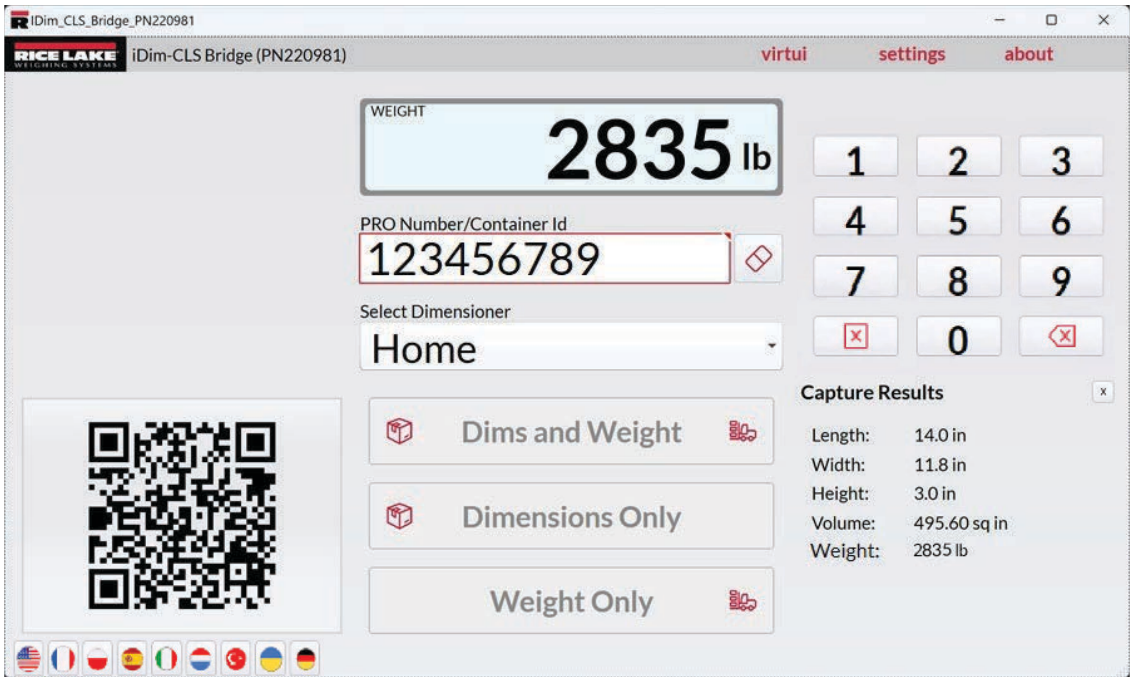
iDimension® CLS Bridge

PC Software

Software Manual



March 22, 2024

PN 221955 Rev B

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www.ricelake.com

Revision History

This section tracks and describes manual revisions for awareness of major updates.

Revision	Date	Description
A	December 18, 2023	Initial manual release with product launch; Software version 1.0.0.0
B	March 22, 2024	Added language configuration; Menu updates; Software version 1.1.0.0

Table i. Revision Letter History

Technical training seminars are available through Rice Lake Weighing Systems. Course descriptions and dates can be viewed at www.ricelake.com/training or obtained by calling 715-234-9171 and asking for the training department.

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1.0 Introduction

This manual provides an overview of the iDim (iDimension®) CLS Bridge software installation and configuration procedures. The iDim CLS Bridge software interfaces the industrial PC it is installed on with a scale (CLS-680 indicator, Dini Argeo® LTP indicator or VIRTUi3®) and the iDimSS (iDimension Software Suite).

Manuals are available from Rice Lake Weighing Systems at www.ricelake.com/manuals
Warranty information is available at www.ricelake.com/warranties

IMPORTANT: Read and adhere to all safety instructions and warnings from forklift and indicator manufacturers.

1.1 System Requirements

- Windows 10® build 1607 or newer (64 bit only) or equivalent Windows® Server Operating System
- 2.0 GHz processor or faster
- 250 MB drive space needed for install. Additional space will vary based on data retention requirements.
- 8 GB ram or greater
- Ethernet TCP/IP connection for equipment and external system integration
- 802.11 ac/a/b/g/n Wi-Fi or greater for external data communication
- Touchscreen display (suggested)
- iDimSS Version 2.22 or greater running on external PC
- If using a scale, one of the following: VIRTUi3, CLS-680, or Dini Argeo LTP scale

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2.0 Installation and Software Access

2.1 iDim CLS Bridge Installation

1. Download the iDim CLS Bridge software from https://www.ricelake.com/software.
2. Unzip the file and then launch **IDim_CLS_Bridge_PN220981.Installer.exe**.
3. Read the Rice Lake Weighing Systems License Agreement. Enable the check box if the terms are acceptable.

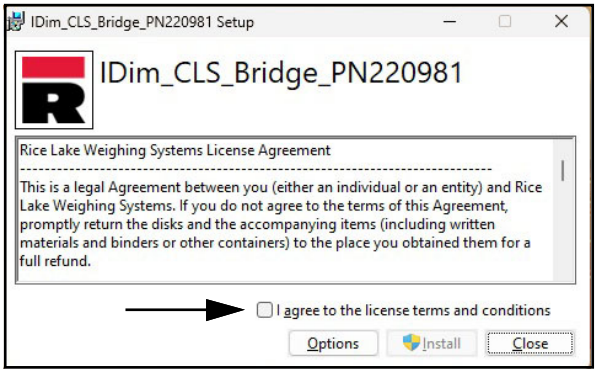

Figure 2-1. iDim CLS Bridge Installation Window

4. (Optional) Perform the following to change the installation location:
   - Select **Options** and then **Browse** to install iDimSS CLS Bridge in a user specified file location.
   - Select **OK** to return to the previous window.

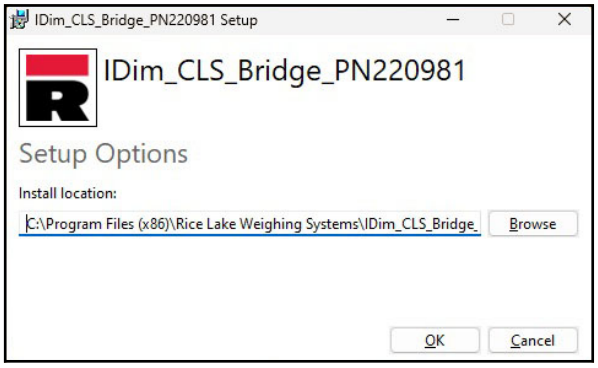

Figure 2-2. iDim CLS Bridge Installation Options

5. Select **Install**.
6. The Installation Successfully Completed window displays, select **Close**. The iDim CLS Bridge is successfully installed.

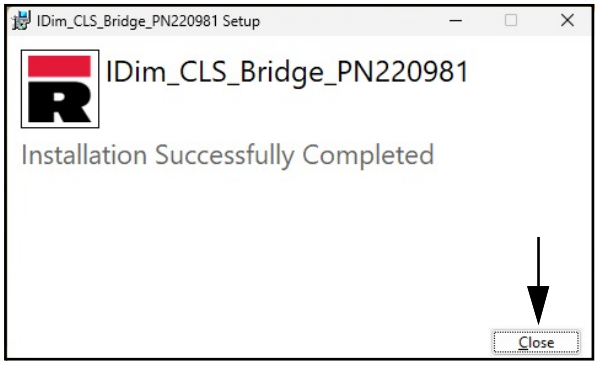

Figure 2-3. iDim CLS Bridge Complete Installation Window

3.0 Basic iDim CLS Bridge Functions

3.1 Launch iDim CLS Bridge Software

1. In the Windows Start menu, open the **Rice Lake Weighing Systems** folder.
2. Select IDim CLS Bridge.
3. The application displays.

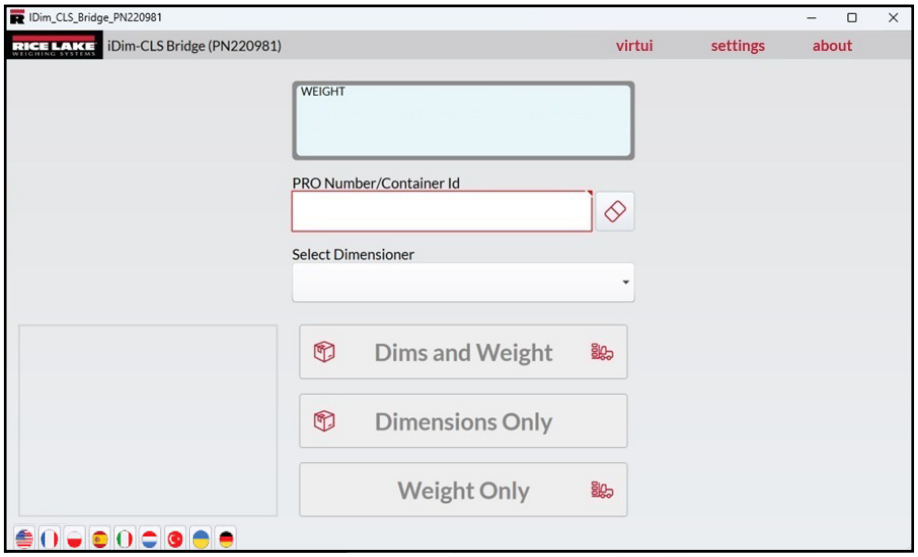

Figure 3-1. iDim CLS Bridge

3.2 Close iDim CLS Bridge Software

1. In the iDim CLS Bridge application, select the **X** icon.
2. The application closes.

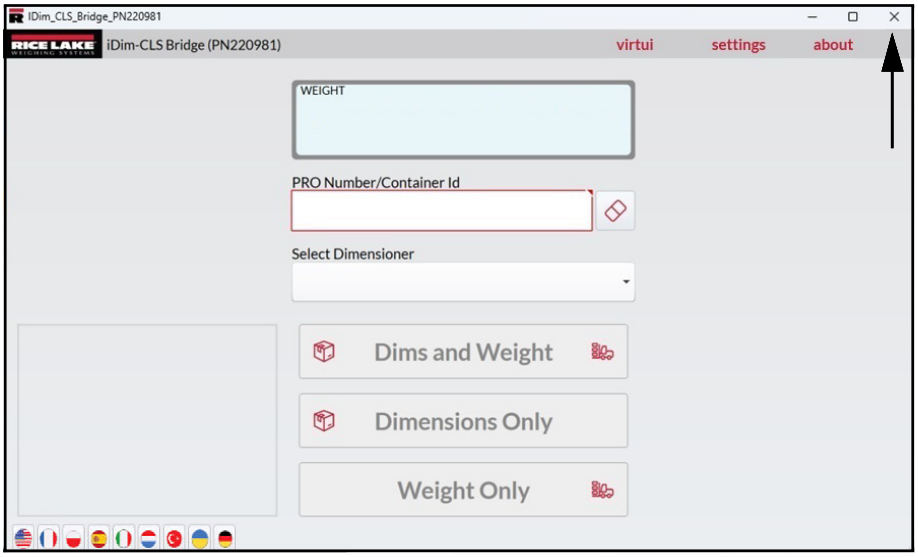

Figure 3-2. iDim CLS Bridge Close Button

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3.3 Language Configuration

1. Navigate to the main view.
2. Select the flag that corresponds to the desired language.

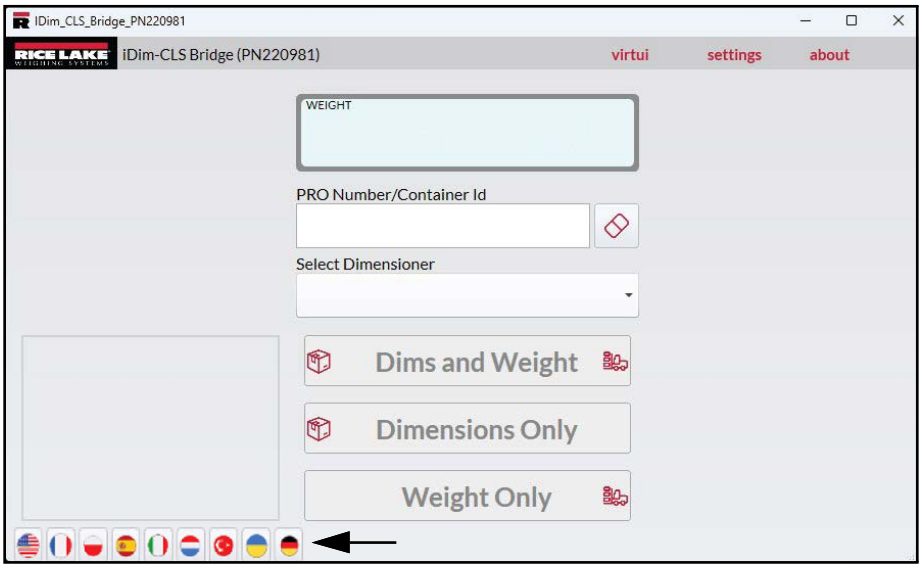

Figure 3-3. iDim CLS Bridge Language Selection

3. The language in the application changes.

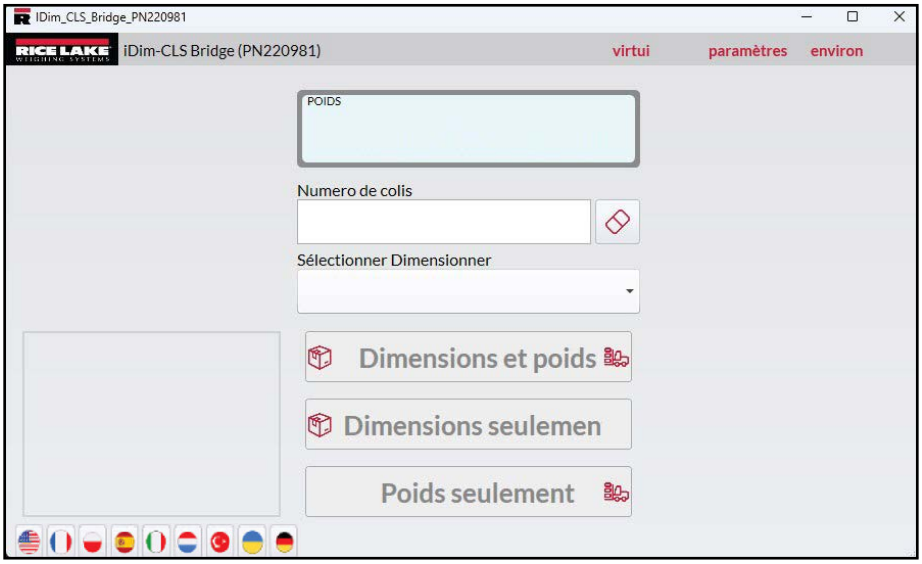

Figure 3-4. New Language Selected in iDim CLS Bridge

4.0 iDim CLS Bridge Elements

This section discusses iDim CLS Bridge software elements. Topics in this section include:

- Main View Elements (Section 4.1 on page 9)
- Settings Menu (Section 4.2 on page 10)
- About Window (Section 4.3 on page 12)

4.1 Main View Elements

The main view displays when the software is launched and provides several elements that facilitate operation. Each element is identified in Figure 4-1.

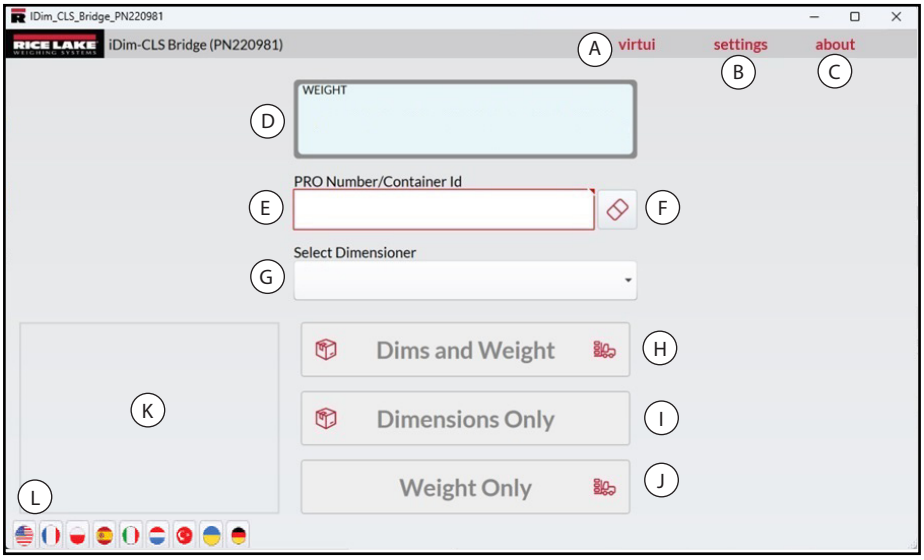

Figure 4-1. Main View Elements

Item	Function	Description
A	virtui	Launches VIRTUi[3] software if installed and configured in iDim CLS Bridge (see Section 5.8 on page 23).
B	settings	Opens the Settings menu (see Section 4.2 on page 10).
C	about	Opens the About window (see Section 4.3 on page 12).
D	Weight	Displays weight and unit of measure.
E	Pro Number/Container ID	Configures the Pro Number or a container ID with the integrated keypad or optional barcode scanner (see Section 6.0 on page 24).
F	Eraser Button	Erases data from the Pro Number/Container ID field.
G	Select Dimensioner	Selects which dimensioner will be used. ***NOTE: The software automatically selects the first name in the drop-down menu when the application launches.***
H	Dims and Weight	Processes the object's dimensions and weight.
I	Dimensions Only	Processes the object's dimensions.
J	Weight Only	Processes the object's weight.
K	QR code	Displays a QR Code containing data received from iDimSS. ***NOTE: The QR code is configured in the iDimSS. See iDimension Software Suite Software Manual (PN 201231) for more information.***
L	Languages	Changes the language of the user interface • See Section 3.3 on page 8 for quick change configuration. • See Section 5.1 on page 14 for default language configuration.

Table 4-1. Main View Elements Descriptions

NOTE: Alibi compatibility is embedded in the software. There are no software parameters to modify this feature.

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4.2 Settings Menu

4.2.1 Access Settings Menu

1. From the main view, select **settings**.

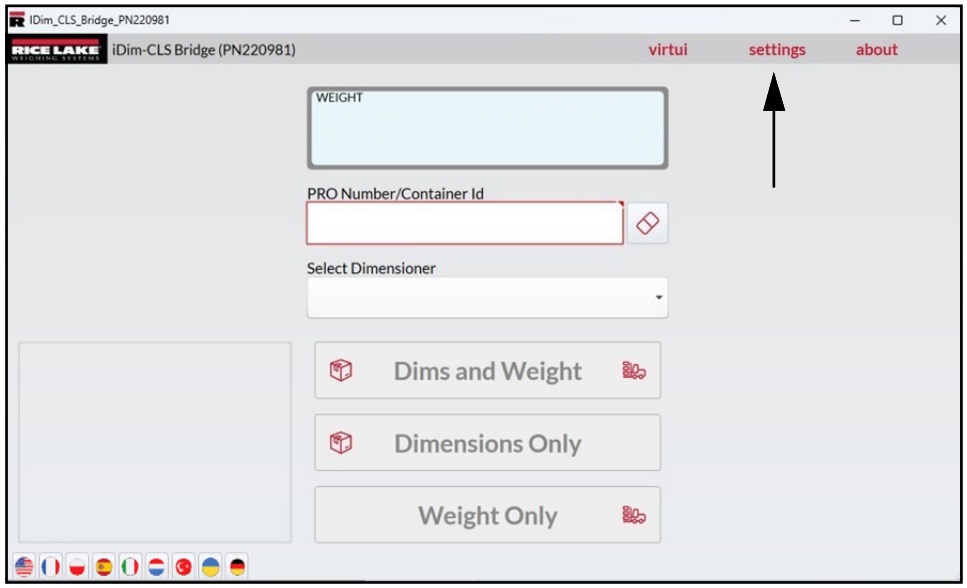

Figure 4-2. Main View settings Button

2. The Settings menu appears.

Figure 4-3. Settings Menu

4.2.2 Settings Menu Elements

Settings Menu contains several elements launch additional menus that facilitate configuration. Each element is identified in Figure 4-4.

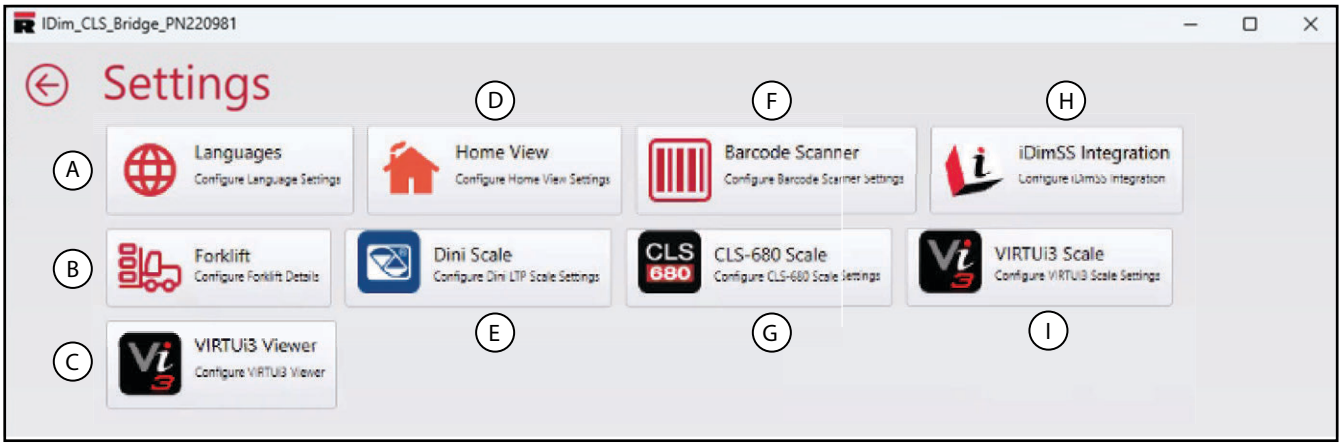

Figure 4-4. Settings Menu with Elements Identified

Item	Function	Description
A	Languages	Opens Language Settings (see Section 5.1 on page 14)
B	Forklift	Opens Forklift Settings (see Section 5.5 on page 21)
C	VIRTUI3 Viewer	Opens VIRTUi3 Viewer (see Section 5.8.2 on page 23)
D	Home View	Opens Home View Settings (see Section 5.2 on page 15)
E	Dini Scale	Opens Dini Scale Settings (see Section 5.6 on page 21)
F	Barcode Scanner	Opens Barcode Scanner Settings (see Section 5.1 on page 14)
G	CLS-680 Scale	Opens CLS-680 Settings (see Section 5.7 on page 22)
H	IDimSS Integration	Opens iDimSS Integration Settings (see Section 5.4 on page 18)
I	VIRTUI3 Scale	Opens VIRTUi3 Scale Settings (see Section 5.8.1 on page 23)

Table 4-2. Settings Menu Element Descriptions

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4.3 About Window

4.3.1 Access About Window

1. Navigate to the main view.
2. Select **about**.

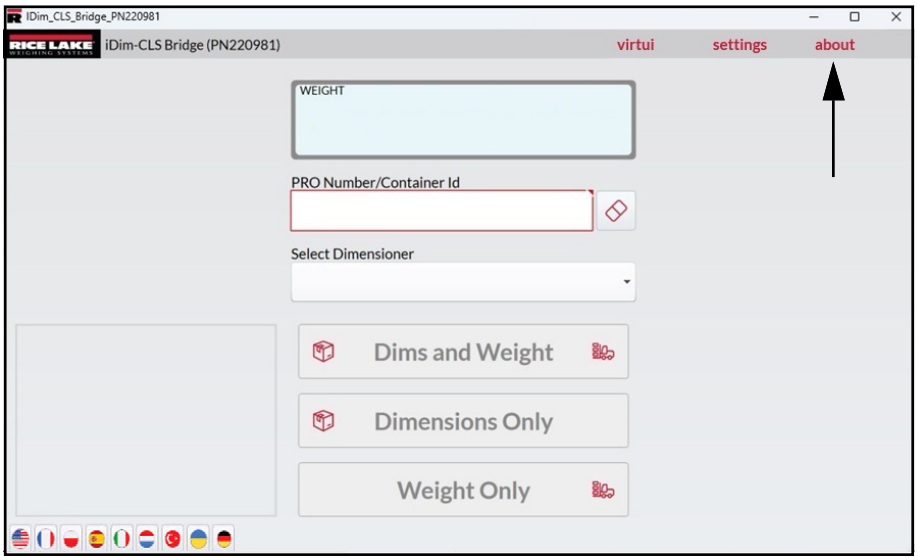

Figure 4-5. Main View about Button

3. The About window slides out from the right side.

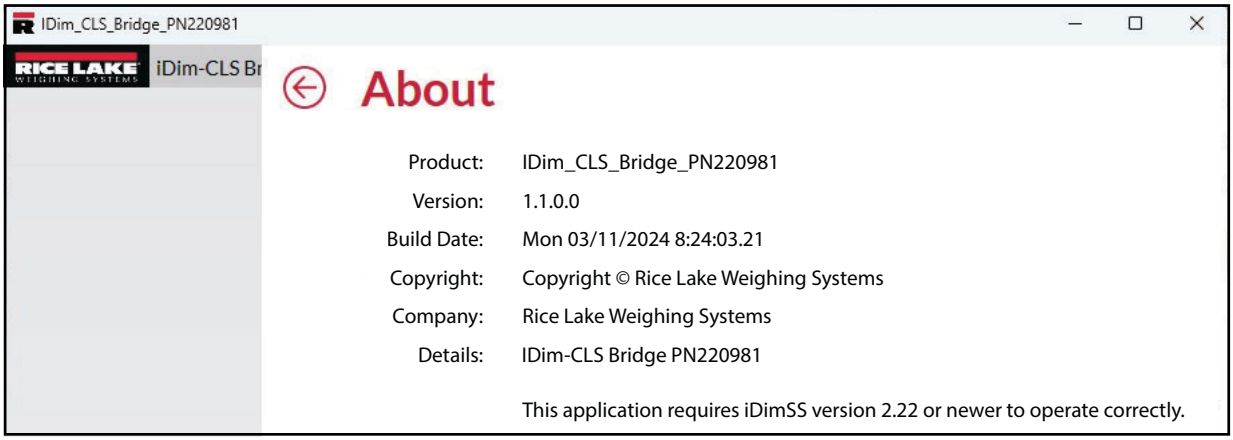

Figure 4-6. About Window

4.3.2 About Elements

The About window contains several elements that provide supplemental information about the software. Each element is identified in Figure 4-7.

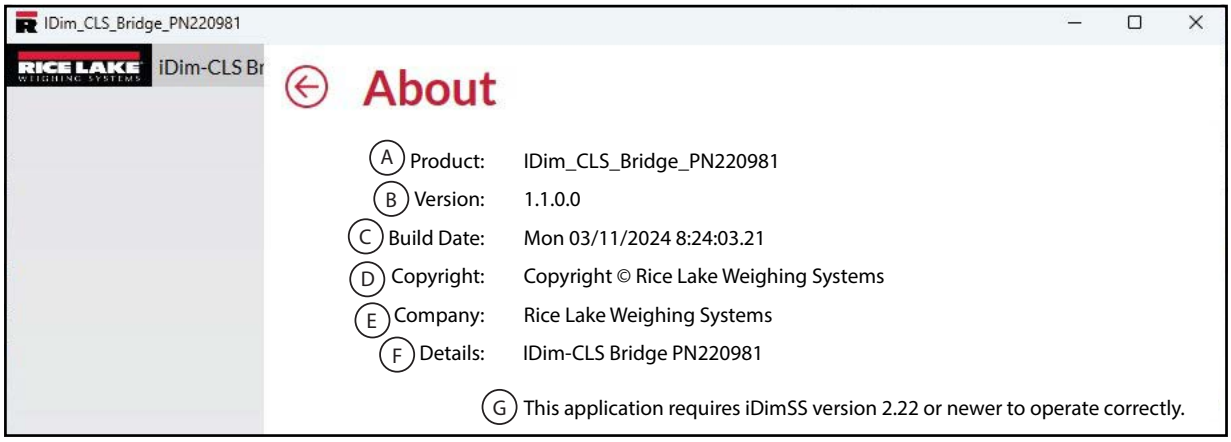

Figure 4-7. About Window with Elements Identified

Item	Function	Description
A	Product	Displays the product name
B	Version	Displays the software version number
C	Build Date	Displays when the software was released
D	Copyright	Displays copyright information
E	Company	Displays developer company name
F	Details	Displays name and part number of the software
G	iDimmSS Requirements	Displays iDimSS version requirements

Table 4-3. About Window Element Descriptions

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5.0 Configuration

This section discusses how to configure settings. In order for the iDim CLS Bridge to operate, ensure iDimSS, Forklift and Scale settings are configured.

NOTE: The Settings menu contains multiple scale settings menus (VIRTUi^3, CLS-680, or Dini Argeo LTP scale), only settings for the scale installed on the forklift must be configured.

The following topics are discussed in this section:

- Default Language Configuration (see Section 5.1)
- Home View Configuration (see Section 5.2 on page 15)
- iDimSS Integration Configuration (see Section 5.4 on page 18)
- Forklift Settings Configuration (see Section 5.5 on page 21)
- Dini Argeo LTP Scale Settings Configuration (see Section 5.6 on page 21)
- CLS-680 Scale Settings Configuration (see Section 5.7 on page 22)
- VIRTUi3 Configuration (see Section 5.7 on page 22)

5.1 Default Language Configuration

1. Navigate to Language Settings
2. Select the Default Language drop-down menu.
3. Select the default language.
4. Select **Save** to commit the changes or select **Cancel** to abort.

Figure 5-1. iDim CLS Bridge Default Language Selection

NOTE: The language changes only on the application screen.

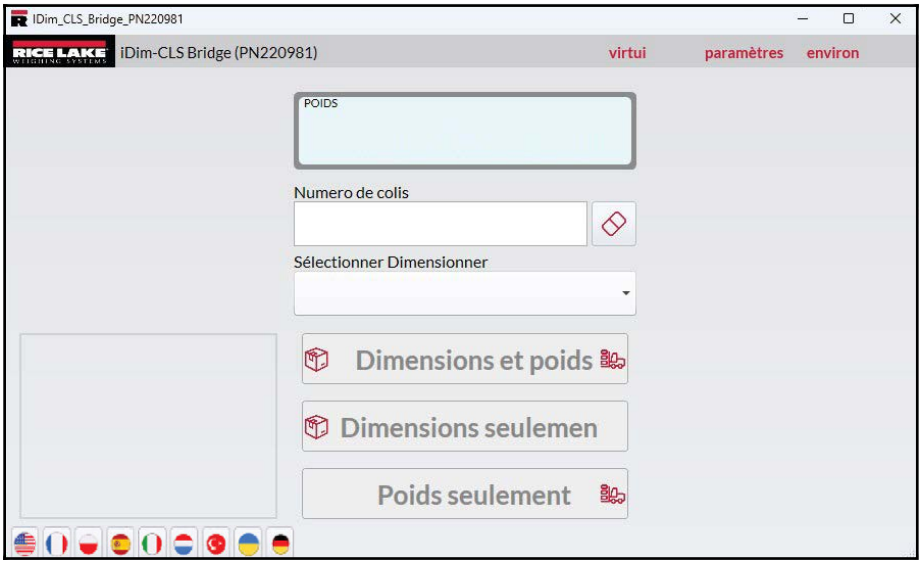

Figure 5-2. New Language Selected in iDim CLS Bridge

5.2 Home View Configuration

1. Navigate to Home View Settings.
2. Configure the following parameters:
   - **Dim and Weight Button Enabled:** Check the box to enable the Dim and Weight Button function.
   - **Dim Only Button Enabled:** Check the box to enable the Dim Only Button function.
   - **Weight Only Button Enabled:** Check the box to enable the Weight Only Button function.
   - **Select Capture Results Display Method:** Choose between the following display options.
     - **As Text:** Shows weight results as numerical data.(see Section Figure 5-4. on page 16)
     - **As Thumbs Up/Down:** Shows weight results as a thumbs up or down icon (see Section Figure 5-5. on page 16)

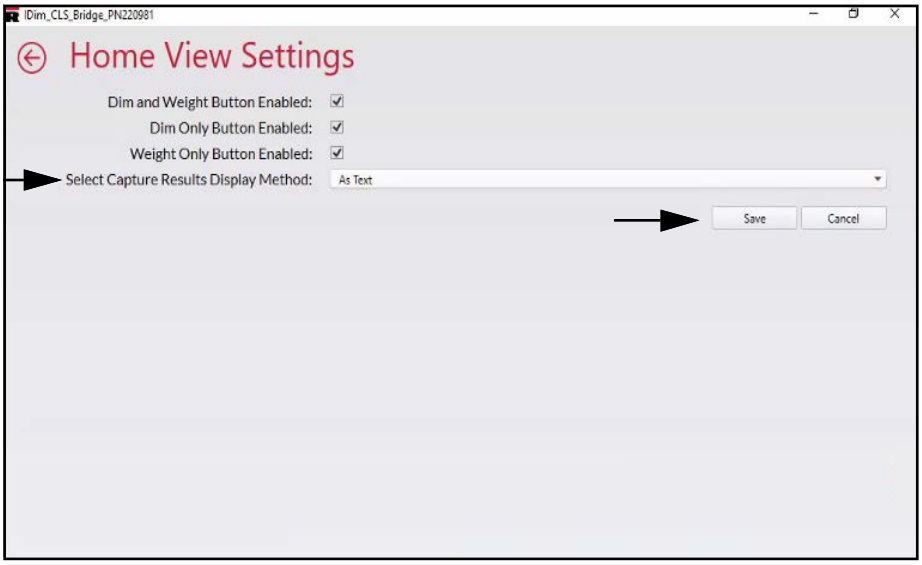

Figure 5-3. Home View Settings

3. Select **Save** to commit the changes or select **Cancel** to abort.

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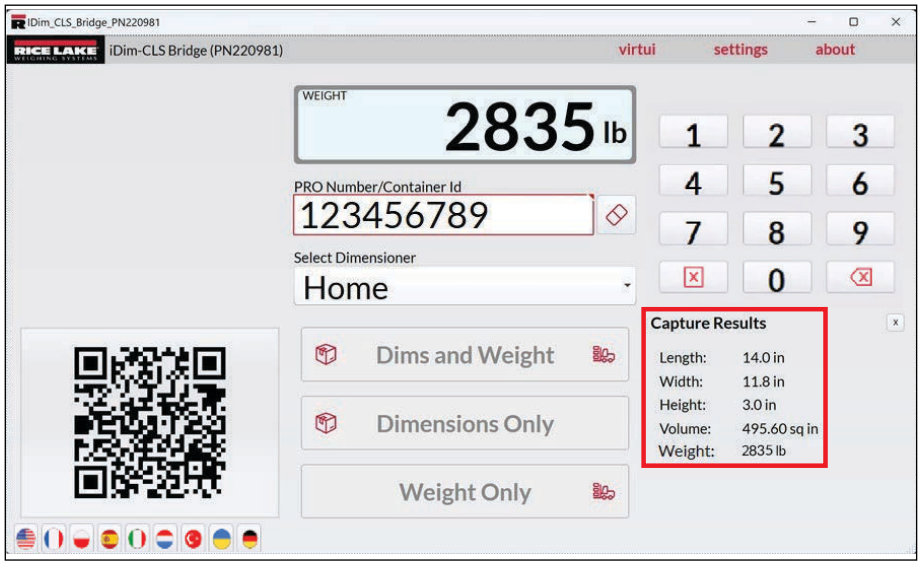

Figure 5-4. Weight Results as Numerical Data

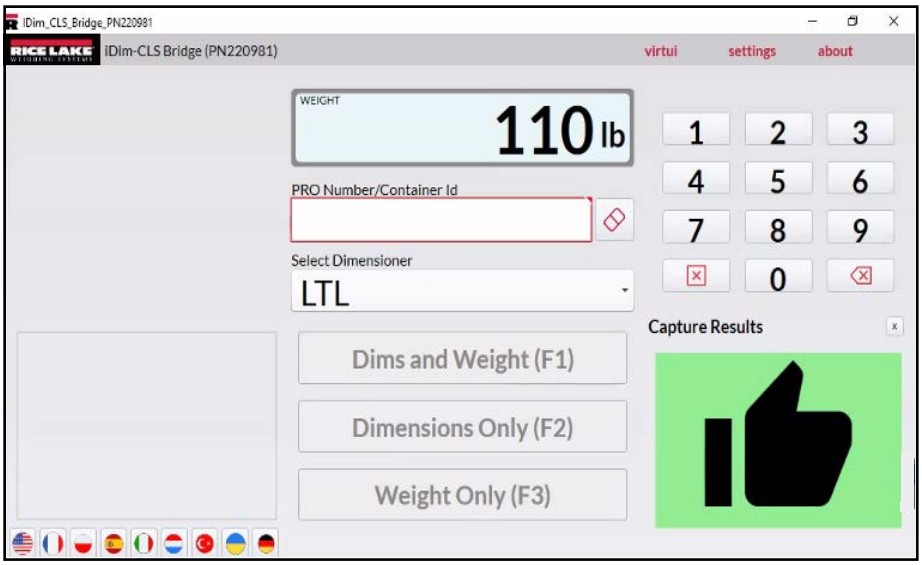

Figure 5-5. Weight Results as Thumbs Up/Down

5.3 Barcode Scanner Settings Configuration

NOTE: A barcode scanner is optional and configuration may not apply to all systems.

1. Navigate to Barcode Scanner Settings.
2. Activate the Enabled check box.
3. Set the **Connection type** as either **TCP/IP** or **RS232**.
4. Perform one of the following:
   A. If using TCP/IP, configure the **Listening Port** as the TCP Port number used by the application to listen for incoming TCP/IP data from the barcode scanner.
   B. If using RS232, configure the following:
      - **Serial Port:** Set the communication port number on the PC the barcode scanner is connected to.
      - **Baud Rate:** Set the baud rate of the serial port (1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200).
      - **Data Bits:** Set data bits of the serial port (7 or 8).
      - **Parity:** Set the parity of the serial port (none, odd, even, mark or space).
      - **Stop Bits:** Set the number of stop bits transmitted or received by the port (none, one, two, onepointfive).

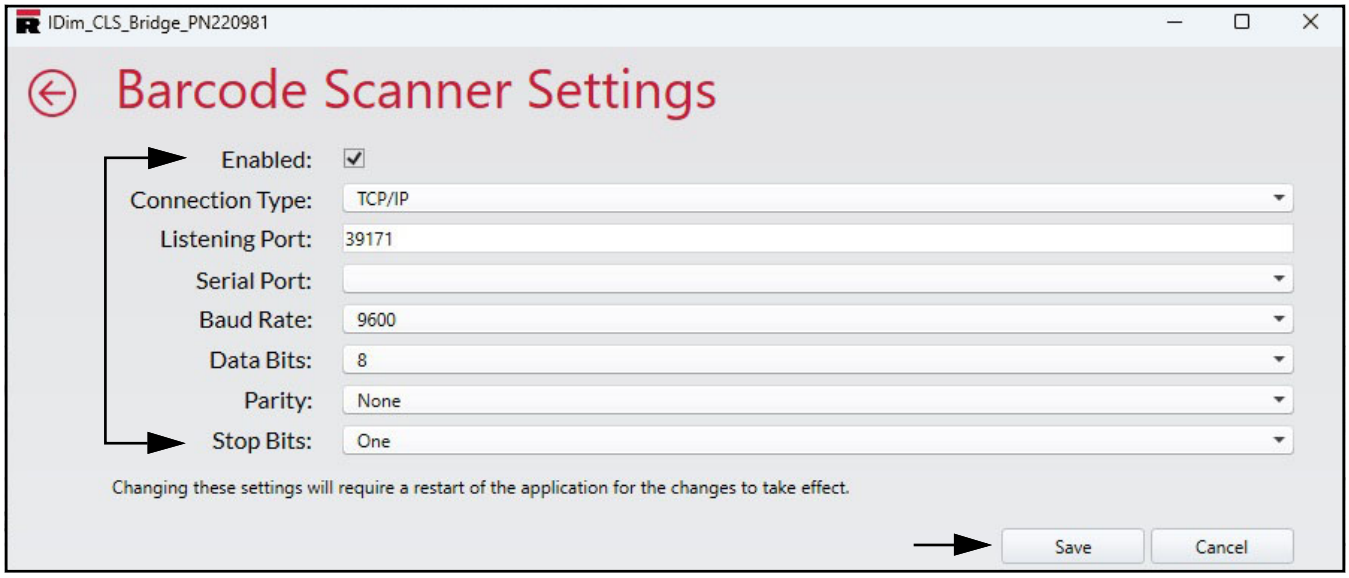

Figure 5-6. Barcode Scanner Settings

5. Select **Save** to commit the changes or select **Cancel** to abort.

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5.4 iDimSS Integration Configuration

5.4.1 Add a iDimmSS Intrgration

1. Navigate to **iDimSS Integration**.
2. Select **Add**.

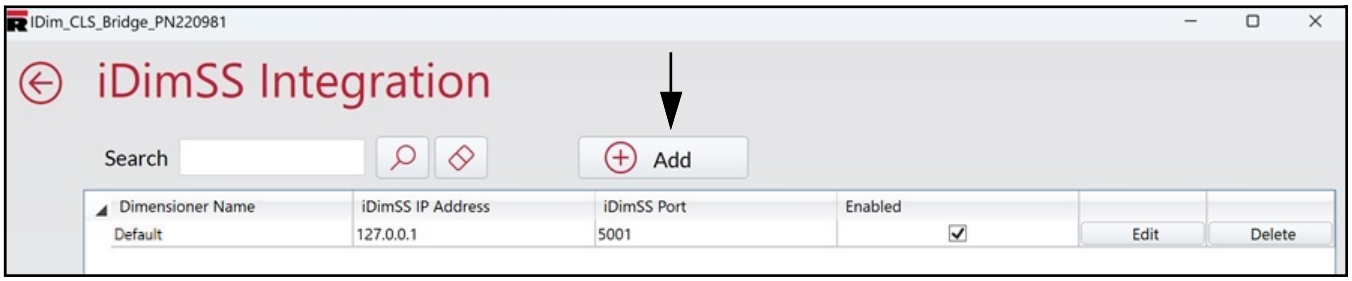

Figure 5-7. Edit iDimSS Integration Add Button

3. The Edit iDimSS Integration window displays.
4. Configure the following parameters:
   - **Enabled:** Enable this check box to display the dimensioner in the Select Dimensioner drop-down menu (see Figure 4-2 on page 10) in the main view.
   - **Dimensioner Name:** Add the exact name of the dimensioner that is configured in iDimSS.
   - **IP Address:** Enter the IP address of the computer running iDimSS. The IP address can be configured as the same value for multiple dimensioners setup in the iDimSS.
   - **Port:** Enter the listening port used by the computer running iDimSS (the default port for iDimSS is 5001).
5. Select **Save** to commit the changes or select **Cancel** to abort.

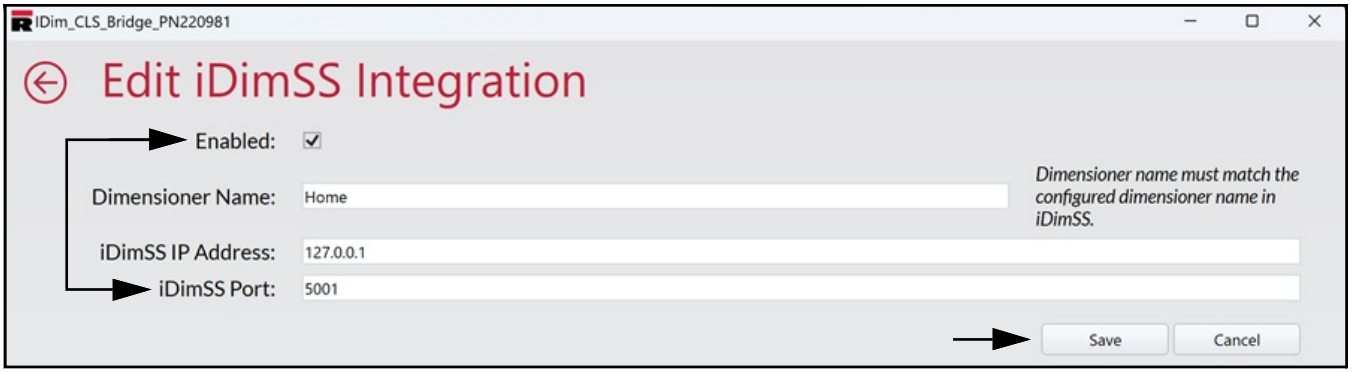

Figure 5-8. Edit iDimSS Integration Configured

6. If **Save** is selected, the new dimensioner is added to iDimSS Integration.

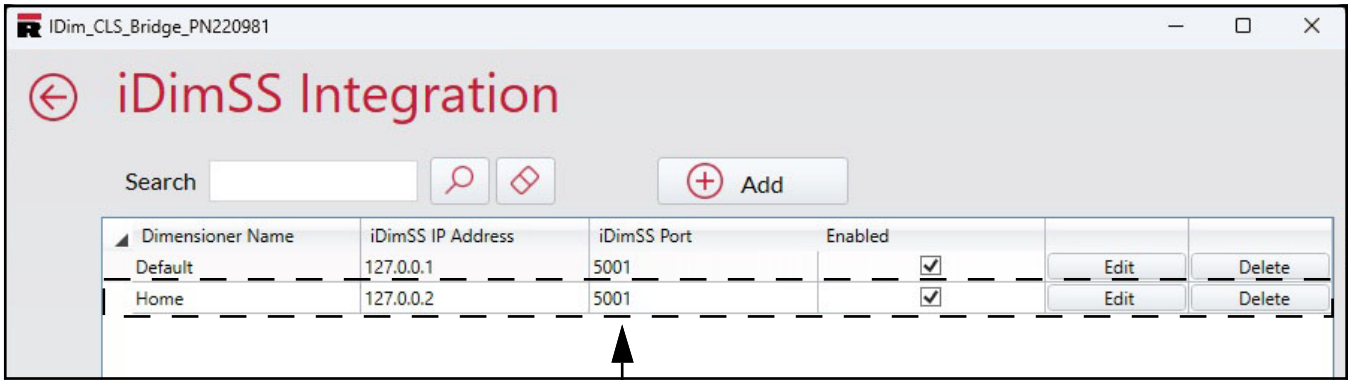

Figure 5-9. Edit iDimSS Integration Configured

5.4.2 Edit a Dimensioner

1. Navigate to **iDimSS Integration**.
2. Select **Edit** to change a configured iDimSS integration.

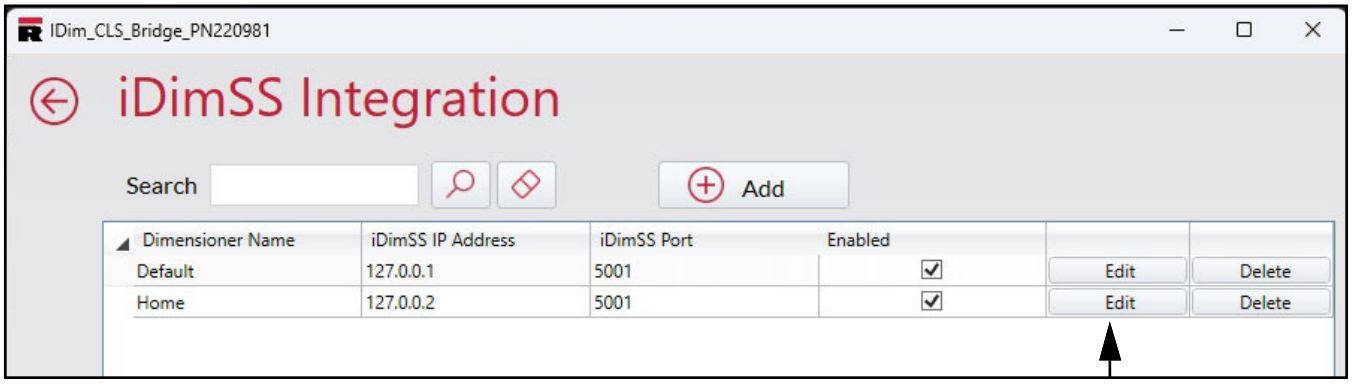

Figure 5-10. Edit iDimSS Integration Edit Button

3. The Edit iDimSS Integration window displays.
4. Edit parameters as required (see Section 5.4.1 on page 18 for parameter descriptions).
5. Select **Save** to commit the changes or select **Cancel** to abort.

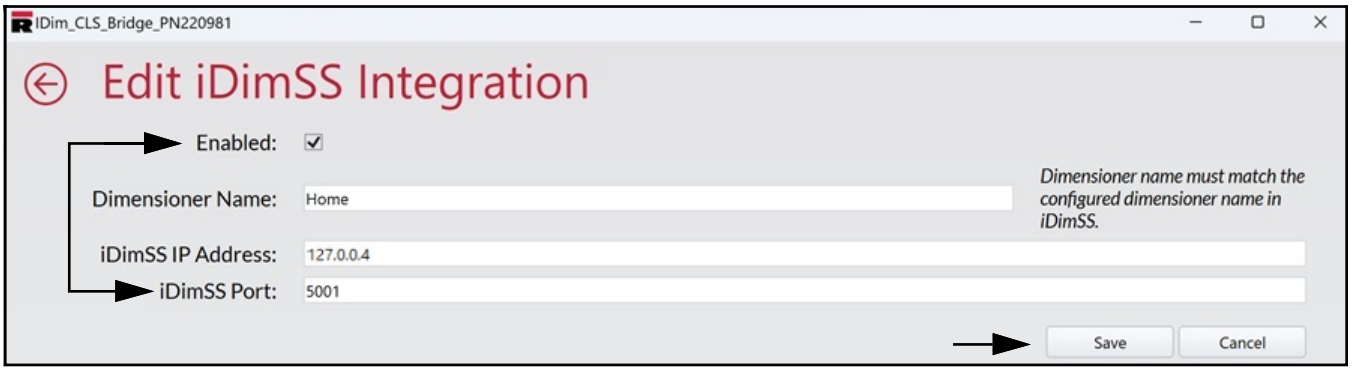

Figure 5-11. Edit iDimSS Integration

6. If **Save** is selected, the changes to the dimensioner's configuration are saved.

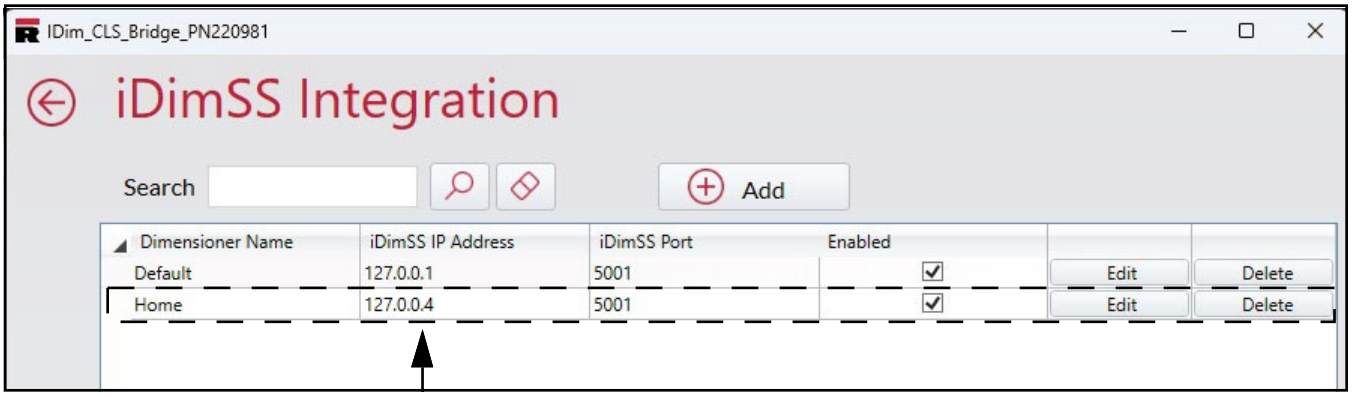

Figure 5-12. Edit iDimSS Integration Configured

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5.4.3 Delete a Dimensionser

1. Navigate to **iDimSS Integration**.
2. Select **Delete** adjacent to the iDimmSS integration to be removed.

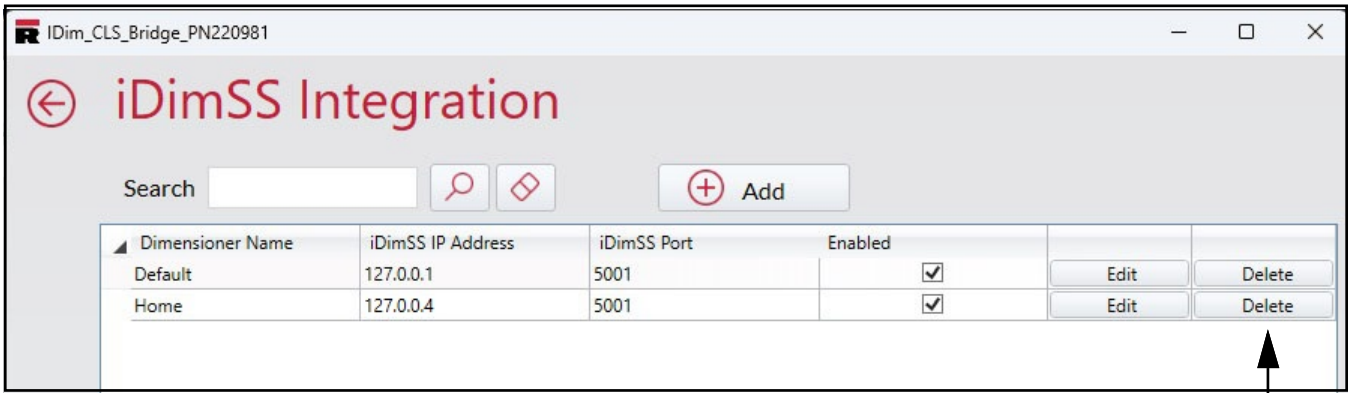

Figure 5-13. iDimSS Integration Delete Button

3. A delete confirmation window appears.
4. Select **Yes** to delete or **No** to cancel.

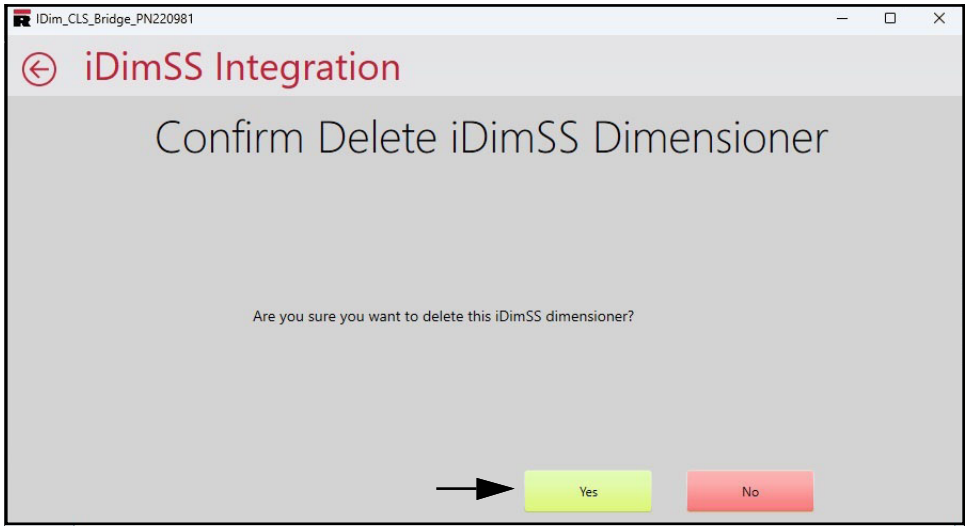

Figure 5-14. iDimSS Integration Delete Confirmation

5. If **Yes** is selected, the iDimSS Integration is removed.

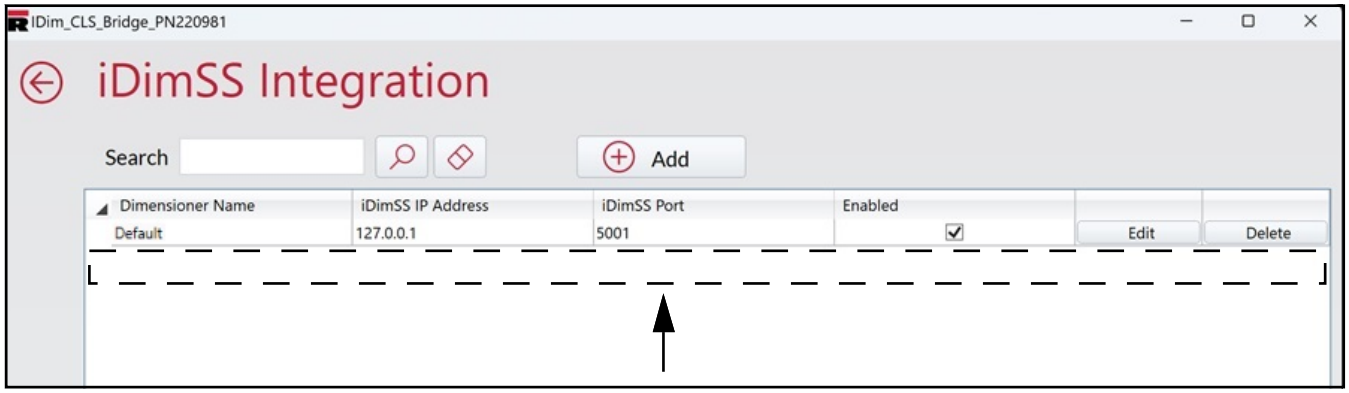

Figure 5-15. iDimSS Entry Removed

5.5 Forklift Settings Configuration

1. Navigate to Forklift Settings.
2. Configure the following parameters:
   - **Forklift ID:** Set the forklift Id that is used to identify the forklift in iDimSS. This enables dimensioner Stop and Go functionality.

NOTE: If the selected dimensioner does not support Stop and Go functionality, avoid configuring this field. Configuring this parameter for dimensioners incompatible with Stop and Go causes the capture operation to function incorrectly.

   - **Indicator Type:** Set the type of indicator used4 on the forklift as either VIUTUi3, Dini LTP, CLS-680 or None. This configuration must match the type of installed hardware to receive weight information.

Figure 5-16. Forklift Settings

3. Select **Yes** to delete or **No** to cancel.

5.6 Dini Argeo LTP Scale Settings Configuration

NOTE: The Dini Argeo LTP scale requires the Alibi memory module to installed to function correctly with iDim CLS Bridge.

1. Navigate to Dini LTP Scale Settings.
2. Configure the following parameters:
   - **Serial Port:** Set the communication port number on the PC the Dini Argeo LTP scale is connected to.
   - **Baud Rate:** Set the baud rate of the serial port (9600, 19200, 38400, 57600, or 115200).
   - **Data Bits:** Set data bits of the serial port (7 or 8).
   - **Parity:** Set the parity of the serial port (none, odd, even, mark or space).
   - **Stop Bits:** Set the number of stop bits transmitted or received by the port (none, one, two, onepointfive).

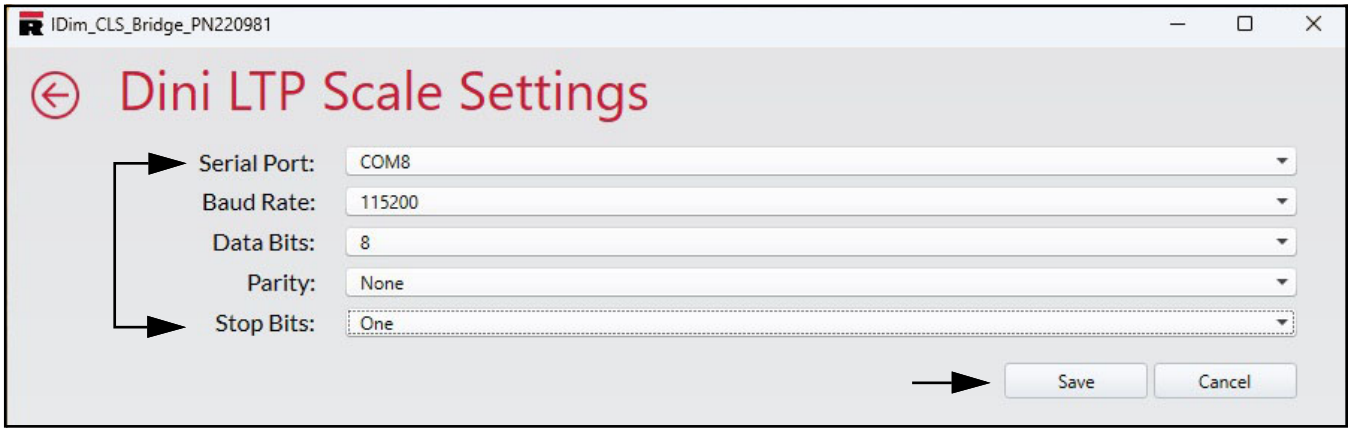

Figure 5-17. Dini LTP Scale Settings

3. Select **Yes** to delete or **No** to cancel.

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5.7 CLS-680 Scale Settings Configuration

1. Navigate to CLS-680 Scale Settings.
2. Set the **Connection type** as either **TCP** or **RS232**.
3. Perform one of the following:
   A. If using TCP, configure the following:
      - **IP Address**: Set as the IP address of the CLS-680 scale.
      - **Port:** Set as the port of the CLS-680 scale.
   B. If using RS232, configure the following:
      - **Serial Port:** Set the communication port number the on the PC the CLS-680 scale is connected to.
      - **Baud Rate:** Set the baud rate of the serial port (9600, 19200, 38400, 57600, or 115200).
      - **Data Bits:** Set data bits of the serial port (7 or 8).
      - **Parity:** Set the parity of the Serial port (none, odd, even, mark or space).
      - **Stop Bits:** Set the number of stop bits transmitted or received by the port (none, one, two, onepointfive).

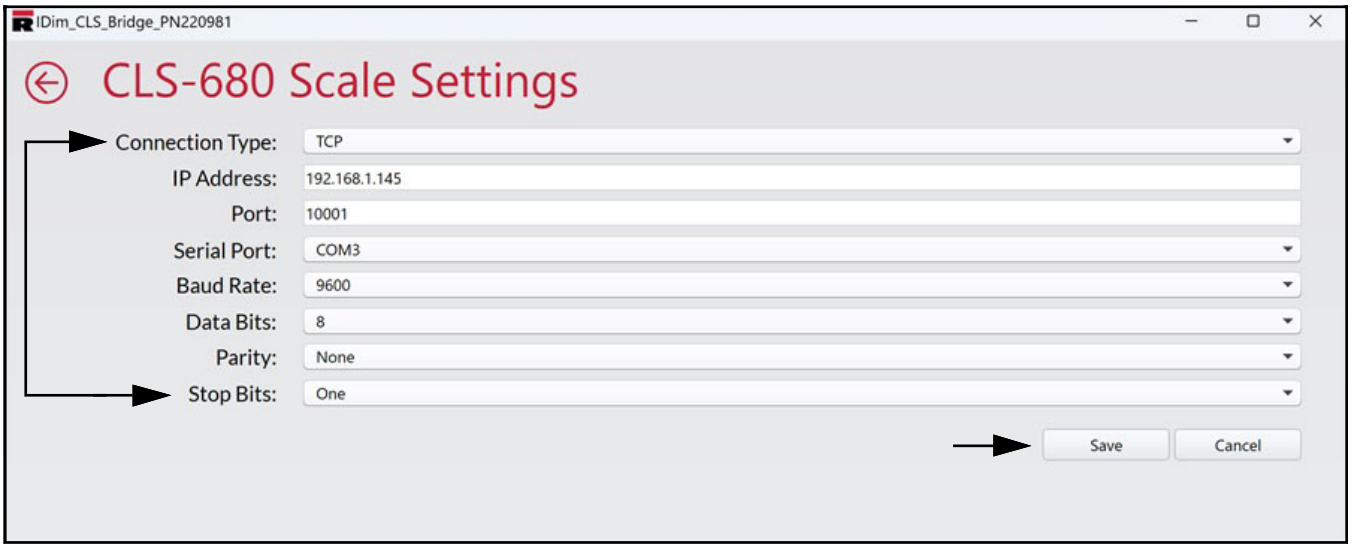

Figure 5-18. CLS-680 Scale Settings

4. Select **Yes** to delete or **No** to cancel.

5.8 VIRTUi^3 Configuration

5.8.1 VIRTUi3 Scale Settings

1. Navigate to VIRTUi3 Scale Settings.
2. Configure the following:
   - **IP Address:** Set as the IP address of the PC running VIRTUi^3.
   - **Port:** Set as the port of the PC running VIRTUi^3.

Figure 5-19. VIRTUi3 Scale Settings

3. Select **Yes** to delete or **No** to cancel.

5.8.2 VIRTUi3 Viewer Settings

1. Navigate to VIRTUi3 Viewer Settings.
2. Set VIRTUi3 Path as file the path of the VIRTUi^3 viewer.

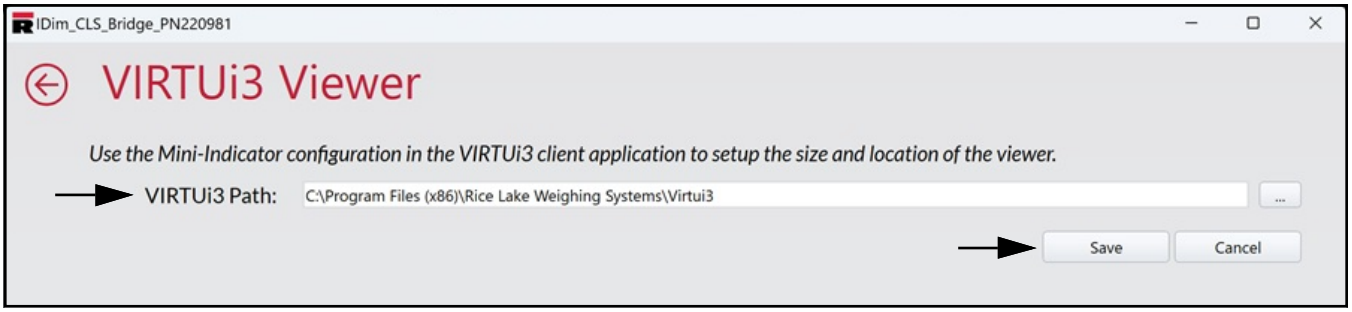

Figure 5-20. VIRTUi3 Viewer Settings

3. Select **Yes** to delete or **No** to cancel.

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6.0 Operation

Processing a container transmits the container ID and results to iDimSS. The type of results vary depending on the aquisition function (Dims and Weight, Dimensions Only or Weight Only).

WARNING: The following procedure involves using a forklift. Before using the forklift, read and adhere to the manufacturer's safety warnings and information.

1. If using a dimensioner, select a dimensioner from the **Select Dimensioner** drop-down menu.

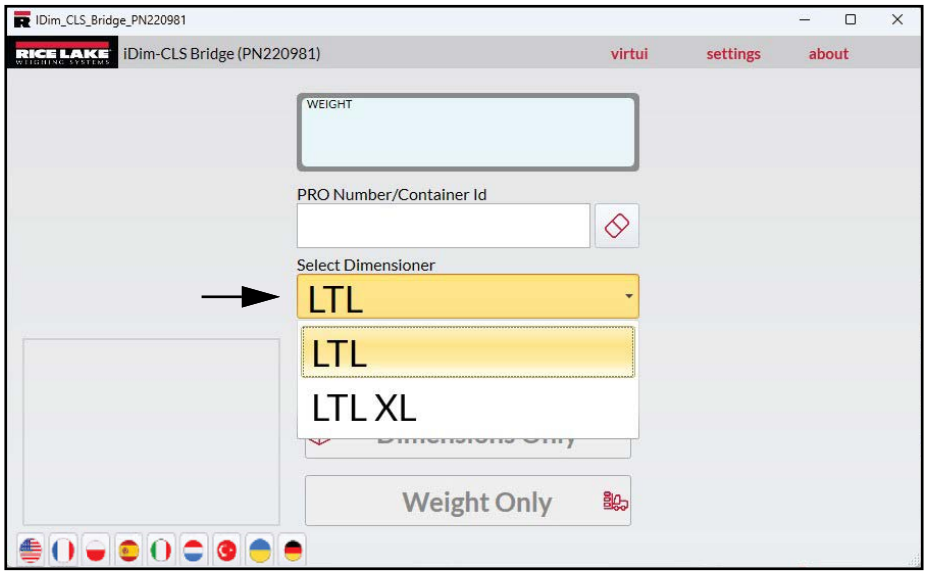

Figure 6-1. iDim CLS Bridge with Select Dimensioner Expanded

2. Select the **Pro Number/Container Id** field. A keypad adjacent to the filed appears.
3. Enter a value in the **PRO Number/Container ID** field by using the keypad or optional barcode scanner.

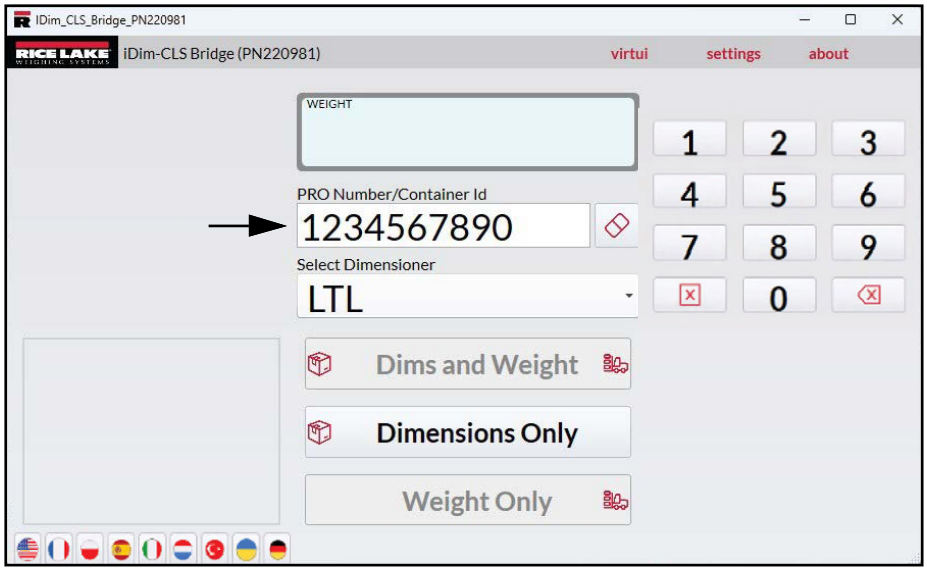

Figure 6-2. iDim CLS Bridge with Keypad Displayed

4. Lift the container with the forklift. If using a scale, ensure a valid weight is displayed in the application.
5. If using a dimensioner, transport the object to the dimensioner and align with the dimensioning system.
6. Park the forklift.
7. Select **Dims and Weight**, **Dimensions Only** or **Weight Only** to perform data acquisition.

NOTE: Acquisition buttons are only available when the scale is stabilized.

8. Once complete, the captured data displays in the application and is sent to the iDimSS.

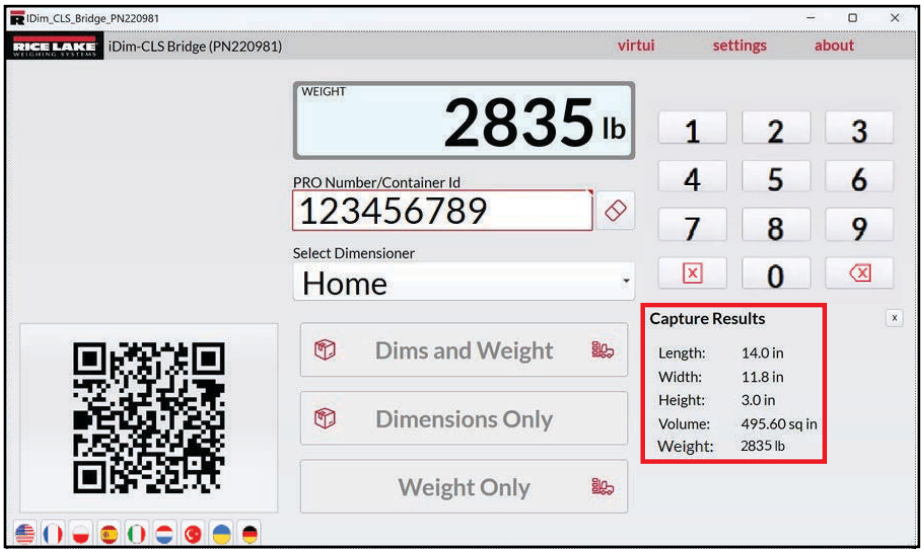

Figure 6-3. iDim CLS Bridge with Capture Results

9. Resume transporting the container.

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7.0 Error Messages

7.1 Application Error Message

In the event of an error, the application displays an error message. These messages provide details regarding what caused the error to occur. Read the message and attempt to resolve the issue. The following is an example when an IP Address was incorrectly set in the CLS-680 configuration.

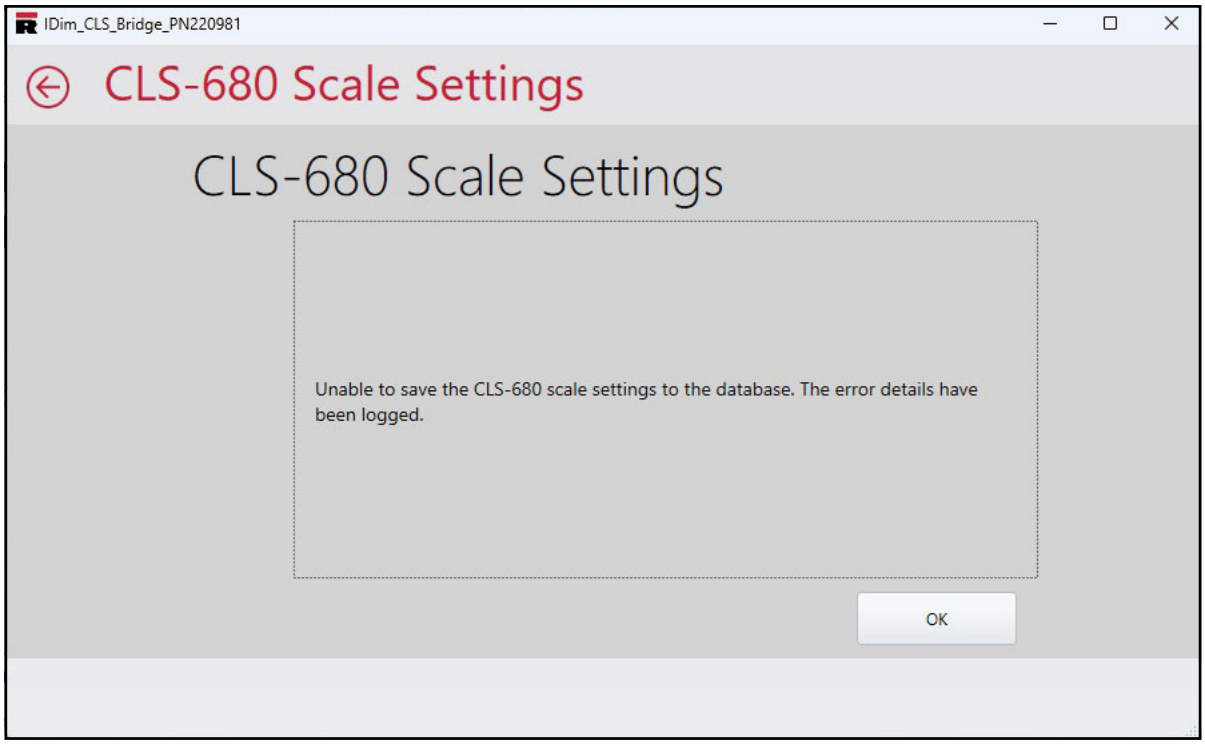

Figure 7-1. Application Error Message Example

The application records errors in log files on the PC in the following location:

C:\ProgramData\Rice Lake Weighing Systems\IDim_CLS_Bridge_PN220981\logs\

NOTE: See Windows Help to display Hidden Folders if the ProgramData folder is missing.

The file creation date is embedded into the log filename using the format of logYYYYMMDD.JSON. Where:

YYYY = Year

MM = Month

DD = Day

JSON = JavaScript Object Notation

For example, log20231127.JSON

7.2 Capture Result Errors

The following examples display an error where capture results return err (error) messages. Frequently these messages occur when the iDimSS IP address is set incorrectly. Verify IP addresses are set correctly and retry processing.

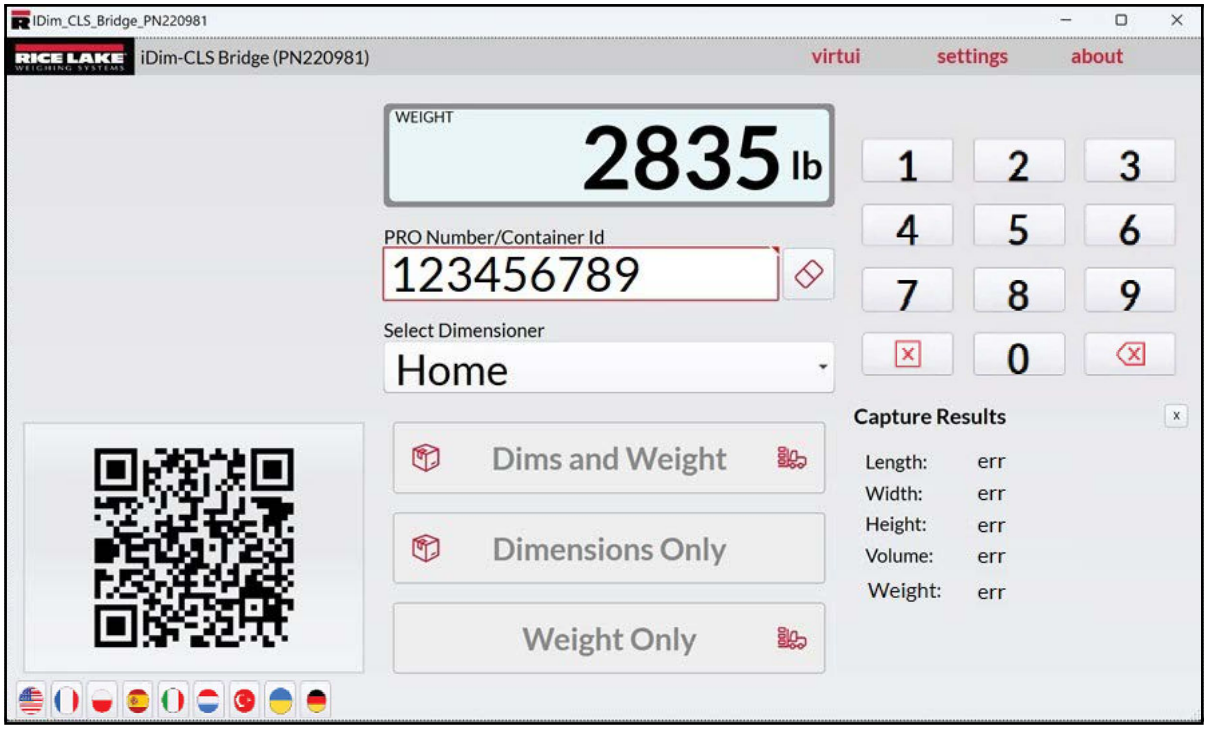

Figure 7-2. Capture Results Error Messages Example as Text

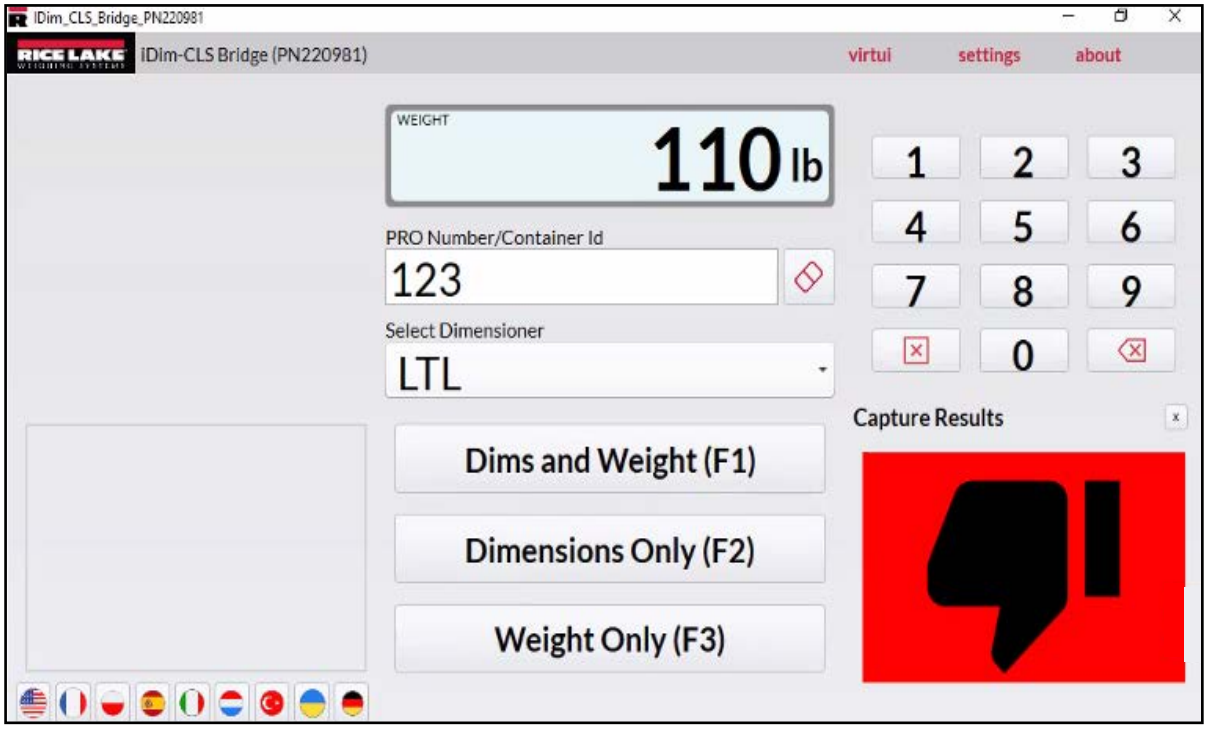

Figure 7-3. Capture Results Error Messages Example as Thumbs Up/Down

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