starcopter

THE HIGHDRA

OPERATIONAL LIMITATIONS

1. REMOTE PILOT COMEPTENCY & EASA REGULATIONS
2. UAV MASS AND BALANCE
3. SPEED AND HEIGHT LIMITATIONS
4. ENVIRONMENTAL LIMITATIONS
5. OTHER LIMITATIONS

According to the HIGHDRA Operating Manual v1.1

REMOTE PILOT COMEPTENCY

Remote Pilot Competency Certification
Issued by: National Aviation Authority (NAA)
Validity: 5 years

KEY REQUIREMENTS:
Training & certification based on UAV category
Knowledge of airspace regulations & emergency procedures
Proficiency in UAV controls & system functionalities

A remote pilot must be proficient in operating all UAV controls and possess a thorough knowledge of the system's functionalities. Ongoing training and periodic proficiency assessments are essential to keep pilots updated with current best practices, helping them stay well-prepared to handle any potential issues or unexpected situations that may arise during flight. These measures help to ensure that remote pilots always operate with the highest level of safety and efficiency.

STARCOPTER REQUIREMENTS:
Periodic training & assessments
Staying updated on best practices
Ensuring safe & efficient operations

EASA REGULATIONS

The European Union Aviation Safety Agency (EASA) has established a regulatory framework for Unmanned Aircraft Systems (UAS), commonly known as drones, to ensure their safe integration into European airspace. This framework categorizes drone operations into three main categories: Open, Specific, and Certified, each defined by the level of operational risk.

Open Category

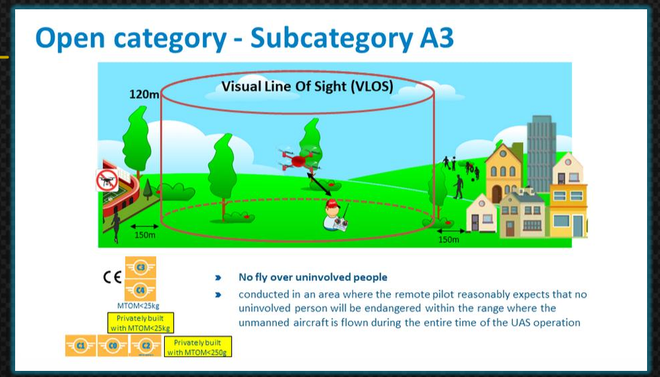
The Open category is designed for low-risk operations.

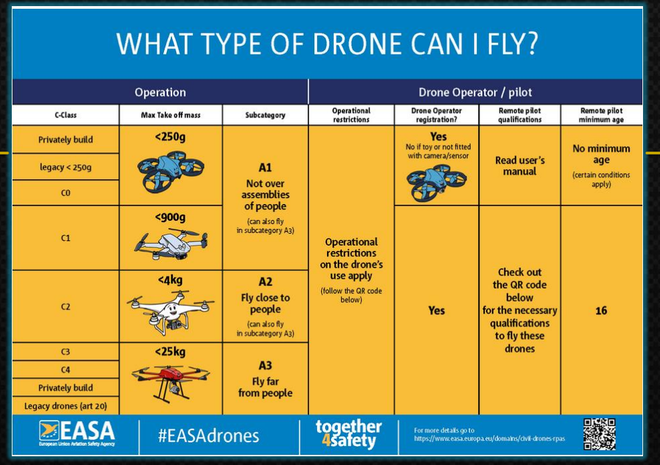
Specific Category

Operations falling outside the Open category's limitations are classified under the Specific category, which encompasses moderate-risk activities.

Certified Category

The Certified category addresses high-risk operations, including the transport of people or dangerous goods.





Difference Between A1/A3 and A2 Remote Pilot Licenses (EASA Regulations)

Category	A1 (Fly Over People)	A3 (Fly Far From People)	A2 (Fly Near People)
Drone Weight	Up to 900g	Up to 25kg	900g to 4kg
Operational Area	Can fly over people but **not over crowds**	Must fly far from people (at least **150m from residential, industrial, or recreational areas**)	Can fly **closer to people** but not over them
Training Required	Online training + online exam	Online training + online exam	A1/A3 training + self-practical training + additional theoretical exam
Exam Format	Online theory test	Online theory test	Additional **in-person** or **supervised exam**
Best For	Hobbyists, small drones in public areas	Rural or controlled areas, larger drones	Commercial operators who need to fly in populated areas

C3 (under 25 kg)

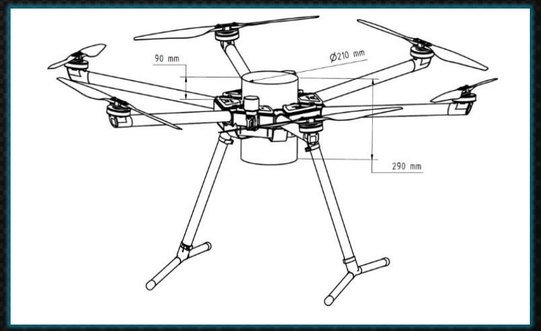
Subcategory	A3
Operational restrictions	◦ Must not overfly uninvolved people; ◦ Maintain a horizontal distance of 150 m from uninvolved people and urban areas; ◦ Maintain flight altitude below 120m above ground level.
Drone operator registration	Yes
Remote pilot competence	◦ Read carefully the user manual ◦ Obtain a 'Proof of completion for online training' for A1/A3 'open' subcategory by: ▪ Completing the online training ▪ Passing the online theoretical exam
Remote pilot minimum age	16*

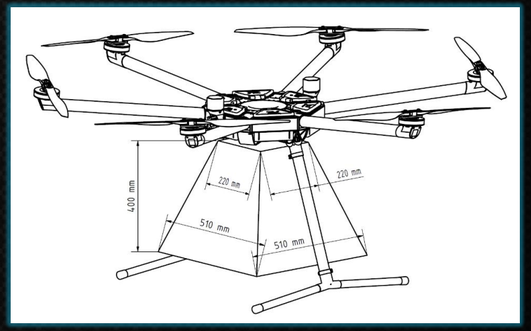
UAV MASS AND BALANCE

2.3.9.1.2 Integration instructions

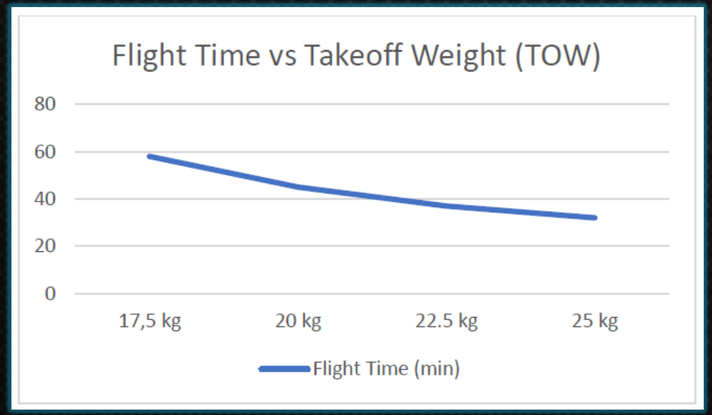
The starcopter HIGHDRA can be equipped with various standalone payload systems that are within the specified dimensions and weight. The UAV has a payload mount below that starcopter will configure for you before the rental, so that you can secure your payload via a payload adapter specified for your payload. starcopter will provide you with specific instructions for your payload.

Parameter	Value
Max. Weight	7.49 kg





Proper mass and balance are essential for stability, controllability and optimal flight performance



SPEED AND HEIGHT LIMITATIONS

Open Category-
120 m altitude limitations

No EASA countries Service ceiling

Payload up to 2.5 kg-3500 meters AMSL

Payload with maximum Takeoff mass-1500 meters AMSL

Position Mode-
Max. Hor. Speed – 12 m/s.

Altitude Mode-
Max. Hor. Speed- No inherent limit. Test-23 m/s.

Automatic Mode-Mission Mode
Default Speed – 12 m/s.

⚠	Only start the mission once the UAV is in the air. Do not use the takeoff action (see Quick Actions Sidebar) in AMC.
🛑	Do not set mission items below 10 meters AGL or HGT due to potential inaccuracies in elevation models, which could pose a safety risk.

ENVIRONMENTAL LIMITATIONS

Wind Limits

Condition	Maximum Wind Speed (Steady)	Maximum Gust Speed	Notes
Sensitive Operations	2 m/s	4 m/s	For precise tasks like mapping or inspections.
Normal Operations	5 m/s	7 m/s	Typical conditions for safe UAV flight.
Emergency Conditions	7 m/s	10 m/s	Only for unavoidable situations, such as unexpected weather changes.

Temperature and Humidity

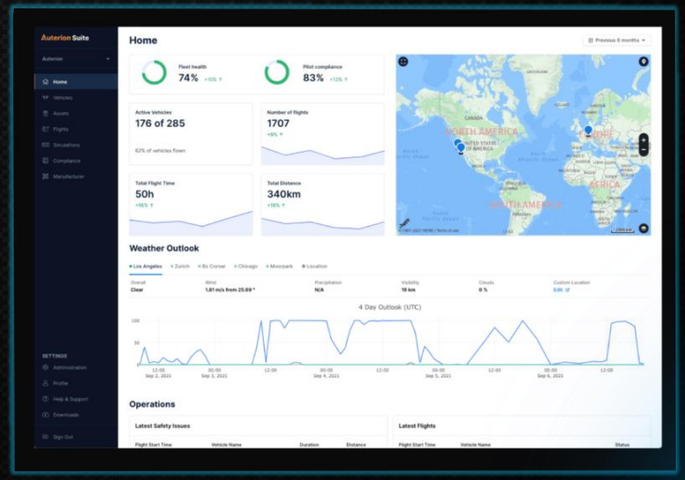
Temperature / Humidity		0% to 50%	50% to 80%	80% to 95%	>95 %
		Dry Conditions	**Normal operation**	**Increased moisture**	**Extreme Humidity, mist or fog present**
-10°C to 2°C	**Very Cold**	Normal flight	Avoid clouds, fog, mist.	High risk of icing. Avoid flying	High risk of icing. Reduced visibility. Avoid flying
2°C to 5°C	**Cold**	Normal flight	Normal flight	Potential for condensation on sensors and electronics.	High risk of condensation. Medium Risk of icing. Reduced visibility. Avoid flying
5°C to 30°C	**Standard**	Normal flight	Normal flight	Potential for condensation on sensors and electronics.	High risk of condensation, reduced visibility. Avoid flying

No operation in precipitation, thunderstorms, lightning and strong winds. Only dry conditions!

OTHER LIMITATIONS

2.4 Software Updates and UAV Upgrades by starcopter

starcopter will exclusively manage all software updates for you. In case of critical safety updates, starcopter will notify you via email, perform a guided update with you and handle all occurring software update issues.



5.8.2 *Other Critical UA Systems Limitations:*

The UAV's critical systems, including its propulsion, navigation, and communication systems, have specific operational limitations that must be respected. Do not exceed the recommended operational load or payload capacity, as doing so may affect stability, control, and overall system integrity.

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The Highdra

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