

1 Camera

1.1 Model and make

Intel Realsense D455

1.2 Mechanical specifications

At the rear of the camera there are two M4 holes for mounting additional modules to the camera. The mechanical drawing is not that clear about the hole size, since there is also a mention of M3 at the same drawing. The part of the mechanical drawing regarding the back of the camera is presented in figure 1.

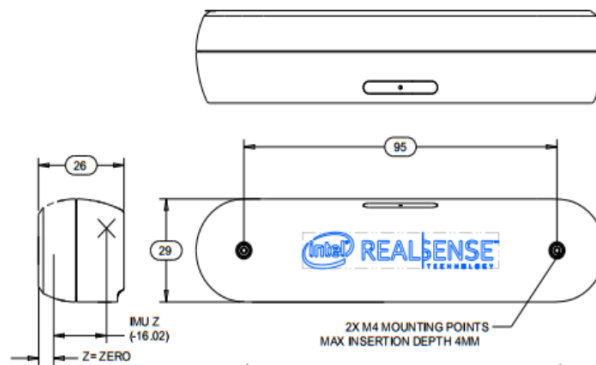


Figure 1: Rear of the Intel RealSense Depth Camera D455. All units in millimeters. Taken from [?].

The case was drawn with open source 3d cad software FreeCAD version 0.19. The size of the case is approx 2 mm larger as camera back side in both dimensions and is 12 mm thick, allowing enough space for mounting the ESP32 board and nRF24l01 module. The holes for synchronization cables from camera and output synchronization are of diameter 3 mm. They are positioned in such a way, that they do not pose any mechanical problems

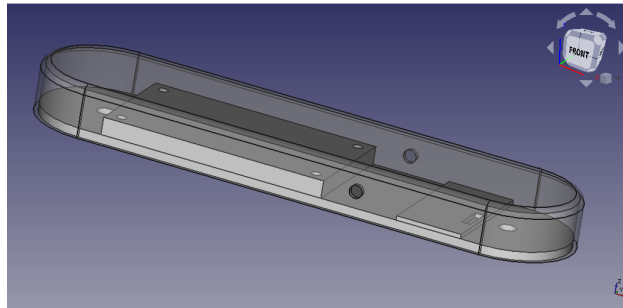


Figure 2: Drawing of the case done in FreeCAD 0.19.

for assembly. Improvement would be to put connectors to the case. Which ones?

1.3 Extension connector pinout