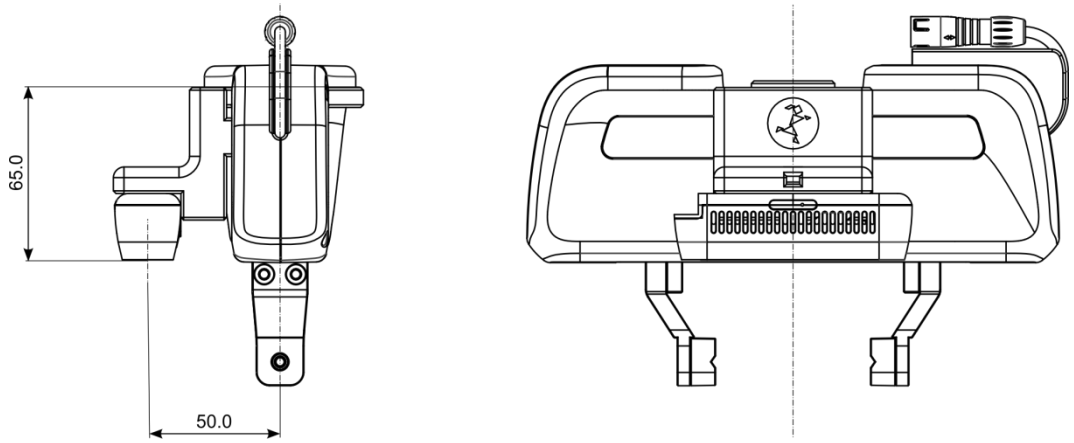
This is a short guide on how to attach a camera to the Panda robot for vision-based research applications.

3D-Print Instructions for the camera mount

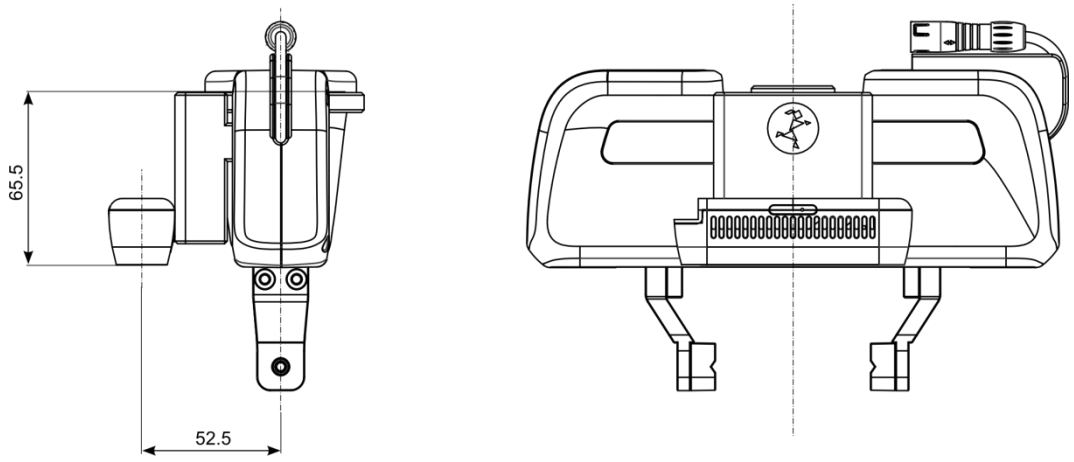
There are two available and ready-to-print versions of the camera mount:

- Panda_RealSenseD435_Camera_Mount.STL
- Panda_Generic_Camera_Mount.STL

Choose the first one for using Panda with an Intel® RealSense D435 or Intel® RealSense D435i Depth camera. For using any other camera model with a ¼”-20 UNC tapped thread choose the second option. You can see the final camera position (the RealSense D435i in this case) in the following figures:



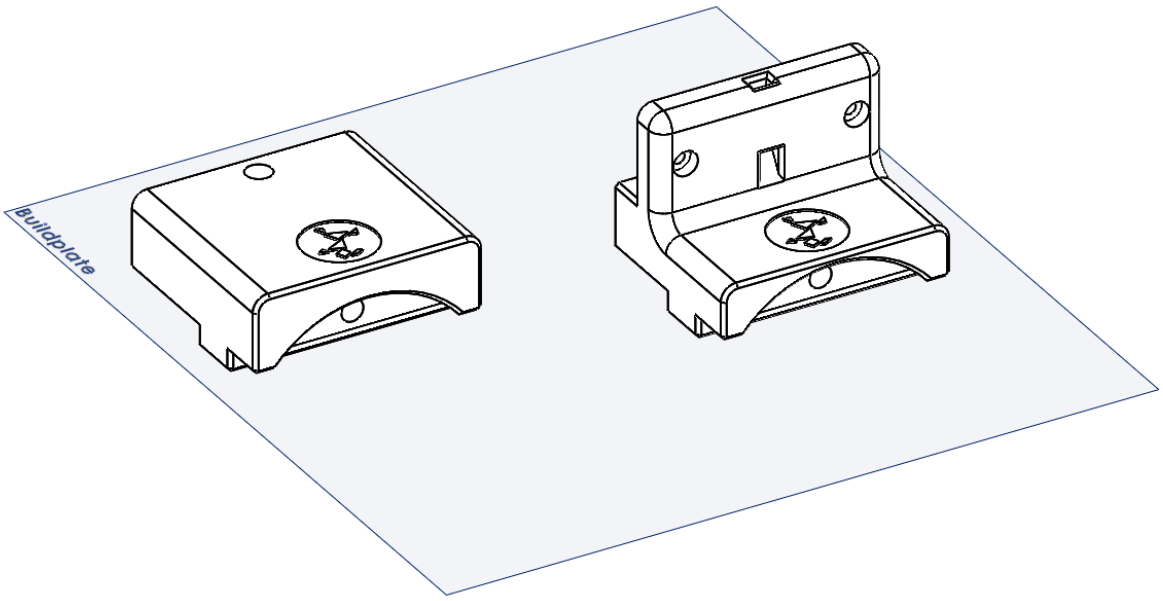
Camera Position with RealSense Mount



Camera Position with Generic Camera Mount

In your preferred 3D printer slicing application (e.g. Cura), rotate the STL-file as shown below and select the following printing options:

- Infill Density: > 50%
- Support Placement: Touching Buildplate (if possible, Use Towers)

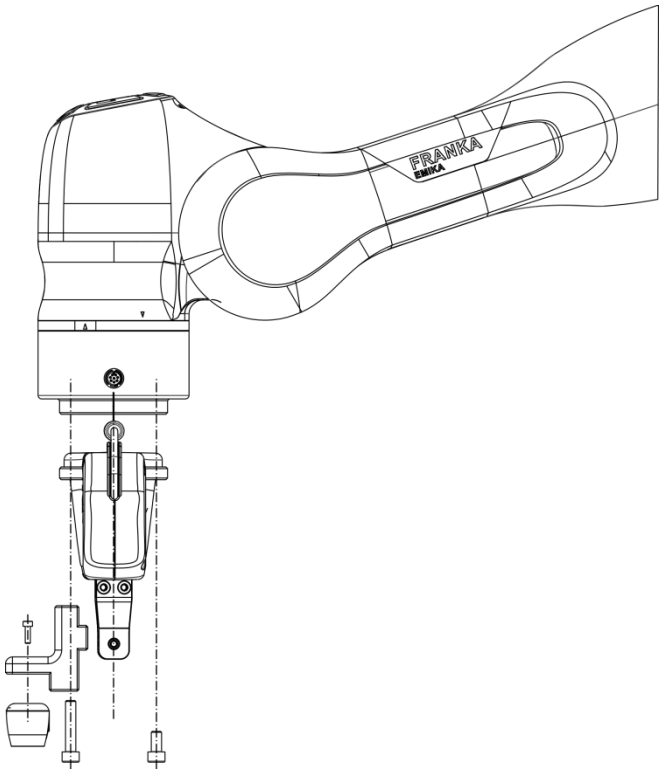


Proposed Printing Orientation for optimal surface quality

Mounting Instructions

For an easy assembly we suggest to attach the camera to the mount first. For the RealSense mount use two M3x10 ST screws, for the generic option use a ¼”-20 UNC screw of a length that fits into the provided camera socket.

Both versions of the camera mount use one of the two M6 thread holes on the end-effector flange for fastening. Remove one of the provided M6x12 ST 8.8 screws of the Franka Hand and replace it with an M6x28 ST 8.8 screw, making sure to apply the same torque indicated in the documentation. The RealSense mount offers the option to insert a cable tie for secure attachment of your data cables.


FRANKA
EMIKA