Guide

3D PRINTABLE CAMERA MOUNT

Franka Robotics GmbH
Frei-Otto-Straße 20
80797 Munich
Germany

Document name: 3D Printable Camera Mount Guide
Document number: R02241
Validity: Applies to Franka Research 3
Change Log:

Content Iteration	Release Date	Release notes / Changes
1.0	October 2025	Camera mount instructions
1.1	January 2026	Added link to folder ‘Ready-to-print 3D models”

Get your manual and additional supporting material in English and other languages at www.franka.de/documents.

TABLE OF CONTENTS

1 INTRODUCTION

This document provides a concise guide on how to attach a camera to Franka robots for vision-based research applications using a 3D-printed camera mount. It is intended to support users in setting up a reliable and adjustable camera mount suitable for a variety of tasks.

2 3D-PRINT INSTRUCTIONS FOR THE CAMERA MOUNT

Two ready-to-print versions of the camera mount are available:

- RealSenseD435_Camera_Mount.STL
- Generic_Camera_Mount.STL

You can also download both files together in a ZIP archive:

Link: https://download.franka.de/camera_mount_guide.zip

- Use the **RealSenseD435_Camera_Mount.STL** if you are using an **Intel® RealSense D435 or D435i Depth Camera**.
- If you are using a different camera model with a **¼"-20 UNC tapped thread**, choose the **Generic_Camera_Mount.STL**.

NOTICE

The final mounted camera position (with the RealSense D435i) is shown in the figures below.

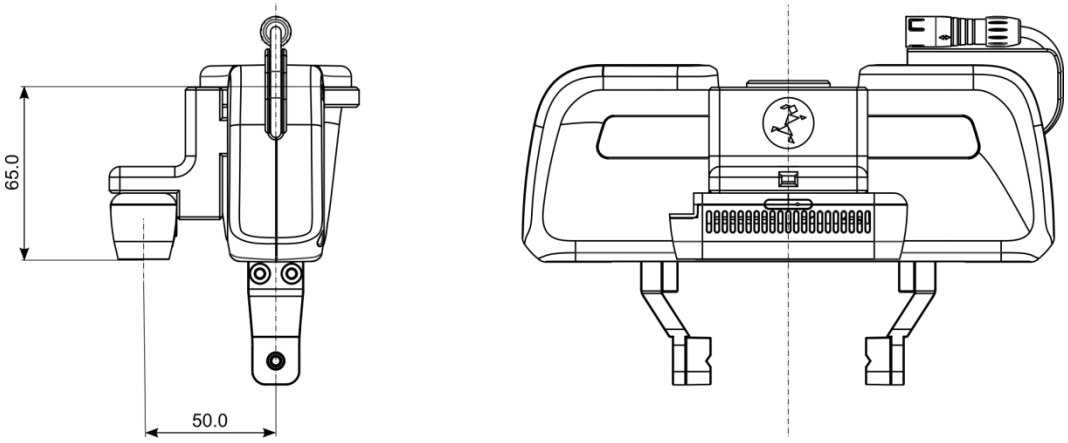

Figure 1: Camera position with RealSense mount

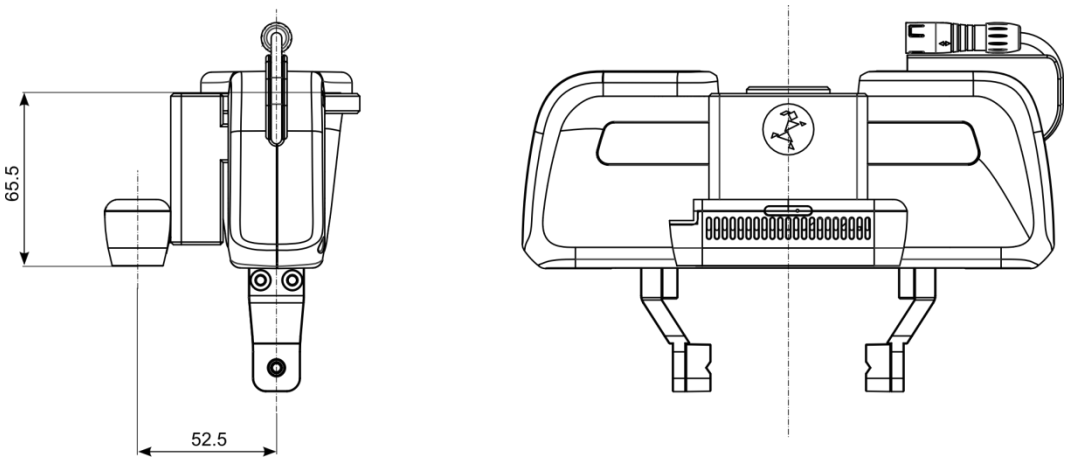

Figure 2: Camera position with generic camera mount

3 SLICER SETUP INSTRUCTIONS

In your preferred 3D slicer software (e.g., **Cura**, **PrusaSlicer**), follow these settings:

- **STL Orientation:** Rotate the model as shown in the figures below for optimal support and surface quality.
- **Infill Density: ≥ 50%**
- **Supports:**
    - **Placement:** Touching build plate
    - **Type (if available):** Use support **towers** for cleaner overhangs

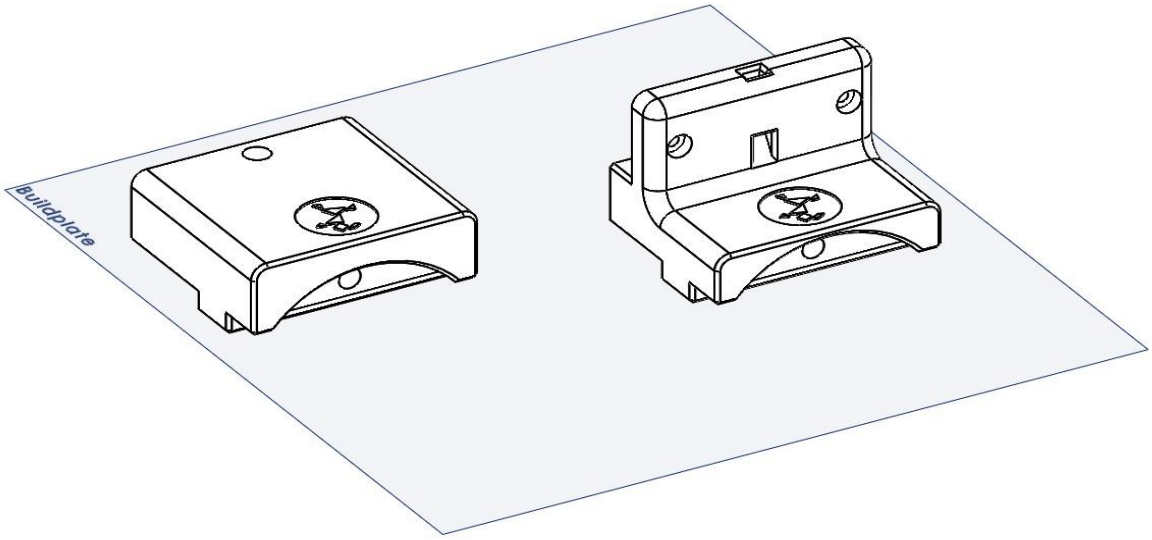

Figure 3: Proposed printing orientation for optimal surface quality

4 MOUNTING INSTRUCTIONS

1. **Attach the camera to the mount before fixing it to the robot.**

- For the RealSense mount, use two M3x10 ST screws.
- For the Generic mount, use a ¼”-20 UNC screw of appropriate length to fit securely into the camera socket.

2. **Mount the camera assembly to the Franka robot’s end effector flange:**

- Both mount versions are attached using one of the two M6 threaded holes.
- Remove one of the original M6x12 ST 8.8 screws from the Franka Hand.
- Replace it with an M6x28 ST 8.8 screw and tighten it using the torque specification provided in the Franka documentation.

3. (Optional): The RealSense mount includes a slot for a cable tie to help secure data cables and reduce strain.

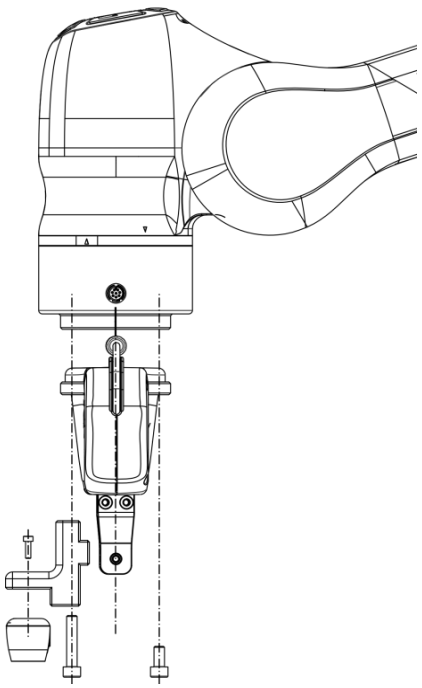

Figure 4: Camera mount

5 TABLE OF FIGURES

Franka Robotics GmbH
Frei-Otto-Straße 20
80797 Munich
Germany

franka.de