Ascending Technologies – manufacturer and innovator of micro UAVs.

With more than 1000 multicopters sold worldwide, the company is highly experienced. You are kindly invited to profit from the expertise of the long-standing technology leader in unmanned aerial vehicles (UAV).

The AscTec Hummingbird is the most dynamic UAV of the AscTec Research Line. High quality standards are held during the production process, to ensure our products are reliable and safe. Our customers are registered to a database, allowing us to provide them with the newest software and hardware updates.

Date & version: 01.05.2015 – V 4.0
Product designation: AscTec Hummingbird
Producer: Ascending Technologies GmbH
Address: Ascending Technologies GmbH
Konrad-Zuse-Bogen 4 /// 82152 Krailling
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/// Summary

This safety data sheet contains all relevant information about the flight system to apply for a take-off permission.

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/// Safety data sheet.

http://wiki.asctec.de/x/XYBJ

The AscTec Hummingbird for flight dynamics & swarming.

Technical data & safety functions

Flight system

Type Quadcopter
Size 540 x 540 x 85.5 mm
Engines 4 electrical, brushless (sensorless) motors with 80 W maximum power each
Rotor diameter 8” (~ 20 cm)
Number of rotors 4
Rotor weight ~ 6 g
Empty weight ~ 350 g
Min. take-off weight ~ 510 g
Max. take-off weight ~ 710 g
Flight time 20 min. 1
Max. range 1 km 2
Tolerable wind speed 10 m/s 1.3
Max. airspeed ~ 200 g

Former & available payload options

AscTec Atomboard
Vision Kit
Up to two BlueFOX 1/3” CMOS Camera (color/monochrome)
Propeller Protection (small/large)

Certification
CE, RoHS

Safety functions

Telemetry in realtime: All necessary system information such as GPS position, height, velocity, battery load, link and GPS quality for instance is displayed live.

Sensor output check: All important sensor values and system parameters are checked automatically before each flight. If a value is critical, it will be identified and interrupt the launching procedure automatically.

3 Emergency modes: The pilot can choose one of three emergency modes to determine the automatic landing in case of link loss: “Direct landing”, “Comehome straight” (at its current height) or “Comehome high” (at max. mission height). As soon as the link is reestablished you may take control again and continue the flight.

Without payload /// 1Recommended: Line of sight (~ 150 m) /// 2GPS mode /// This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

Wireless communication

2.4 GHz XBee link 10–63 mW (optional)
WiFi (optional)

LiPo battery types [mAh]

PP2200, 3 Cells 2200
PP2100, 3 Cells 2100