

/// Safety data sheet.

<http://wiki.ascotec.de/x/W4BJ>



/// The AscTec Pelican for SLAM & Computer vision.

Ascending Technologies – manufacturer and innovator of micro UAVs.

With more than 1000 multicopters sold world-wide, 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 Pelican is the bestseller 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 – V4.0

Product designation: AscTec Pelican

Producer: Ascending Technologies GmbH

Address:

Ascending Technologies GmbH
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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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Technical data & safety functions

Flight system

Type	Quadcopter
Size	651 x 651 x 188mm
Engines	4 electrical, brushless (sensorless) motors with 160W maximum power each
Rotor diameter	10" (~25,4cm)
Number of rotors	4
Rotor weight	~8g
Empty weight	~620g
Min. take-off weight	~1000g
Max. take-off weight	~1650g
Flight time	~16min. ¹
Max. range	1 km ²
Tolerable wind speed	10m/s ^{1,3}
Max. payload	~650g

~ Max. airspeed

Manual mode	15m/s
GPS mode	3m/s
Max. climb rate:	8m/s
Max. thrust:	36N

Wireless communication

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

LiPo battery types [mAh]

PP6250, 3 Cells	6250
PP6100, 3 Cells	6100

Former & available payload options

AscTec Mastermind

- + Camera Mount Option 1, 2 or 3
- + Laser Scanner Mount

AscTec Atomboard

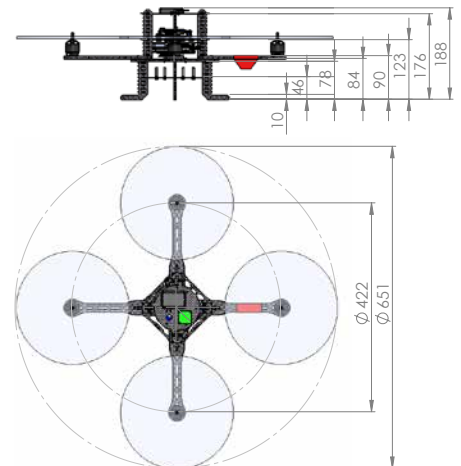
- + Camera Mount Option 1, 2, 3 or 4
- + Laser Scanner Mount
- BlueFOX 1/3" CMOS Camera
- 30m Laser Scanner Hokuyo UTM-30LX
- 20m Laser Scanner Hokuyo UST-20LX
- 10m Laser Scanner Hokuyo UST-10LX
- 4m Laser Scanner Hokuyo URG-04LX
- Propeller Protection (small/large)
- Feet Extensions

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.

¹Incl. payload (~650g) /// ²Recommended: Line of sight (~150m) /// ³GPS 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.