mode** is not selected, you can set the start and end dates and times for **Past Loads** filtering regardless of any established shift start or end times. SmartPack Dashboard currently only supports single **Shift Mode**.

5. Use the drop-down lists to set the Shift Start Time.

# **Current Loads**

## Introduction

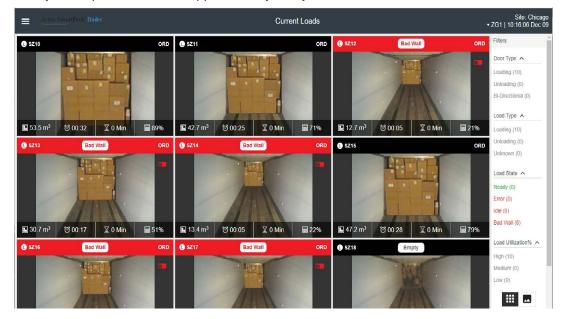
The **Current Loads** window displays load point tiles in graphic or image view. This is the default window that appears upon opening the dashboard.

To open the Current Loads window if not already displayed, select Current Loads from the Navigation

menu ≡ .

## **Load Point Tiles**

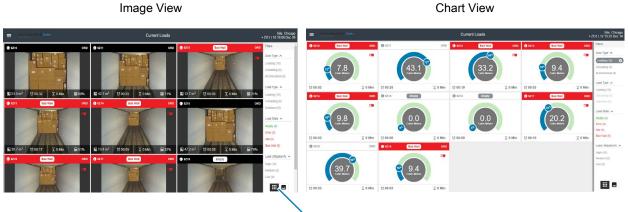
Load point tiles appear in the main window of the SmartPack Dashboard. Each load point tile represents an outbound (loading) location and inbound (unloading) location within the SmartPack solution. Each tile displays near real-time status of a specific container or trailer at a specific loading or unloading location. The system updates each tile approximately every 15 seconds.



### **Image and Chart Views**

Load point tiles can be represented in image format, which displays an image of the load point, or chart format, which displays graphical information about the load point.

Select a tile view button at the bottom right of the dashboard to display the tiles in image view or chart view. The selected view button is darkened as shown below.



Tile View Buttons

#### **Load Point Tile Features**

Each load point tile contains load information, and can be viewed in image and chart format, as illustrated in the following figure.



7	Utilization percent
8	Utilization volume
9	Idle time

#### Table 2 Load Point Tile Features

ltem	Description
Door type	L - Loading
	U - Unloading
Zone ID (dock door ID)	Dock door number
Load state	Ready - Loading or unloading has reached target goal. Header is green.
	Error - Load point out of service.
	Idle - There is no loading or unloading activity at the door. Header is red.
	Bad Wall – A wall with poor properties has been constructed.
	Warning – Load point in service but has warnings.
	For error examples, see Error States on page 42.
Destination/Origin ID	An up to four-character value for the destination of the trailer for outbound load points, or the origin of the trailer (where it came from) for inbound load points.
Near real-time image / chart	Near real-time image of the load in image view, or chart with load data in chart view.
	Load point tile information refreshes approximately every 15 seconds.
Load duration	Time to complete the loading/unloading process.
Utilization percent	Percent of the volume of a container or trailer occupied by contents.
	This information appears in the tile footer in image view, and the tile body in chart view.
Utilization volume	Volume of contents in a container or trailer.
	This information appears in the tile footer in image view, and the tile body in chart view.
Idle time	A configurable period of time during which SmartPack does not detect loading or unloading activity. When this time is met or exceeded, the load point tile status displays the idle time clock, indicating that the idle time was exceeded.

For more details on load point tiles, see Image and Chart Views on page 22.

## Chart View - Loading and Unloading (SPT Only)

In the chart view information for a loading tile, loading progression moves clockwise. For an unloading tile, progression moves counterclockwise.



## **Filters Panel**

The **Filters** panel on the right of the **Current Loads** window varies between SPT and SPC. The panel allows filtering by door type, load type, load state, and load utilization, and indicates the number of current loads in each category.

The counts for Good, Fair, Poor, and Idle are based on the thresholds set in Basic Settings.

In the Filters panel, select an option to view the load point tiles in that category.

Filters
Door Type 🔨
Loading (0)
Unloading (10)
Bi-Directional (0)
Load Type 🔺
Loading (0)
Unloading (10)
Unknown (0)
Load State A
Ready (0)
Ready (0)
Ready (0) Error (0)
Ready (0) Error (0) Idle (0)
Ready (0) Error (0) Idle (0) Bad Wall (0)
Ready (0) Error (0) Idle (0) Bad Wall (0) Load Utilization%
Ready (0) Error (0) Idle (0) Bad Wall (0) Load Utilization% A High (10)

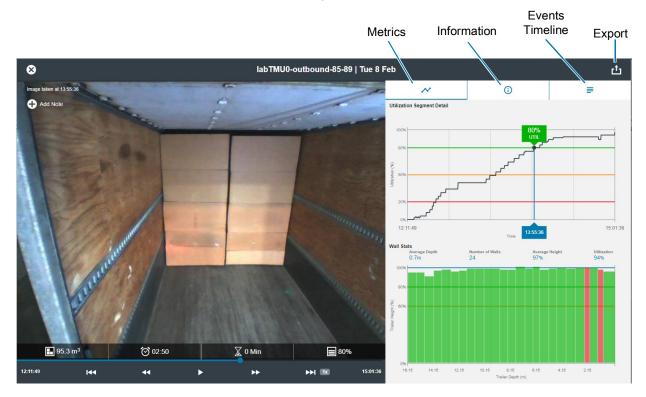
The following table describes Filters panel options.

#### Table 3 Filters Panel - SmartPack Trailer

ltem	Description	
Door Type		
Loading	Displays load point tiles designated for outgoing loads.	
Bi-Directional	Displays load point tiles designated for either loading or unloading.	
Load Type		
Loading	Displays load point tiles of outgoing loads.	
Unknown	Displays load point tiles of unknown direction.	
Load State		
Ready	Idle time is greater than or equal to the idle time threshold.	
Error	A network or hardware issue prevents the load from being viewed in the SmartPack Dashboard load point tile. Follow site procedures to resolve this.	
Idle	Idle time is greater than or equal to the idle time threshold.	
Bad Wall	A historic wall does not meet the minimum utilization goal.	
Load Utilization		
High	Load point utilization is greater than or equal to the high utilization loading threshold.	
Medium	Load point utilization is between the low and high utilization thresholds.	
Low	Load point utilization is less than or equal to the low utilization threshold.	

## Load Point Tile Detail Window

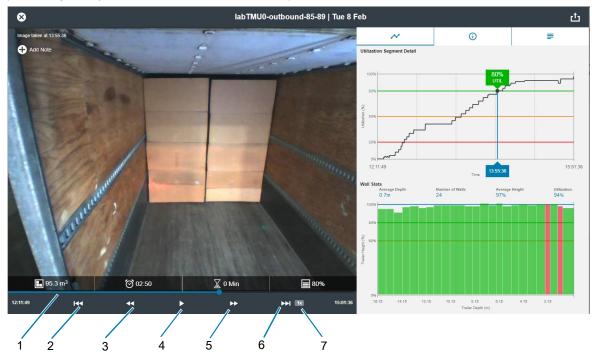
Select a load point tile in the **Current Loads** dashboard window to open the **Load Point Tile Detail** window, which contains information on how efficiently a trailer is loaded.



#### Image Navigation and Playback Controls

Use the image navigation and playback controls at the bottom of the **Load Point Tile Detail** window to view the desired image snapshot. The image snapshot and the information to its right change to display information for that point in time.

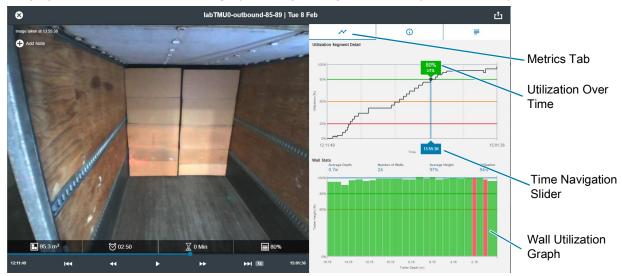
To select slideshow playback speed, select the speed setting button to open a menu of available speeds (1x for regular speed, 2x is two times faster, etc.)



1	Image navigation slider
2	Go to first image
3	Go to previous image
4	Play / pause image slideshow
5	Go to next image
6	Go to final image
7	Speed setting (pop-up menu)

#### **Metrics Tab**

The **Metrics** tab on the **Load Point Tile Detail** window displays information on how efficiently a container or trailer is loaded (or unloaded) over time. To view the desired image snapshot, use the image navigation and playback controls below the image (see Image Navigation and Playback Controls).



#### Wall Counting Information and Wall Graph

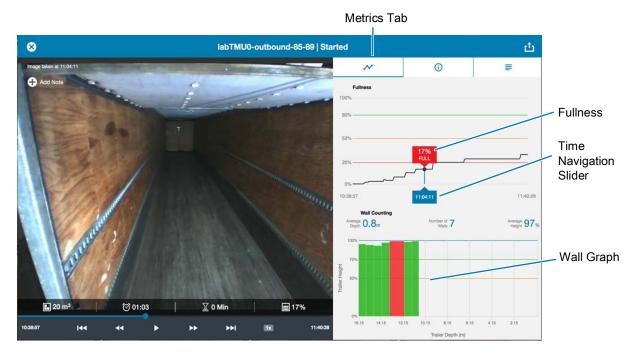
For trailer load points using loading, the **Wall Counting** information shows the following information over time.

- Average wall depth
- Number of walls
- · Wall height expressed as a percentage of trailer height

The wall graph shows the height and depth of individual walls as a function of trailer length.

The color of the bars is determined by the wall height and wall depth thresholds set in **Advanced Settings** (SmartPack Trailer only).

When you select any bar in the wall graph, the information in the right window and the image in the left window change to display information for that point in time.



You can view image snapshots over time in the following ways.

- Slide the Navigation Slider horizontally to the desired point or points in time.
- Use the image navigation and playback controls below the image (see Image Navigation and Playback Controls on page 27).

When either of the above methods is used, the image snapshot and the information to the right of the image change to display information for that point in time.

### **Information Tab**

The **Information** tab on the **Load Point Tile Detail** window displays container or trailer statistics over time. It includes destination information for containers or trailers that are loading, and origin information for those unloading.

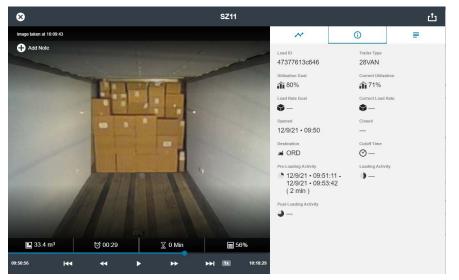


Table 4 describes the items a	ppearing in the <b>Information</b> tab.
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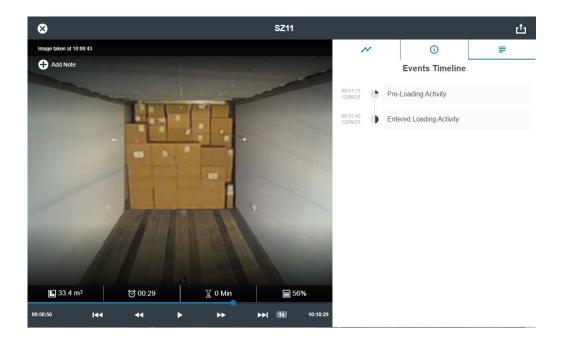
ltem	Description
Load ID (Trailer)	Identification number of load (Trailer).
Trailer Type (Trailer)	Type of container or trailer (e.g., 28VAN).
Utilization Goal	Goal for container or trailer volume as a percentage.
Current Utilization	Current container or trailer volume as a percentage.
Opened	Date and time the container or trailer begins loading.
Closed	Date and time the container or trailer loading is complete and closed.
Destination or Origin	Destination or origin code for the load. Optionally set by the administrator.
Cutoff Time	Optional time set by the administrator for loading / unloading to complete.
Pre-Loading Activity	Time spent in pre-loading activity.
Loading Activity	Time spent loading / unloading.
Post-Loading Activity	Time spent in post-loading activity.

#### Table 4 Information Tab

### **Events Timeline**

The SmartPack Dashboard allows you to manage notes in one of the following ways:

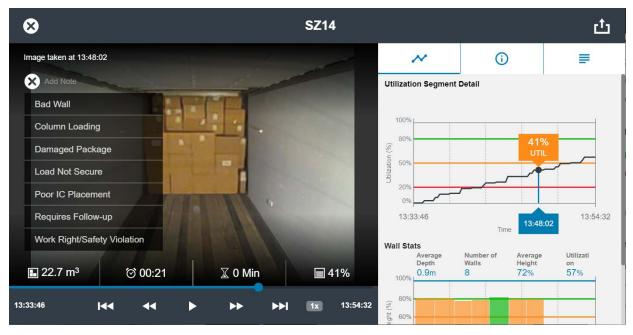
- Use the **Notes Settings** window to manage the notes that populate the drop-down list of notes used in the **Load Point Image Detail** window. See Creating a New Note on page 17.
- Use the Add Note drop-down menu in the Load Point Tile Detail window in image view to apply notes to a snapshot, as follows.



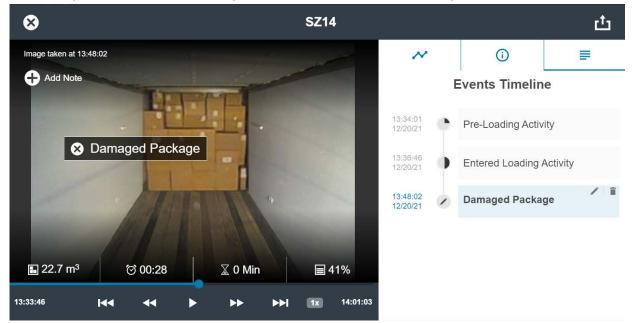
#### Adding a Note to an Image Load Point Tile Detail Window

To add a note to an image load point tile:

- 1. In the Load Point Tile Detail window, use the navigation and playback controls to select the image time frame on which to place the note. See Image Navigation and Playback Controls on page 27.
- 2. At the top left corner of the image, select the Add Note icon, and select a note from the menu.



3. The note appears for placement on the image, and is added to the **Events Timeline** tab to the right of the image. Select the note and drag it to the desired location on the image.



#### Moving a Note

To move a note to a specific location on an image snapshot, select the **Events Timeline** tab, and then select the note on the timeline. Drag the note to the new location on the image.

#### **Deleting a Note**

To delete a note, on the **Events Timeline** tab, select the delete icon next to the note, or select the **X** next to the note on the image. The note is deleted from the image and from the **Events Timeline** tab.

## **Exporting Data for Current Loads**

To export data for a current load:

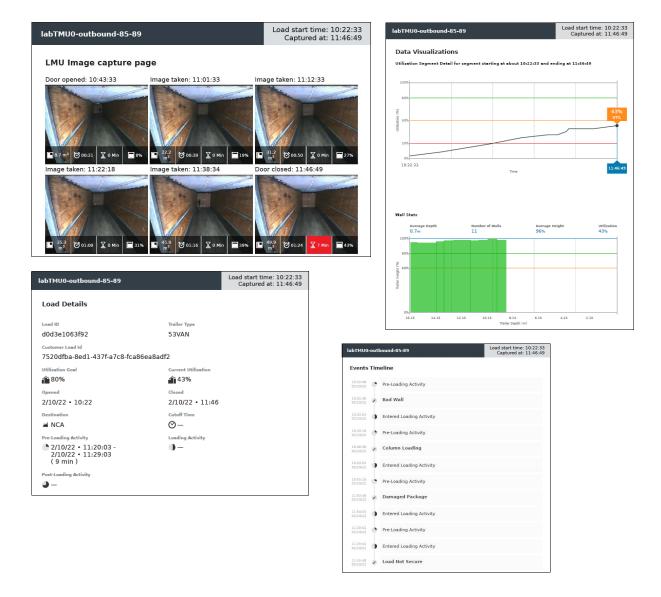
- 1. If the **Current Loads** window isn't displayed, select the Navigation icon at the top left corner of the dashboard and select **Current Loads**.
- 2. Select a Load Point Tile to open the Load Point Tile Detail window.
- 3. In the top right corner of the window, select the **Export** icon <sup>1</sup> to open the Export window.

Export Real-Time Data (17:33:	46)	No m
Click Export to generate a print-friendly view of the curr visualizations, load details and load notes for the se		
	Cancel	Export

4. Select Export.

The dashboard generates a PDF containing a photo of the loading point, as well as information from the **Metrics**, **Information**, and **Notes** tabs.

#### Following is a sample PDF report in **Current Loads**.



## **Stitched Loads**

SPX includes a new feature that detects **Split Loads** which are then linked together into **Stitched Loads** (a single past load). **Split Loads** are generated when a load prematurely closes due to detection of a false door closure event. Such false events are typically followed by detection of a true door open event.

# Past Loads

## Introduction

The **Past Loads** window presents historical container or trailer load information in a table that can be searched, filtered, or expanded to display more detail, as well as exported. The SmartPack Trailer **Past Loads** window contains information for loading and unloading, while the SmartPack Container only displays loading information.

To open the **Past Loads** window, select **Past Loads** from the Navigation menu



**NOTE:** Filtering past loads by zone group is not currently available. The utilization percentages and average idle time summary that appear at the top of the window depend on whether inbound or outbound past load information is displayed.

#### Loading and Unloading Tabs

The **Loading** and **Unloading** tabs provide identical metric information for outbound and inbound load points, respectively. The following sections apply to both tabs.

## **Summary View**

The **Past Loads** window opens in the **Loading** (outbound) tab **Summary** view. The top of this window includes the following information on both the **Loading** and **Unloading** tabs:

- Total loads with Good Utilization as a percentage of total loads.
- Total loads with Fair Utilization as a percentage of total loads.
- Total loads with Poor Utilization as a percentage of total loads.
- Average Idle Time in minutes.
- Average Utilization percentage across loads.

Zebra SmartPack" Tra	uler			Past Loads			Site: Chicago 13:05:23 Dec 16
Q Search							
SUMMARY   DETAIL	)						
Total loads with Good Utilization 100%	Total loads with Fair Utilization $0\%$				Utilization Avg. Idle Time 0 Min		Avg. Utilization 90%
	UNL	OADING					凸
Load ID	Trailer Type	Load Date	Door	Opened	Closed	Idle Time	Utilization
0d95680648ed	28VAN	16 Dec 2021 12:27	SZ16	16 Dec 2021 12:27	16 Dec 2021 13:00	—	91%
f5e48ad224b9	28VAN	16 Dec 2021 12:26	SZ18	16 Dec 2021 12:26	16 Dec 2021 12:58	_	90%
32271ab486fa	28VAN	16 Dec 2021 12:25	SZ11	16 Dec 2021 12:25	16 Dec 2021 12:56	_	84%
ef70de30fa3a	28VAN	16 Dec 2021 12:08	SZ17	16 Dec 2021 12:08	16 Dec 2021 12:40	_	89%
f975ad6249d3	28VAN	16 Dec 2021 12:08	SZ10	16 Dec 2021 12:08	16 Dec 2021 12:40	—	88%

This window lists the following information for each load point on both the **Loading** and **Unloading** tabs:

- Load ID
- Trailer Type
- Load Date and Time
- Door
- Opened Date and time door opened
- Closed Date and time door closed
- Idle Time
- Utilization

## **Detail View**

To view additional details, including start and end images for loads, open the **Detail** window using the toggle button **SUMMARY IDETAIL O**.

### Loading Tab Detail

Zebra SmartPacl	< Trailer				Past Loads	5				Site: Chicag 13:07:33 Dec 1
Q Search										
SUMMARY   DETAIL										
Total loads with Good Utilization 100%		Total loads with		Total lo	eds with Poor Utilization 0%		Avg. Idle Time 0 Min		Avg. Utilizati 90%	'n
LOADING   = FILTE	R UNLO	DADING								ம்
Load ID and Trailer Type	Door Number	Load Open/Close	Load Dur (min)	Idle Time (min)	Utilization Change Per Hour (m)	Start/End Utilization	Num of Walls	Num Walls (hrs)	Avg. Wall Depth (m)	Avg. Wall Height (m)
3de899d65226 28VAN	SZ12	16 Dec 2021 12:33 16 Dec 2021 13:05	32.5	-	12.8	11% 89%	17		0.5	2.3
fa0bac53fb99 28VAN	SZ13	16 Dec 2021 12:30 16 Dec 2021 13:04	34	-	12.8	11% 93%	17		0.5	2.3
0d95680648ed 28VAN	SZ16	16 Dec 2021 12:27 16 Dec 2021 13:00	- 33.3	_	12.8	11% 91%	17		0.5	2.3
f5e48ad224b9 28VAN	SZ18	16 Dec 2021 12:26 16 Dec 2021 12:58	32.8	_	12.8	10% 90%	17		0.5	2.3
32271ab486fa 28VAN	SZ11	16 Dec 2021 12:25	30.5	_	12.8	11%	17		0.5	2.3

The **Detail** view of the **Loading** tab lists the following information for each load point:

- Load ID and Trailer Type
- Door Number
- · Load Open/Close Trailer door open and close date/times
- Load Duration (in minutes) Time between load start (trailer door open) and complete (trailer door closed)
- Idle Time (in minutes)
- Utilization Change Per Hour (in linear measurement)
- Start/End Utilization Percentage of trailer utilization at trailer door open and close times
- Number of Walls Total number of walls in the trailer
- Number of Walls created per hour
- Average Wall Depth (in linear measurement) Average depth of all walls created.
- Average Wall Height (in linear measurement) Average height of all walls created.
- Notes Number of notes per type of note added to the load record.
- Start/End Images Load images before and after loading

### **Unloading Tab Detail**

Zebra SmagtPar	k Trailer					Past Loads				Site: Chicag 13:09:44 Dec 1
C Search										
JMMARY   DETAIL										
Total loads with	Good Utilization		Total loads with Fair Utilization $0\%$		Total loads with Poor U 100%	Rilization		a Idle Time O Min		Utilization 0%
LOADING	UNLOADING	FILTER								ம்
Load ID	Trailer Type	Door Number	Load Open	Load Closed	Load Dur. (min)	Idle Time (min)	Utilization Change Per Hour (m)	Start/End Utilization	Notes	Start/End Images
7b4901a92aee	28VAN	SZ1	16 Dec 2021 12:32	16 Dec 2021 13:04	32.3	_	12.8	10% 91%	-	
ef86567b639f	28VAN	SZ4	16 Dec 2021 12:30	16 Dec 2021 12:59	29.3		12.8	10%	_	
010000750001	200744	OL 1	10 000 2021 12:00	10 202 202 1 12:00	20.0		12.0	83%		And And
cec352e06b86	28VAN	SZ3	16 Dec 2021 12:26	16 Dec 2021 12:58	32.8		12.8	92%	-	
8f833dd4348b	28VAN	SZ8	16 Dec 2021 12:27	16 Dec 2021 12:58	30.8	-	12.8	10% 87%	_	
6512aaadaa09	28VAN	SZ2	16 Dec 2021 12:17	16 Dec 2021 12:50	32.8	-	12.8	11% 92%	-	

The **Detail** view of the **Unloading** tab lists the following information for each load point:

- Load ID
- Trailer Type
- Door Number
- Load Open Trailer door open date/time
- Load Close Trailer door close date/time
- Load Duration (in minutes) Time between unload start (trailer door open) and complete (trailer door closed)
- Idle Time (in minutes)
- Utilization Change Per Hour (in linear measurement)
- · Start/End Utilization Percentage of trailer utilization at trailer door open and close times
- Notes Number of notes placed on the Load Point Tile Detail Window for that load
- · Start/End Images Load images before and after unloading

### **Filtering Past Loads**

To filter information in the **Past Loads** window, use the **Filter** button **FILTER** at the right side of the window for SmartPack Container, and at the top of the selected tab for SmartPack Trailer.

Single Shift Filter		
Load Open Date	Load Close Date	
5	5	
Filter by Trailer Type	Filter by Utilization	
•	0% 10	00%

If **Enable Single Shift Mode** in **Advanced Settings** is enabled, and the **Single Shift Filter** option is enabled in the **Filters** dialog box, there is a prompt for Load Open or Load Close dates, but not times.

To use the Filters dialog box:

1. Select the Load Open Date and Load Close Date using the pop-up calendars.

**IMPORTANT:** If you do not set the values for **Load Open Date** and **Load Close Date**, by default the system provides information for the past 3 days only.

- 2. In the Filter by Trailer Type drop-down menu, select All trailer types or specific trailer types using the check boxes.
- 3. Use the Filter by Utilization slider to set minimum and maximum percentages.
- Select Update to apply the filtering criteria, or Clear to clear the criteria. To cancel the filtering action, select Cancel.

### **Searching Past Loads**

To search **Past Loads**, use the search bar at the top of the **Past Loads** window. Search by Load ID, Trailer Type, Load Date, Door, Opened, Closed, Idle Time, and/or Load Utilization. Any filters set in the **Filters** dialog box are noted at the right of the search bar.

=	Past Loads	▼ NY40 (0 <b>29997)    /Ni   12:36:11 Jul 23</b>
Q Search		NY40   0115   IDLE

## **Exporting Data for Past Loads**

To export data for past loads:

- After applying any desired filters, at the right side of the Past Loads window, Select the Export icon
- 2. Select one of the export file type options: CSV, XLSX (Excel), or PDF.
- 3. Select Export.

	PDF
XLSX	PDF
XLSX	PDF

Cancel Export

## **Past Loads Sample Reports**

Following are samples of past loads exported reports in the three available formats.

Past Loads	Detail Rep	ort: Loading								12/16/2021	14:30
Load ID and Trailer Type	Door Number	Load Open/ Close	Load Dur (min)	Idle Time (min)	Utilization Change Per Hour (m)	Start/End Utilization	Num of Walls	Num Walls (hrs)	Avg. Wall Depth (m)	Avg. Wall Height (m)	Notes
487ea045f8 82 28VAN	SZ17	16 Dec 2021 13:50 16 Dec 2021 14:23	32.53		12.76	11% 89%	17	0.03	0.5	2.31	
a9460c967 2b6 28VAN	SZ10	16 Dec 2021 13:50 16 Dec 2021 14:22	32.03		12.78	10% 88%	17	0.03	0.5	2.31	
ab4abf2a30 75 28VAN	SZ14	16 Dec 2021 13:45 16 Dec 2021 14:18	32.53		12.76	11% 89%	17	0.03	0.5	2.31	
37ea01ff22 91 28VAN	SZ15	16 Dec 2021 13:45 16 Dec 2021 14:17	32.03		12.79	11% 88%	17	0.03	0.5	2.31	
cbf6cc2b0d eb 28VAN	SZ19	16 Dec 2021 13:45 16 Dec 2021 14:17	32.03		12.78	11% 88%	17	0.03	0.5	2.31	
54ad00b8a 39d 28VAN	SZ12	16 Dec 2021 13:41 16 Dec 2021 14:13	33.03		12.81	10% 91%	17	0.03	0.5	2.31	

PDF Format

	A	В	с	D	E	F	G	н	1.1	J.	к	L	м	N	0
								Utilization							
			Door			Load Dur	Idle Time	Change Per	Start	End	Num of	Num Walls	Avg. Wall	Avg. Wall	
1	Load ID	Trailer Type	Number	Load Open Date	Load Close Date	(min)	(min)	Hour (m)	Utilization	Utilization	Walls	(hrs)		Height (m)	Notes
2	487ea045f882	28VAN	SZ17	16 Dec 2021 13:50	16 Dec 2021 14:23	32.53		12.76	11%	89%	17	0.03	0.5	2.31	
3	a9460c9672b6	28VAN	SZ10	16 Dec 2021 13:50	16 Dec 2021 14:22	32.03		12.78	10%	88%	17	0.03	0.5	2.31	
-4	ab4abf2a3075	28VAN	SZ14	16 Dec 2021 13:45	16 Dec 2021 14:18	32.53		12.76	11%	89%	17	0.03	0.5	2.31	
5	37ea01ff2291	28VAN	SZ15	16 Dec 2021 13:45	16 Dec 2021 14:17	32.03		12.79	11%	88%	17	0.03	0.5	2.31	
6	cbf6cc2b0deb	28VAN	SZ19	16 Dec 2021 13:45	16 Dec 2021 14:17	32.03		12.78	11%	88%	17	0.03	0.5	2.31	
7	54ad00b8a39d	28VAN	SZ12	16 Dec 2021 13:41	16 Dec 2021 14:13	33.03		12.81	10%	91%	17	0.03	0.5	2.31	
8	a8c48a04b9a3	28VAN	SZ13	16 Dec 2021 13:40	16 Dec 2021 14:12	32.03		12.78	10%	88%	17	0.03	0.5	2.31	
9	7c59b88429bd	28VAN	SZ16	16 Dec 2021 13:36	16 Dec 2021 14:08	31.78		12.77	11%	88%	17	0.03	0.5	2.31	
10	4a2ab6f97656	28VAN	SZ11	16 Dec 2021 13:32	16 Dec 2021 14:06	33.53		12.79	10%	92%	17	0.03	0.5	2.31	
11	9224a2acae95	28VAN	SZ18	16 Dec 2021 13:35	16 Dec 2021 14:05	30.53		12.79	10%	84%	17	0.03	0.5	2.31	
12	b8736acc704a	28VAN	SZ17	16 Dec 2021 13:15	16 Dec 2021 13:48	33.53		12.79	11%	92%	17	0.03	0.5	2.31	
13	79fbfbc1b4d6	28VAN	SZ10	16 Dec 2021 13:16	16 Dec 2021 13:48	31.78		12.76	11%	88%	17	0.03	0.5	2.31	
14	79d5befe00fa	28VAN	SZ14	16 Dec 2021 13:11	16 Dec 2021 13:43	32.53		12.82	10%	89%	17	0.03	0.5	2.31	
15	174cc2eb60e3	28VAN	SZ15	16 Dec 2021 13:11	16 Dec 2021 13:43	31.78		12.76	11%	88%	17	0.03	0.5	2.31	

XLSX (Excel)

	Door		Load Dur	Idle Time	Utilization Change Per	Start/End	Num of	Num Walls	Avg. Wall Depth	Avg. Wall Height	
Load ID and Trailer Type	Number	Load Open/Close	(min)	(min)	Hour (m)	Utilization	Walls	(hrs)	(m)	(m)	Notes
37ea01ff2291 / 28VAN	SZ15	16 Dec 2021 13:45 / 16 Dec 2021 14:17	32.03		12.79	11% / 88%	17	0.03	0.5	2.31	
cbf6cc2b0deb / 28VAN	SZ19	16 Dec 2021 13:45 / 16 Dec 2021 14:17	32.03		12.78	11% / 88%	17	0.03	0.5	2.31	
54ad00b8a39d / 28VAN	SZ12	16 Dec 2021 13:41 / 16 Dec 2021 14:13	33.03		12.81	10% / 91%	17	0.03	0.5	2.31	
a8c48a04b9a3 / 28VAN	SZ13	16 Dec 2021 13:40 / 16 Dec 2021 14:12	32.03		12.78	10% / 88%	17	0.03	0.5	2.31	
7c59b88429bd / 28VAN	SZ16	16 Dec 2021 13:36 / 16 Dec 2021 14:08	31.78		12.77	11% / 88%	17	0.03	0.5	2.31	
4a2ab6f97656 / 28VAN	SZ11	16 Dec 2021 13:32 / 16 Dec 2021 14:06	33.53		12.79	10% / 92%	17	0.03	0.5	2.31	
9224a2acae95 / 28VAN	SZ18	16 Dec 2021 13:35 / 16 Dec 2021 14:05	30.53		12.79	10% / 84%	17	0.03	0.5	2.31	
b8736acc704a / 28VAN	SZ17	16 Dec 2021 13:15 / 16 Dec 2021 13:48	33.53		12.79	11% / 92%	17	0.03	0.5	2.31	
79fbfbc1b4d6 / 28VAN	SZ10	16 Dec 2021 13:16 / 16 Dec 2021 13:48	31.78		12.76	11% / 88%	17	0.03	0.5	2.31	
79d5befe00fa / 28VAN	SZ14	16 Dec 2021 13:11 / 16 Dec 2021 13:43	32.53		12.82	10% / 89%	17	0.03	0.5	2.31	
174cc2eb60e3 / 28VAN	SZ15	16 Dec 2021 13:11 / 16 Dec 2021 13:43	31.78		12.76	11% / 88%	17	0.03	0.5	2.31	
de709776339e / 28VAN	SZ19	16 Dec 2021 13:10 / 16 Dec 2021 13:43	33.28		12.82	10% / 91%	17	0.03	0.5	2.31	
499a33015142 / 28VAN	SZ12	16 Dec 2021 13:07 / 16 Dec 2021 13:38	31.28		12.79	10% / 86%	17	0.03	0.5	2.31	
761890ad69ff / 28VAN	SZ13	16 Dec 2021 13:06 / 16 Dec 2021 13:38	32.53		12.76	11% / 89%	17	0.03	0.5	2.31	
f1a0b28813d2 / 28VAN	SZ16	16 Dec 2021 13:02 / 16 Dec 2021 13:34	32.28		12.81	10% / 89%	17	0.03	0.5	2.31	

CSV

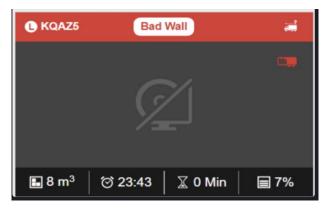
# **Error States**

## Introduction

The SmartPack Dashboard displays various error states and other load states on load point tiles, as discussed in the following sections.

## **Bad Wall Error**

When the system detects a past wall height or depth that is outside the thresholds configured in **Settings**, the load point tile status changes to **Bad Wall** and the header turns red. A past wall is a wall that is not currently being worked on. An icon representing the bad wall state displays in the top right corner of the body of the load point tile.





**NOTE:** If the Bad Wall error state and the Idle error state exist simultaneously for a load point, the Idle error state indication takes priority and displays in the header of the load point tile, and the bad wall icon displays in the top right corner of the body. Follow site procedures to resolve this.

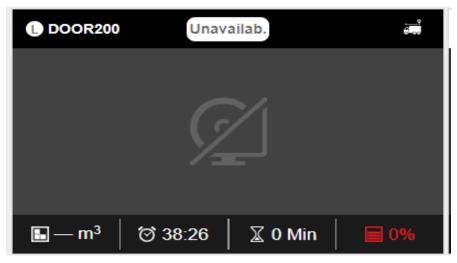
## Idle State Threshold Exceeded Error

When the system has not detected a change in loading or unloading activity when the configured idle time is met, the load point tile status changes to **Idle**, the header turns red, and the idle time clock indicates the idle time that has elapsed, as shown below. Follow site procedures to resolve this.



## **Error State**

If the system cannot send container or a trailer information from the LMU, the load point tile status changes to **Unavailable**, and an icon representing the information unavailable state appears in the body of the load point tile, as shown below.



Follow site procedures to resolve this, or refer the TM1000 and/or TM2000 guides listed in Related Documents and Software on page 6 for LMU troubleshooting.



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