Hurricane 3520-3

Gemfan · 3.5" three-blade propeller for FPV drones
User manual



Read this manual before mounting and the first flight. Rotating propellers can cause serious injury.

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1. Product description

1.1 Intended use

The Gemfan Hurricane 3520-3 is a three-blade propeller with a diameter of 3.5" and a pitch of 2" for 3.5" FPV drones (multicopters). It is made of polycarbonate (PC) and is attached to the motor by a T-mount fitting for a 1.5 mm motor shaft.

The manufacturer designs it for freestyle flying and recommends it for 1806–2004 size motors and drones with a take-off weight of 250–380 g. The pack contains two propellers for each direction of rotation, so one set is enough for one quadcopter.



Hurricane 3520-3 propellers – a pair for opposite directions of rotation (grey version)

1.2 Specifications and package contents

Product designation	Gemfan Hurricane 3520-3 (bag label: 3.5x2x3 ...-1.5MM 2L2R)
Manufacturer	Ningbo Gemfan Hobby Co., Ltd., Room 1501, Building 655 Xueshi Road, Yinzhou District, Ningbo, China; contact@gemfanhobby.com; www.gfprops.com
Diameter	3.5" (89.5 mm)
Pitch	2"
Number of blades	3
Material	polycarbonate (PC)
Mounting	T-mount, centre hole for 1.5 mm shaft
Hub thickness	5.5 mm
Max. blade width	11.7 mm
Weight	1.8 g (1 propeller)

Recommended motors	1806–2004
Recommended drone take-off weight	250–380 g
Colour	according to the selected variant
Package contents	2× CW propeller, 2× CCW propeller
Not included	mounting screws, motors, tools



Propeller hub: centre hole for the 1.5 mm shaft and two holes for the T-mount screws

2. Use

2.1 Safety instructions

- Always fit and remove the propellers **with the battery disconnected**.
- When connecting the drone to a computer, testing motors, binding or configuring it on the bench, keep the propellers **removed**.
- A rotating propeller can cause serious cuts. Do not approach a drone with a connected battery and keep a safe distance from people and animals.
- Do not use cracked, bent, chipped or otherwise damaged propellers – they can break in flight and the fragments fly off at high speed.
- When choosing the motor and drone, follow the manufacturer's recommendations given in Chapter 1.2.
- When flying, observe the regulations for unmanned aircraft that apply in the country where you fly.
- This product is not a toy. Keep it out of the reach of children.

2.2 Direction of rotation (CW and CCW)

The pack contains propellers for both directions of rotation: **CW** (clockwise) and **CCW** (counter-clockwise). The bag label marks this as **2L2R** – two propellers for each direction.

- Each motor must be fitted with the propeller matching its direction of rotation. The direction of rotation of the motors is determined by the drone configuration and the flight controller (FC) settings, e.g. in Betaflight.
- Fit the propeller so that the leading edge of the blade moves in the direction of motor rotation and the propeller pushes air downwards.
- On a typical X-shaped quadcopter, diagonally opposite motors rotate in the same direction – they take propellers of the same type.

A propeller fitted upside down or on a motor with the opposite direction of rotation does not produce correct thrust. The drone will flip over on take-off or may shoot off uncontrollably.

2.3 Mounting on the motor

① Disconnect the battery.

② Place the propeller on the bell of a T-mount motor so that the motor shaft passes through the centre hole and the screw holes line up with the holes in the motor bell.

③ Fasten the propeller with the screws intended for the motor. The screws are not included with the propellers; their type and length are specified by the motor manufacturer.

④ Tighten the screws gradually and with care. A screw that is too long can damage the motor windings; overtightening can damage the propeller hub.

⑤ Check that the propeller sits flat on the motor bell, does not wobble and turns freely without touching the frame, cables or duct.

2.4 Pre-flight check

- Each propeller matches the direction of rotation of its motor.
- The screws are tight and the propeller does not wobble.
- The blades are not cracked, bent or chipped.
- After changing propellers, perform the first Arm (motor start) in a safe place at a sufficient distance from people and check that the drone lifts off level when you apply a little throttle.

3. Maintenance, replacement and storage

3.1 Inspection after flight and after a crash

- After every flight, and especially after a crash, inspect all propellers. Look for cracks near the hub, chipped blade tips, bent blades and whitish stress marks in the plastic.
- Replace a damaged propeller. Do not straighten or glue bent or cracked propellers.
- New jello in the camera image or an unusual motor sound often indicate a damaged or loose propeller.
- After a crash, also check that the screws are tight and inspect the motor bell and shaft.

3.2 Cleaning and storage

- Remove dirt and grass with a dry cloth or lukewarm water; let the propellers dry before further use. Do not use solvents.
- Store the propellers in a dry place, away from direct sunlight and heat sources, so that the blades are not loaded and cannot bend.

4. Information for the EU and Czech Market

4.1 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

4.2 Disposal

- The propeller contains no electrical or electronic components and is not subject to the take-back of electrical equipment.
- Dispose of worn or damaged propellers and the plastic packaging as sorted waste according to the waste management rules of your municipality (usually as plastic), or at a collection yard.
- The information in this chapter describes the situation in the Czech Republic. If you use the product in another country, follow the regulations of the country in which you use it.

5. 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 4.1.
- 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.