ROTORAMA

Oasisfly30 O4 Pro

Sub250 · frame for a 3" FPV drone
Assembly and user manual



Read the entire manual and the safety instructions before building and flying. Keep this manual.

www.rotorama.com

Contents

1. Product description

1.1 What it is for

1.2 Specifications and package contents

1.3 Parts overview

2. Safety instructions

3. Assembly and use

3.1 What else you need

3.2 Recommended build procedure

3.3 Battery

4. Operating the finished drone

4.1 The law of the country where you fly applies

4.2 Basic rules in the Czech Republic

5. Maintenance and spare parts

6. Information for the EU and Czech Market

6.1 Importer and responsible person in the EU

6.2 Disposal

7. Warranty and rights arising from defective performance

1. Product description

1.1 What it is for

Sub250 Oasisfly30 O4 Pro is a frame for building a small 3" freestyle FPV drone. It is designed for both digital and analogue video transmission, including the **DJI O4 Pro** system. The FPV camera sits in front of the front motors, so the edges of the propellers are not visible in the camera view. The camera angle can be adjusted within 0–20°.

The arms are made of 3 mm thick carbon fibre. 3D-printed plastic side panels protect the electronics from dirt. The camera is held in aluminium side plates via silicone inserts that dampen the transmission of vibrations to the camera. The DJI O4 unit is easily accessible for pairing (bind) and for connecting to a computer. The frame is a kit – motors, electronics, propellers and battery are not included.



Example of a drone built on an Oasisfly O4 Pro series frame (illustrative photo from the manufacturer; motors, electronics, propellers and antennas are not included).

1.2 Specifications and package contents

Product designation	Sub250 Oasisfly30 O4 Pro
Manufacturer	Sub250 (www.sub250.com, support@sub250.com)
Product type	frame (kit) for a 3" FPV drone
Motor-to-motor diagonal	150 mm
Propeller size	3"
Arm thickness	3 mm (carbon fibre)
Camera size	19–20 mm
Camera angle adjustment	0–20°
Motor mounting holes	9 mm / 12 mm, M2
Stack mounting holes	20×20 mm, M2
VTX mounting holes	20×20 mm / 25.5×25.5 mm, M2

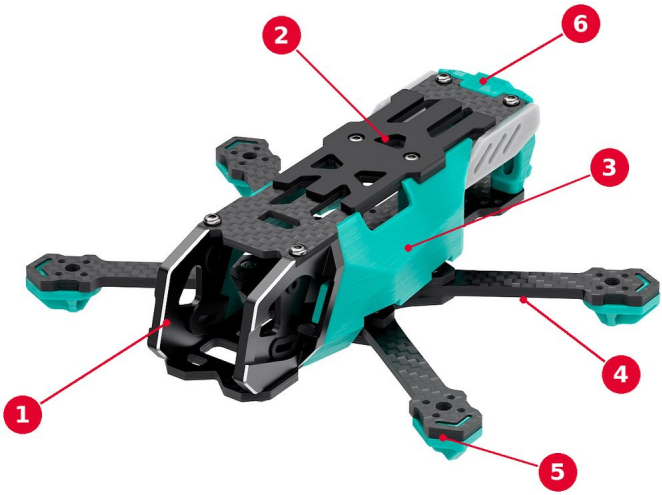
▶ Package contents

- 1× frame
- 1× set of 3D-printed parts
- 2× battery strap (LiPo strap)
- 1× battery pad

▶ NOT included

Motors, flight controller (FC) with electronic speed controllers (ESC), video transmitter (VTX) or DJI O4 Pro unit, FPV camera, receiver, antennas, propellers, battery, charger, radio transmitter and FPV goggles. Screws for mounting the motors and electronics are not listed in the package contents – choose their length according to the components used.

1.3 Parts overview



Oasisfly30 O4 Pro frame – main parts

① Aluminium camera side plates with silicone inserts
② Top plate (carbon fibre)
③ 3D-printed side cover of the electronics
④ 3 mm thick carbon fibre arm
⑤ 3D-printed arm pad (foot)
⑥ 3D-printed rear antenna mount

2. Safety instructions

- The frame is intended for building an FPV drone by persons with basic knowledge of electronics and soldering. The product is not a toy and must be kept away from children.
- Carbon fibre parts have sharp edges. Sanding or drilling carbon fibre produces dust that irritates the respiratory tract and skin and is **electrically conductive**. Wear respiratory protection, extract the dust and remove it from the electronics.
- Carbon fibre is conductive – cables and solder joints must not touch the edges of the carbon plates. Protect sharp edges where cables are routed, otherwise there is a risk of a short circuit.
- Motor screws must not be too long – a screw that touches the motor windings will damage the motor and may cause a short circuit.
- Always remove the propellers before connecting the battery. Fit the propellers only after checking the motor rotation direction.
- Handle LiPo and LiHV batteries according to their manufacturer's instructions. Charge them under supervision on a non-flammable surface and never charge a damaged or swollen battery.
- Rotating propellers can cause serious injury. Fly the finished drone only at a safe distance from people, animals and property.

3. Assembly and use

3.1 What else you need

- 4 motors for 3" propellers with 9 mm or 12 mm mounting holes for M2 screws,
- a flight controller (FC) and electronic speed controllers (ESC) in a 20×20 mm stack format, or an AIO board of the same format,
- a video transmission system – digital (e.g. DJI O4 Pro) or analogue; a VTX with 20×20 mm or 25.5×25.5 mm hole spacing and a 19–20 mm camera,
- a receiver, antennas, 3" propellers, battery, charger, radio transmitter and FPV goggles,
- M2 screws of suitable length, tools (hex keys, soldering iron) and thread-locking compound.

3.2 Recommended build procedure

① Inspect all frame parts – the carbon plates and arms must not show any cracks or delaminated layers.

② Attach the motors to the arms with M2 screws of suitable length. Apply thread-locking compound and make sure the screws do not touch the windings.

③ Mount the stack (FC and ESC) on the 20×20 mm holes and the VTX on the 20×20 mm or 25.5×25.5 mm holes. Route the cables so that they do not touch the edges of the carbon fibre.

④ Insert the camera between the aluminium side plates with silicone inserts and set the desired angle (0–20°). Tighten the camera screws gently.

⑤ Fit the 3D-printed parts – side covers, arm pads and antenna mounts – and attach the top plate.

⑥ Stick the battery pad onto the top plate and thread the battery straps through.

⑦ Before the first flight, set up the flight controller according to its manufacturer's instructions, check the motor rotation direction and only then fit the propellers.

※ The exact assembly order and screw lengths may differ depending on the electronics used. Also follow the instructions of the manufacturers of the individual components.

3.3 Battery

Secure the battery with both straps on the pad on the top plate so that it cannot shift in flight and its cables cannot reach the propellers. Always insert a **fully charged** battery before flight – LiPo 4.20 V/cell, LiHV 4.35 V/cell. End the flight at 3.5 V/cell at the latest and store the battery at 3.8 V/cell.

4. Operating the finished drone

4.1 The law of the country where you fly applies

Regulations (EU) 2019/947 and 2019/945 apply in all member states of the European Union, but national implementing rules differ from country to country – registration portals, minimum pilot age, geographical zones, mandatory insurance, permitted frequency bands and maximum transmit power. The information in this chapter describes the situation in the Czech Republic. If you operate the drone in another country, you must follow the regulations of the country in which you fly.

4.2 Basic rules in the Czech Republic

- A drone built from this frame has no C0–C4 class. It can be operated as a privately built unmanned aircraft system in the open category – in subcategory A1 if its maximum take-off mass (including battery) is less than 250 g, otherwise in subcategory A3 – or within a model aircraft club. Therefore weigh the finished drone.
- If the drone has a camera, the operator must be registered with the Civil Aviation Authority (ÚCL) regardless of the drone's weight, and the registration number must be displayed on the drone.

- Fly no higher than 120 m above ground and within visual line of sight. Do not fly over assemblies of people and respect geographical zones.
- When flying with FPV goggles, an observer must stand next to the pilot and keep the drone in visual line of sight.
- The user is responsible for setting the frequency and transmit power of the receiver and video transmitter – observe the limits applicable in the country of operation.

5. Maintenance and spare parts

- After every flight, and especially after a crash, inspect the arms and plates. Replace cracked or delaminated carbon parts – they may fail in flight.
- Regularly check that the screws are tight, especially the screws of the motors, arms and camera.
- Check the silicone inserts of the camera mount; replace worn or torn inserts.
- Damaged 3D-printed parts can be reprinted. The manufacturer Sub250 provides STL files (arm pads, side covers, antenna mounts) on its Oasisfly30 O4 Pro drone page at www.sub250.com.
- Spare parts (arms, plates, aluminium parts, silicone inserts) are supplied by the manufacturer as separate items; check availability with your retailer.

6. Information for the EU and Czech Market

6.1 Importer and responsible person in the EU

The product is placed on the European Union market by the importer stated below, who is at the same time the responsible person within the meaning of Article 16 of Regulation (EU) 2023/988 of the European Parliament and of the Council on general product safety (GPSR).

Importer / responsible person in the EU	Rotorama, s.r.o.
Company ID (IČO)	051 57 692
VAT ID (DIČ)	CZ05157692
Registered office	Okrajová 1351, 674 01 Třebíč, Czech Republic
E-mail	info@rotorama.cz
Phone	+420 252 252 098
Website	www.rotorama.com

6.2 Disposal

- The frame itself contains no electrical or electronic components and no batteries.
- Dispose of carbon fibre, aluminium, plastic and silicone parts and the straps according to the waste management rules of your municipality; take metal parts to metal collection. Do not burn carbon fibre parts.
- Sort the packaging by material (paper, plastic).
- Dispose of the motors, electronics and batteries you have installed in the frame separately as electrical waste and batteries according to their instructions – they do not belong in mixed waste.

7. Warranty and rights arising from defective performance

The rights and obligations of the contracting parties are governed by Czech law, in particular by Act No. 89/2012 Coll., the Civil Code, and Act No. 634/1992 Coll., on consumer protection.

- The seller is liable to the buyer for the product being free of defects on receipt. If the buyer is a consumer, a defect may be notified **within two years of receipt** of the product (Section 2165 of the Civil Code).
- If a defect appears within **one year** of receipt, the product is deemed to have been defective already at the time of receipt (Section 2161(5) of the Civil Code).
- When purchasing online, a consumer has the right to **withdraw from the contract within 14 days** of receiving the goods without giving a reason (Section 1829 of the Civil Code).
- Claims should be made with the retailer from whom you purchased the product. The importer's contact details are given in Chapter 6.1.
- The competent body for out-of-court settlement of consumer disputes is the **Czech Trade Inspection Authority**, Štěpánská 796/44, 110 00 Prague 1, www.coi.cz.