



Die TQ 2D Camera Solution overview

This package includes the following apps:



TQ Camera Motion



TQ Camera Repeat



TQ Trigger Camera



TQ Exit Camera Motion Group



TQ Camera Calibration



Group: TQ Camera Motion

Moving the Franka Panda to object positions recognized by the camera

Features:

- Defining the object positions by teaching only one robot position
- Definable approach and return movements to the objects consisting of relative movements and Cartesian movements with separately adjustable speeds
- Query results from up to ten different cameras in one task
- Adjustable offsets to object positions in the robot coordinate system
- Approach of the objects with variable or fixed end effector rotation
- Selection of the camera's triggering behavior from three different modes
- Adjustable timeout for image processing requests
- Trigger the camera at a fixed position
- Angle correction of the end effector in the case of a large range of object rotations



Group: TQ Camera Repeat

All apps within this group are repeated for each detected object

Features:

The number of repetitions does not have to be configured, but is automatically determined based on the number of detected objects



App: TQ Trigger Camera

Capture an image at a desired point in the task

Features:

- Trigger the camera as soon as this app is started
- Time saving as the image processing can take place during the further execution of the task
- Selection of which camera should be triggered



App: TQ Exit Camera Motion Group

Control of the behavior of the "TQ Camera Motion" group if no object was detected

Features:

- Independent configuration of the app, so no parameters need to be set



App: TQ Camera Calibration

Determine the parameters for calibrating the camera to the robot

Features:

- Output of the coordinates of the four calibration points to be taught directly in the front end