

**FARO**<sup>®</sup>

**VISUAL INSPECT**<sup>™</sup>



**VISUAL INSPECT**<sup>™</sup>

Manual AppStore version

**Functional range:**

- Comfortable navigation by innovative handling
- Browse through product structures with help of a tree view and pre-view pictures
- Quick and easy viewing of 3D data
- Move, rotate and zoom by intuitive multi touch functionality
- Hide / show of single parts and complete products
- User defined viewing by a wide range of view options (e.g. shading, background color)

<b>Content</b>	<b>1. App Settings</b>	<b>4</b>
	1. Import / Export	4
	<b>2. Area Local files</b>	<b>5</b>
	1. General functionality	5
	2. App information and manuals	8
	3. File search	8
	4. Security settings	9
	5. Import	10
	6. Export	11
	<b>3. Tree view</b>	<b>12</b>
	1. Functionality	12
	<b>4. 3D view</b>	<b>13</b>
	1. Handling	13
	2. Overview functionality	14
	3. Hide / Show	15
	4. Axis system and view changer	16
	5. Settings in the 3D view	17



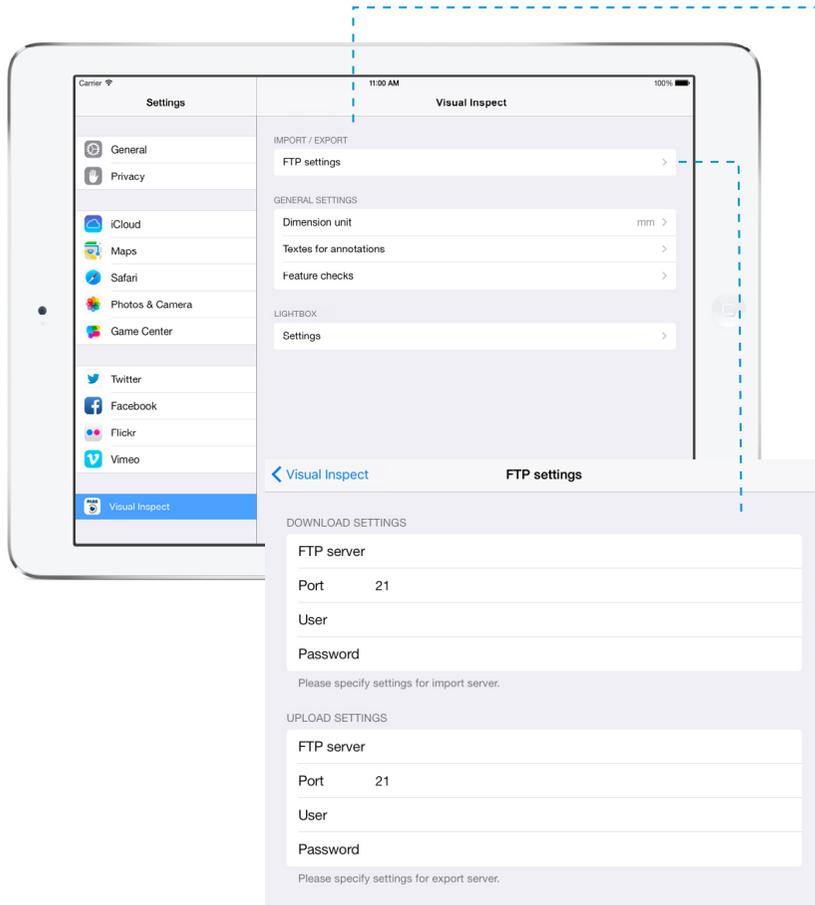
## 1. App Settings

The general app **SETTINGS** of the iPad contains an area for Visual Inspect where several settings can be made.

### 1. Import / Export

Under **FTP SETTINGS**, an FTP download server (for data import) and an FTP upload server (for data export) can be defined.

Complete the **FTP SERVER**, **PORT**, and **USER**. The field **PASSWORD** must be filled only if a password is defined for your server.



## 2. Area Local files

Launch the app and navigate to the LOCAL FILES.

All available data on the device is displayed here. Single files will be displayed as preview thumbnails. If a product structure is available in the file, the file will be displayed as a stack. Under the preview picture, the product name of the file and the download date will be shown.

### 1. General functionality

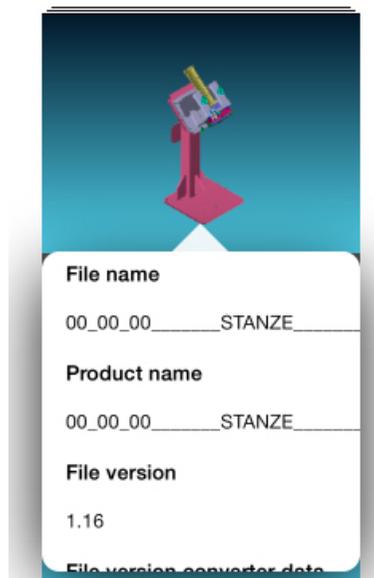
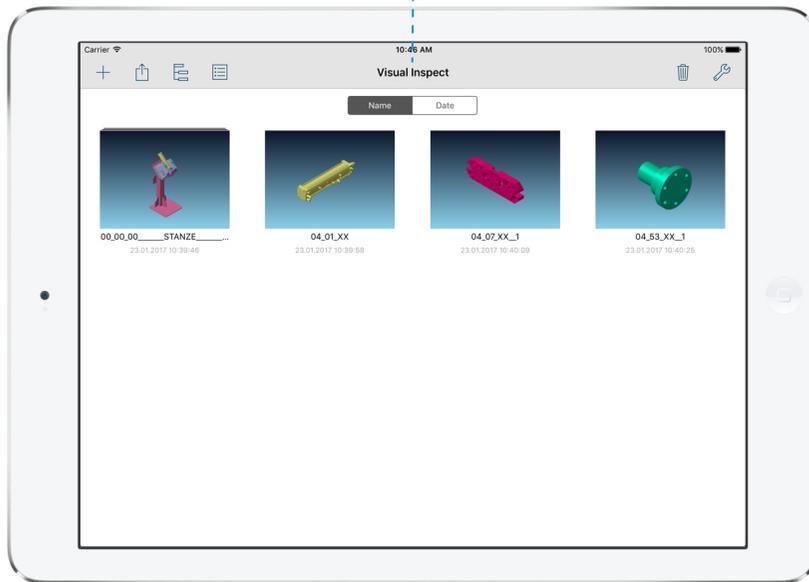
+ The **IMPORT DATA** command: [See page 10](#)

📄 The **EXPORT DATA** command: [See page 11](#)

📁 The **PRODUCT TREE** command: [See page 12](#)

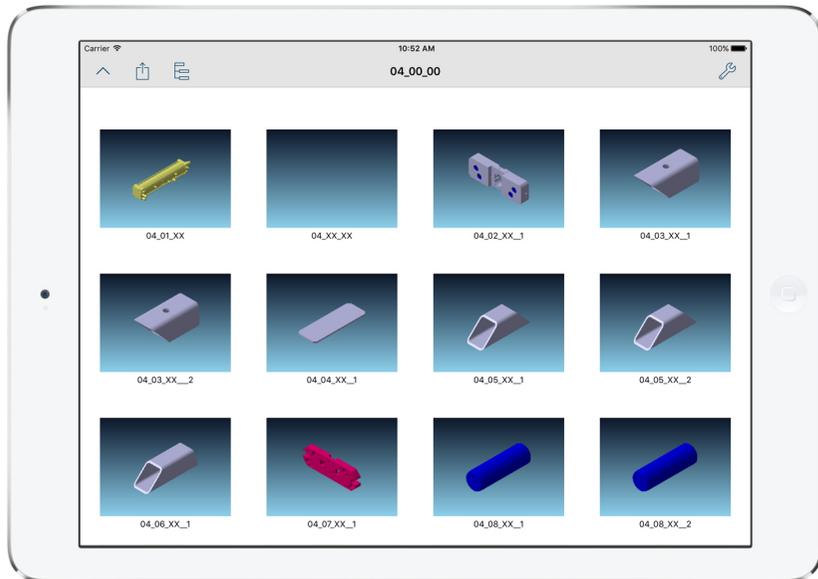
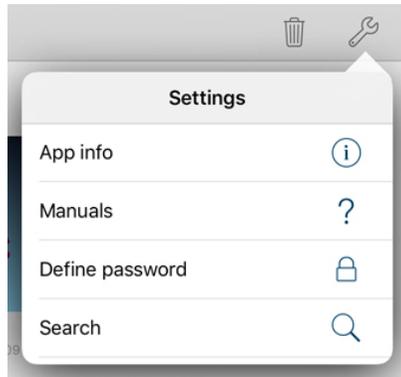
Double-tap an image stack to see the 3D view of the selected file

Long-press an image stack to open a Delete icon. Tap the icon to delete the selected file.



Double-tap the file name to display a popover of information for the file.

Data includes the file name, the product name, the file version, the format of the source data, as well as the creation and download date.



 **The TRASH command (only on the highest level):**

Tap to multi-select files for deletion. All selected files are marked with a delete button. Execute the deletion by tapping **DONE**. All marked stacks will be deleted, or cancel the process by tapping **CANCEL**.

 **The SETTINGS command:**

Tap to open a popover with different options.

→ [See page 8](#)

**NAME / DATE segments (only on the highest level):**

Tap to sort local files by their name or by their download date.

**PINCH OUT gesture on an image stack:**

The selected stack opens to display all components contained in the next deeper level of the product structure. Lift fingers from the screen while pinching out to show the next deeper level. Change the direction while pinching and lift the fingers from the screen to stay in the actual level. Pinch in on a deeper level to close it.

 **The UP command (only in deeper levels):**

Tap to close the current level and view the components of the next higher level.

 **The LIST VIEW command:**

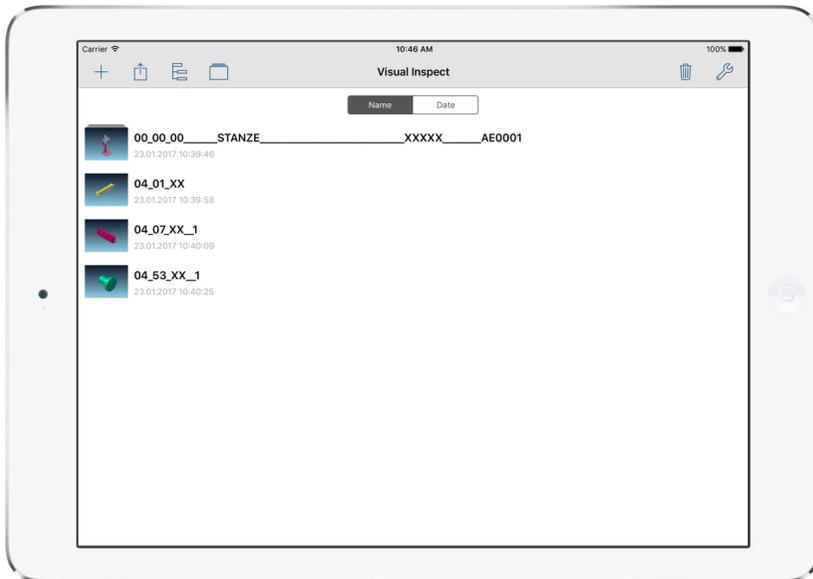
Tap to change the local files view from a stack to list view. This view displays local files in a clearly arranged list instead of in stacks.

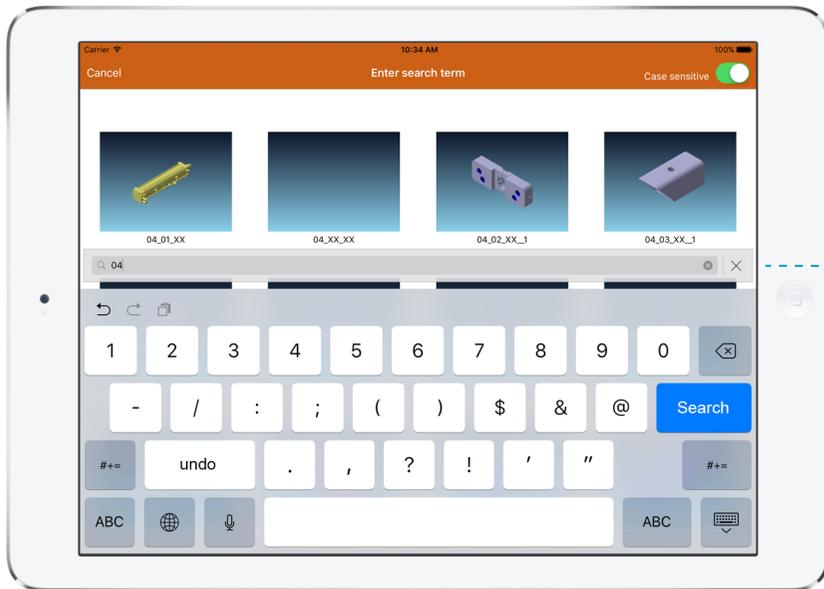
In list view, the toolbar commands are still available. The list can be sorted by name or date. Double-tap a line in the list to open the 3D view. FILE SEARCH can also be used in the list.

→ [See page 8](#)

List view does not allow drilling to deeper levels, to delete elements by long press, or to show additional information.

Tap the STACK VIEW command  to toggle back to Stack view.





## 2. App information and manuals

Tap **APP INFO** option in the popover to open a general information view (e.g. developer and app version). Here you are also able to register VISUAL INSPECT as described in the QUICK START GUIDE.

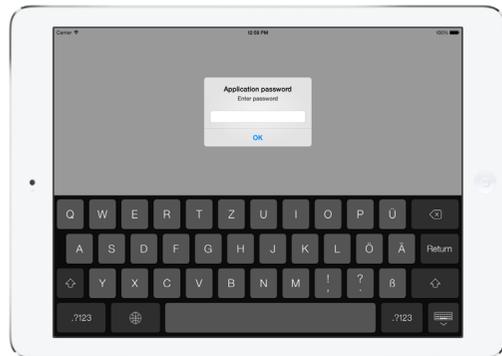
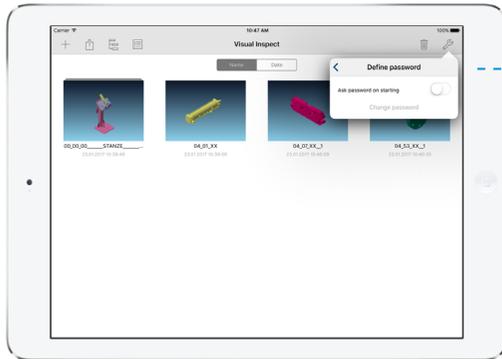
Tap **MANUALS** in the popover to display a list of available manuals. Tap an entry from the list to open the manual; tap the **DONE** command to close the manual. Manuals in English language are always available on the device. If you like to view a manual in any of the other supported languages (French, German, Italian, Japanese, Simplified Chinese or Spanish), you can download it by tapping the **DOWNLOAD** command  provided that your iPad is set to that language. If a newer version of an already downloaded manual is available, the software will display an **UPDATE** button . Tap it to update the manual. Your iPad needs to be connected to the Internet for downloading or updating. After that, you can use the manuals offline too.

## 3. File Search

Tap the **SEARCH** option in the popover to open a search bar and the keyboard.

Enter a search term to locate files containing the search term. Search is case-sensitive; upper and lower case letters will be respected. NOTE: Case sensitivity can be turned off by sliding the **CASE SENSITIVE** switch to the left on the upper toolbar.

The search functionality is available on each level of the local files. Tap **CANCEL** on the toolbar to abandon the search, or tap  in the search bar.



#### 4. Security settings

Tap **DEFINE PASSWORD** in the popover to create a password for the application. The password is required each time the application is opened.

After tapping the option from the list, a new view opens. Slide the **ASK PASSWORD ON STARTING** switch to the right to open. Tap **OK** and enter the password once again. The password will now be saved if both entries match. If the passwords do not match, an error message will be shown and the process will be canceled. Tap **CANCEL** to abandon the process at any time.

If a password was defined successfully, the password prompt will display each time the app opens. The application will only start if the correct password is entered.

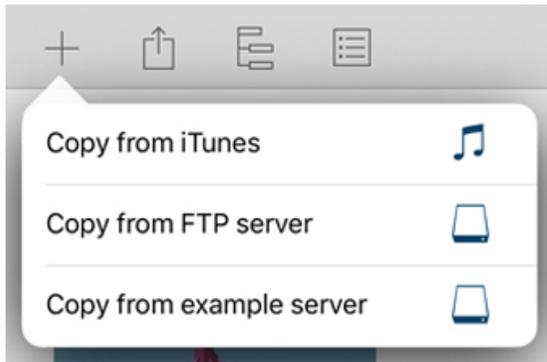
Deactivate a defined password by tapping **CHANGE PASSWORD** and closing the switch; alternatively, change the password. In either case, the original password must be entered to allow changes.

#### → Please note:

*If you forget your password, the application cannot be started any more. To recover the app, delete the complete application from the device and reinstall. NOTE: All data will be lost.*

→ **Please note:**

*The app only accepts data which was created with the data converter.*



## 5. Import

After tapping the **+** command, a popover with options opens.

**Tap the COPY FROM iTUNES in the popover to open a list of files priorly loaded to iTUNES.**

Tap a file in the list to import it.

**Tap the COPY FROM FTP SERVER option in the popover to download a file from the previously defined FTP Server.** This option is only available if a download FTP server was defined in the app SETTINGS.

**Double-tap on a folder to view the contents of the folder.**

 **Tap the DOWNLOAD command on the toolbar to download a file.** If there is no selection, a selection will be requested.

 **Tap the UP command on the toolbar to go up a level.**

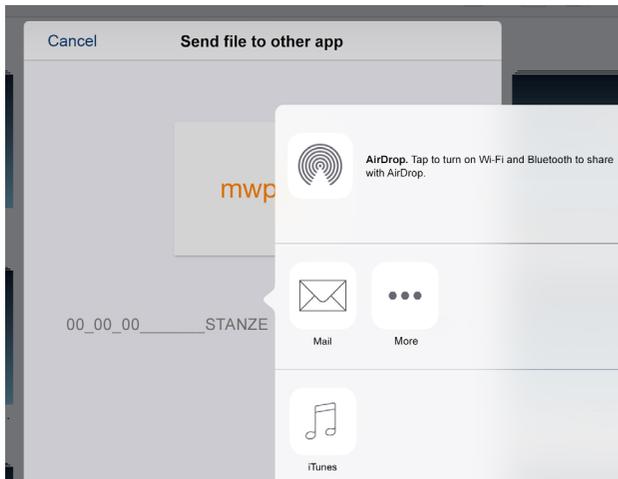
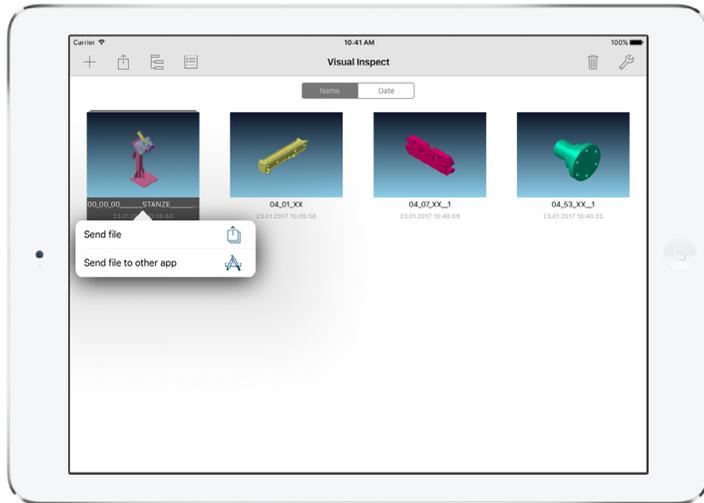
 **Tap the BACK command on the toolbar to return to LOCAL FILES.**

**Tap the COPY FROM EXAMPLE SERVER command in the popover to access a test server with example files.**

### Email / Airdrop

Files can also be sent as email attachments or via AIRDROP to the device. There the file format and the corresponding app will be automatically recognized and the file can be opened directly in VISUAL INSPECT.

These transfer options place the files under LOCAL FILES.



## 6. Export

Tap the EXPORT command  to export the selected file. If no file is selected, a prompt to select a file will display. A popover displays where the export format can be selected.

Tap the SEND FILE command. Next, tap the desired file format to complete the export. The options are:

### Export by AIRDROP:

The selected file will be sent via AIRDROP to the selected device.

### Export by EMAIL:

The selected file will be sent as an email attachment. The MAIL app opens to edit the email and the attachment will be automatically added.

### Export by FTP:

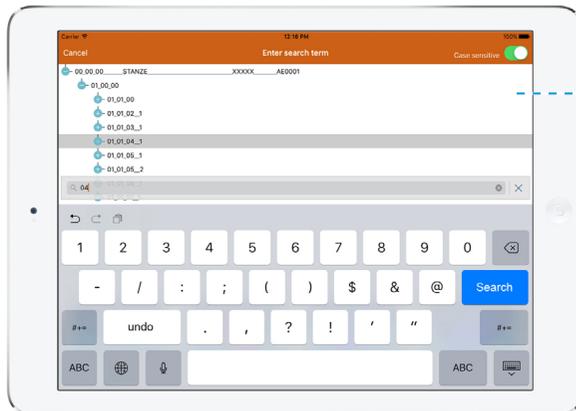
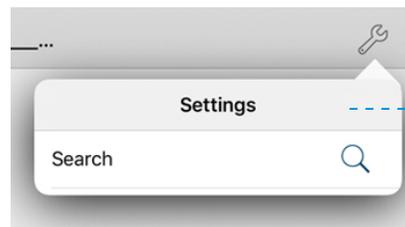
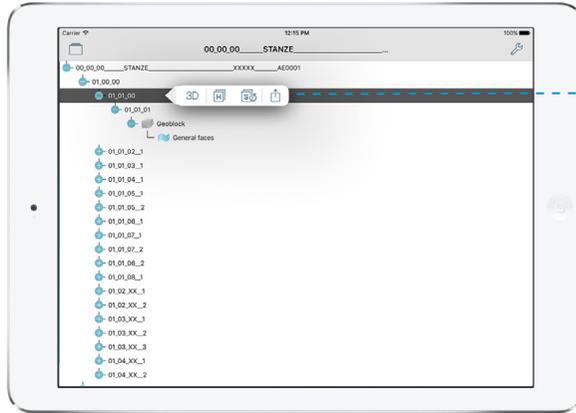
This option is available only if an upload FTP server was defined in the app SETTINGS. After selecting this option, the connection will be established and the content of the FTP server will be shown. If the desired folder was reached, the file can be uploaded by tapping the EXPORT command  on the toolbar.

### Export by iTUNES:

The selected file will be exported and can be found under FILE SHARING in iTUNES when the device is connected.

### 3. Tree view

Tap the TREE VIEW command  and select a file if necessary, the tree view opens and the product structure of the selected file displays.



#### 1. Functionality

-  Tap the **OPEN LEVEL** command to open the next level of the tree view.
-  Tap the **CLOSE LEVEL** command to close the current level.

Double-tap the name of a component to open a context menu.

-  Tap the **3D** command in the context menu to change to 3D view of the selected component opens.
-  /  Tap the **HIDE/SHOW** command on the context menu to toggle visibility of the selected component. Visibility is respected in the 3D view.
-  Tap the **RESET VISIBILITY** command on the context menu to reveal all hidden components.
-  Tap the **EXPORT** command on the context menu to export the selected component and all subcomponents. The behavior is the same as exporting in LOCAL FILES.

→ [See page 11](#)

-  /  Tap the **STACK/LIST VIEW** on the upper toolbar to show the selected component.
-  Tap the **SETTINGS** command on the toolbar to open a popover to start a search. Enter a search term to search the product structure of the tree as described under FILE SEARCH. The results display in gray and the tree structure opens as needed.

→ [See page 8](#)

## 4. 3D view

### 1. Manipulating the View

Manipulate the 3D view using gestures:

**Move with one finger:**

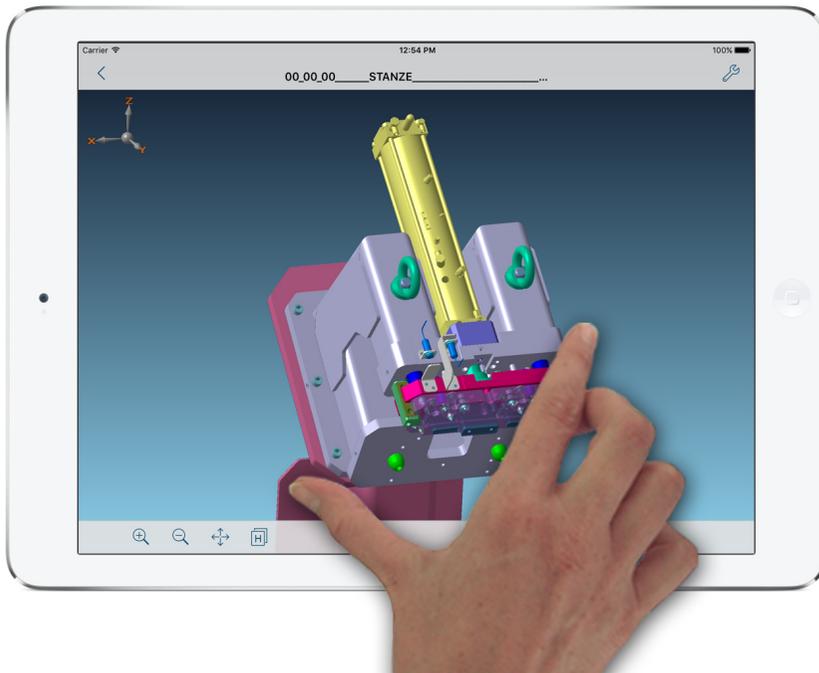
Rotate the 3D object.

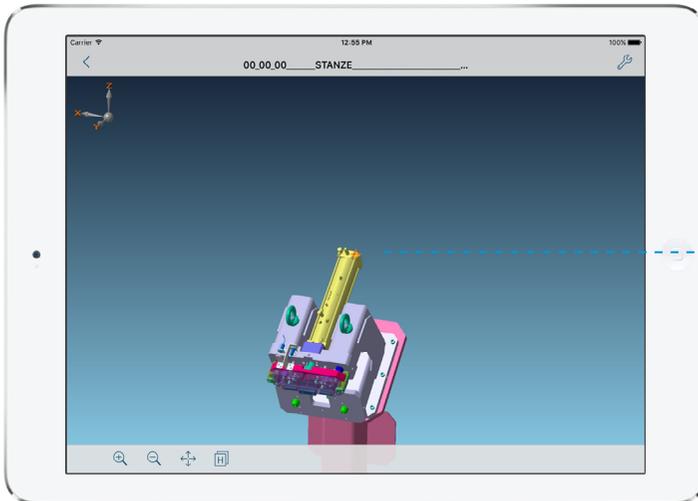
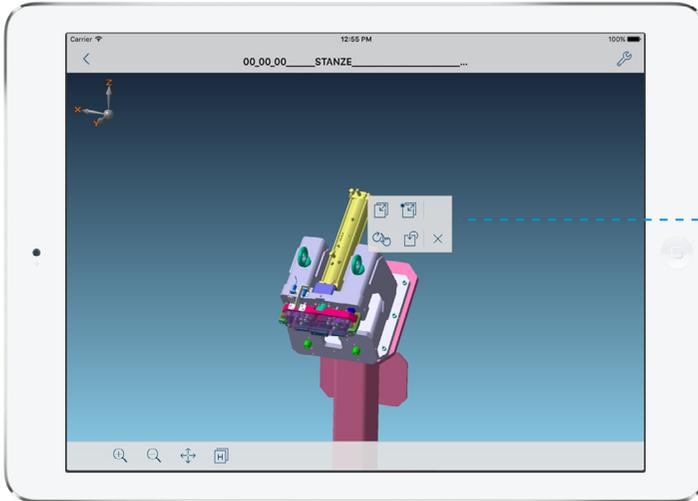
**Move with two fingers maintaining the same distance:**

Move the 3D object.

**Pinch in/out with two fingers:**

Zoom in/out.





### Tap the 3D object:

The respective context menu opens.

- ✕ Tap the **CLOSE** command on the context menu to close it, or tap another point on the 3D object the menu will close automatically and open again at the new position.
- 👉 Tap the **ROTATION POINT** command on the context menu to set a new rotation point at the tapped point. The rotation point will be shown by small cross hairs.
- 📄 Tap the **ROTATE TO FACE** command on the context menu to rotate the 3D view to the tapped face.
- 🔍 Tap the **ZOOM IN** command on the lower toolbar to zoom in step by step.
- 🔍 Tap the **ZOOM OUT** command on the lower toolbar to zoom out step by step.
- ↕ Tap the **FIT OBJECT** command on the lower toolbar to fit the 3D object in the center of the screen.
- < Tap the **BACK** command on the upper toolbar to close the 3D view and return to the previous stack or list view.

### 2. Overview functionality

- 📄 / 📄 Tap the **SHOW/HIDE** command on the lower toolbar to toggle visibility.

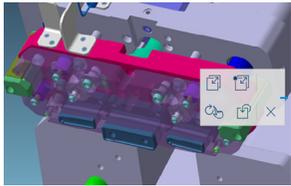
→ [See page 15](#)

- 🔧 Tap the **SETTINGS** command on the upper toolbar to open Settings.

→ [See page 17](#)

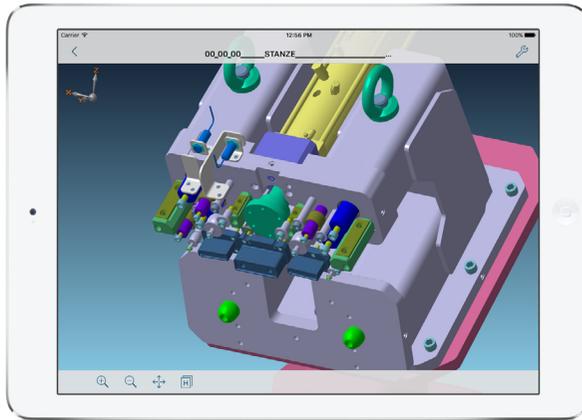
### 3. Hide / Show

Tap the 3D object to open the context menu.

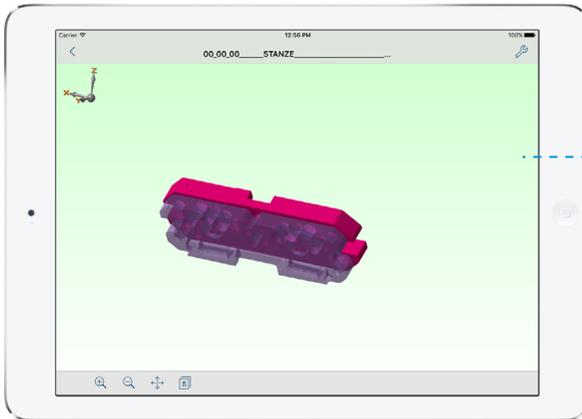


Tap the **TOGGLE VISIBILITY** command on the context menu to change visibility of the selected object.

Tap the **MULTI-TOGGLE VISIBILITY** command on the context menu to activate multi-selection. This is also shown in text on the upper toolbar. Any element selected in this mode will be selected until the mode is canceled by tapping **CANCEL** in the toolbar, or by opening the context menu again by tapping in the free space and selecting the **MULTI** command again.

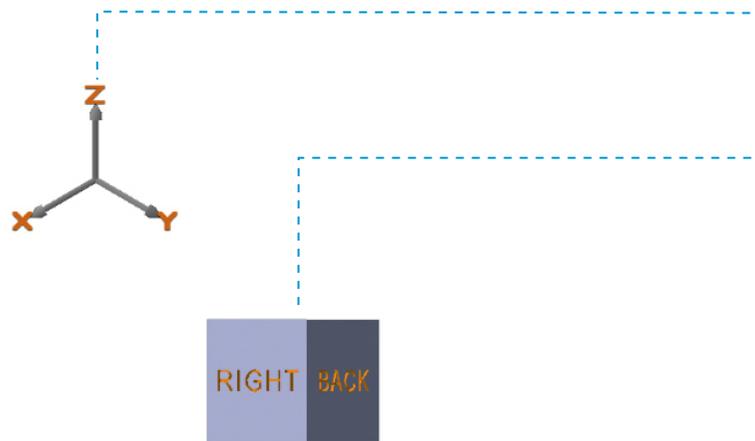


Tap the **HIDE VIEW** command on the lower toolbar to change to the **NOSHOW** view. Any hidden components are visible in this view. For a better overview the background in this area has a different color.



Tap the **SHOW VIEW** command on the lower toolbar to change to **SHOW** view.

#### 4. Axis system and view changer

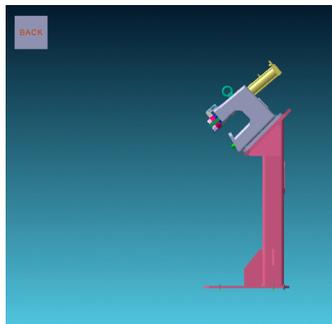


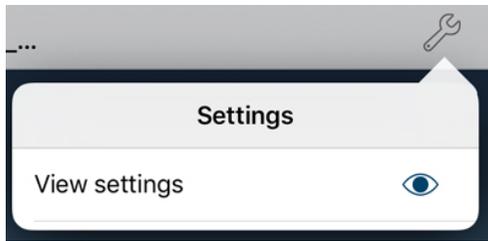
In the standard view mode an axis system is located in the upper left corner of the 3D view. This axis system follows all rotations of the 3D object, which makes orientation in space easier.

**Double-tap the area of the axis system** changes it to a cube view with the labels TOP, BOTTOM, RIGHT, LEFT, FRONT and BACK. In this mode, rotating and moving with one or two fingers is deactivated.

**Swipe the display in a direction to rotate the model in that direction.**

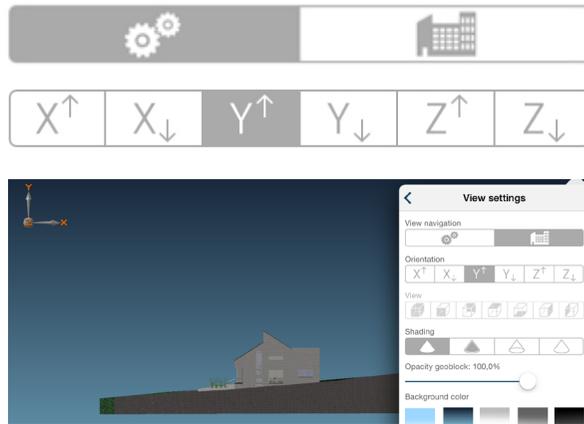
**Double-tap the 3D Cube** to return to the original axis system and the normal handling of the 3D view.





## 5. Settings in the 3D view

 Tap the **SETTINGS** command to open a settings popover. Popover options navigation and orientation options:



### Tap **VIEW NAVIGATION**:

1. Tap **NORMAL** for navigation as described on pageSee page 13.
2. Tap **ARCHITECTURE NAVIGATION** to add an additional segmented control, **ORIENTATION**. With this segments, the direction of gravity for the navigation can be defined.

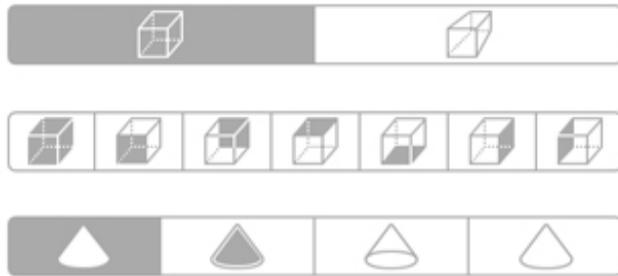
### Tap **ORIENTATION segments**:

1. Model is oriented with x axis up.
2. Model is oriented with x axis down.
3. Model is oriented with y axis up.
4. Model is oriented with y axis down.
5. Model is oriented with z axis up.
6. Model is oriented with z axis down.



In addition to **ORIENTATION**, a new navigation element is added in the right lower corner. With this navigation instrument, you can navigate through the architecture model.

Zooming/translating/rotating with finger motions is enabled in this mode.



**Tap ORTHOGONAL/ PERSPECTIVE segments:**

1. The object will be shown in orthogonal view.
2. The object will be shown in perspective view.

**Tap VIEW segments to view:**

1. Isometric.
2. Front.
3. Back.
4. Top.
5. Bottom.
6. Right.
7. Left.

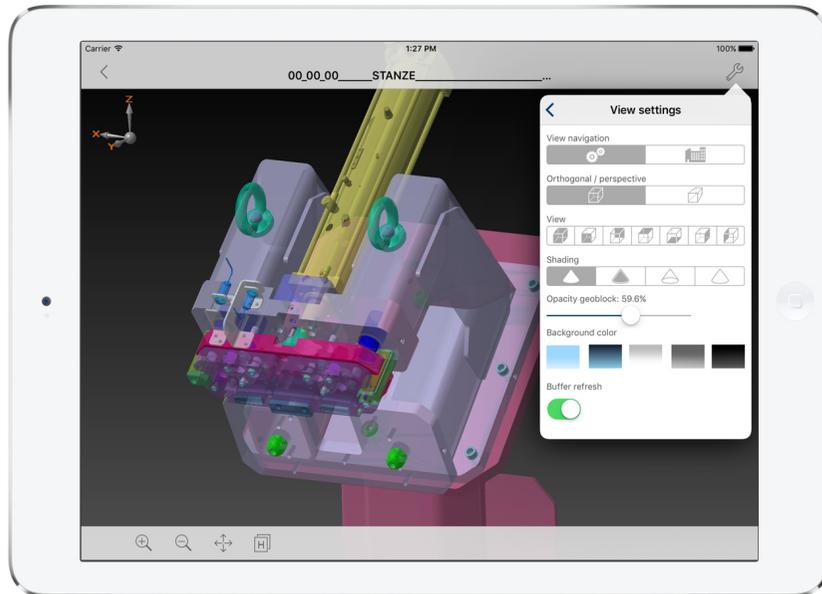
**Tap SHADING segments to show:**

1. Only the faces of the 3D object.
2. Faces and edges of the 3D object.
3. Only the edges of the 3D object.
4. The edges of the 3D object in green without back faces.

If a mode which shows faces is selected here, the **OPACITY GEOBLOCK** slider will activate.

**Moving the OPACITY GEOBLOCK slider:**

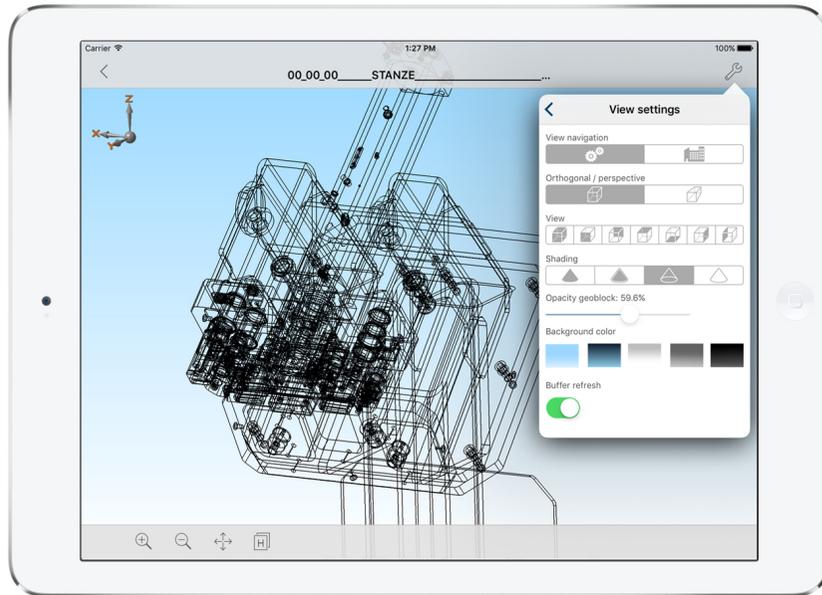
The transparency value of the geoblock faces will be changed.





**Tap the color gradient tiles:**

The five color gradient tiles show different color gradients. The gradient shown in the tile will be used as background for the 3D view. These gradients will only be used in the SHOW area. In the NOSHOW area a light green gradient is used.



**Tap BUFFER REFRESH slider:**

In active mode, large data with a high amount of triangles for better visualization is used. While rotating, translating and zooming, some parts of the product structure will not be drawn so the action can be processed faster. Once finger movement is complete, the whole model will be shown again.

If this switch is deactivated, the complete model will always be shown.

The settings in this dialog are persistent and will be used every time 3D view is open.

Buffer refresh

