We are your partner for professional drone technology. Benefit from our technical experience in development and production of quadrotor systems:

- Customized embedded solutions for business
- Educational tools for lecturers & universities
- Development equipment for researchers
- Innovative technology for everybody

**Contact:**

Tel.: +49 (0) 931 31 83510  
E-Mail.: info@emqopter.de

[www.emqopter.de](http://www.emqopter.de)

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**Impressum**

Emqopter GmbH  
Josef-Martin-Weg 54  
97074 Würzburg  
CEO: Dr. Nils Gageik  
Registration Court: Amtsgericht Würzburg  
HRB 13237
The COLLISION AVOIDANCE ASSISTANT (CAA) is a modular anti-collision solution for multirotors. It is a Plug & Play extension for flight controllers such as Pixhawk. It can easily be connected and provides your multirotors with the new features of anti-collision and distance controlled flight. Thanks to the CAA obstacles can be detected and collisions avoided. Thus the risk of collisions, damages and costs can be reduced. New applications arise and the requirements for the pilot and its work load decrease.

The COLLISION AVOIDANCE ASSISTANT is optimized for cooperation with the pilot.

The CAA UI is the first available, 360°, complementary, PnP, actively-controlled anti-collision solution for multirotors.

**360° Obstacle Detection**
12 x 40° ultrasonic + 8 x 5° infrared

**Complementary Sensor Technology**
The CAA UI fuses ultrasonic and infrared sensors for maximal reliability.

**Plug-&-Play (PnP)**
Thanks to the PnP interface, connecting the CAA UI is a piece of cake. Simply plug in the connector to your flight control, e.g. Pixhawk.

**Active Distance Control**
The CAA actively interferes in the flight control. A configurable distance between 1m and 2m can be set. This enables and simplifies flights along a wall, facade or other objects with a fixed distance.

**Range of sensing**
With the integrated sensors, objects in distances from 60cm to 500cm can be detected.

**Weight, Size, Voltage and Interface**
The weight of the CAA UI is 400g. Its overall dimensions are 14,5cm x 11,5cm x 6,7cm. The CAA works with 5V supply voltage. Further interfaces (TWI / USART) are available on demand.

Profit from our expertise and the newest anti-collision technologies.

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Pick the optimal CAA depending on your application

Don't hesitate to ask us for help to select the optimal CAA sensing technology for your needs. Get the best results for your use case. Ranges up to 40m are possible. We provide the following sensing technologies:

- ✔️ Infrared
- ✔️ Ultrasonic
- ✔️ LIDAR
- ✔️ 3D ToF
- ✔️ Stereovision