

Link do produktu: <https://www.nobshop.pl/dron-betafpv-air75-ii-whoop-elrs-champipn-racing-freestyle-p-5237.html>



Dron BetaFPV Air75 II whoop ELRS Champipn / Racing / Freestyle

Cena brutto	479,99 zł
Cena netto	390,24 zł
Dostępność	Dostępny
Czas wysyłki	1 - 3 dni
Producent	BetaFPV

Opis produktu

Edycja produktu **Dron BetaFPV Air75 II whoop ELRS Champipn / Racing / Freestyle**

Engineered for the next generation of 1S performance, the Air75 II redefines the balance of power and resilience. At its core, a specialized propulsion system offers three distinct configurations—Champion, Racing, and Freestyle—each tuned with specific motor and propeller combinations for optimized thrust, response, and control. This precision-tuned power is matched by a rugged, purpose-built design, featuring the durable Matrix 5IN1 II Flight Controller with a high-output 12A ESC and a reinforced frame & canopy crafted to withstand repeated impacts. Built to deliver relentless performance in every flying style, the Air75 II is the ultralight whoop that doesn't hold back.

Note: Due to the shortage of IMU chip ICM42688, BETAFPV team has found new IMU chips including ICM42622, BMI270, and LSM6DSK320X, and built compatible firmwares. Extensive testing confirms they all meet our strict quality standards. Betaflight has not yet released official firmwares compatible with some of the IMU chips, so please do not flash the official Betaflight firmware and pay attention to future support updates.

Bullet Points

- Three Performance-Tuned Versions: Choose the setup that fits your style.
 - Champion: Max-power 0802 28000KV motors & GF 1614 3-B Props for pro racing.
 - Racing: 0802 25000KV motors & GF 1614 3-B Props for razor-sharp throttle response on technical courses.
 - Freestyle: 0802 22000KV motors & GF 1614 3-B Props for smooth, efficient, and cinematic flying.
- 0802 Brushless Motors (2026): Feature a revolutionary 0.1mm stator core, specific magnetic and winding designs for Champion, Racing and Freestyle versions.
- Matrix 5IN1 II FC: Features a robust 12A continuous ESC, 3-point mounting, and a 1.0mm thickened PCB for superior power and resilience.
- Air II Canopy: Features upgraded materials, strategic reinforcements and a redesigned curve with a 15° to 45° adjustable camera angle.
- Air75 II Frame: Its optimized ducts, connecting braces, and PP blend ensure stable, reliable flights.
- Lightweight & Flight Time: An ultra-lightweight design achieves up to 7:30 flight time with the LAVA II 1S 480mAh battery.

Specifications

	Champion	Racing	Freestyle
Weight	20.2g	20.9g	21.3g
Antenna	Whip		Dipole

Frame	Air75 II		
Wheelbase	75mm		
Canopy	Air II Canopy		
FC	Matrix 1S 5IN1 II		
ESC	1S 12A		
VTX	Onboard 5.8G 25mw~400mw		
RX	Onboard Serial ELRS 2.4G		
Camera	C03		
Props Motors	GF 1614 3-B Champion 0802 (28000KV) - dual-ball bearings	Racing 0802 (25000KV) - brass bushings	Freestyle 0802 (22000KV) - brass bushings
Motor Connection Flight Time (with LAVA II 1S 480mAh Batt)	Soldering 6:50	JST1.25 3Pin connector 7:00	JST1.25 3Pin connector 7:30
Battery Connector	BT2.0 U Cable Pigtail		
Recommended Battery	LAVA II 1S 480mAh/580mAh		

Three Propulsion Systems

The Air75 II expands its lineup with three distinct performance profiles: Champion, Racing, and Freestyle. Each version is powered by new 0802 brushless motors, featuring an industry-first 0.1mm stator core, specific magnetic and winding designs for superior efficiency and power. Combined with the new GF 1614 3-blade props and driven by the high-output Matrix 1S 5IN1 II Flight Controller—with a 12A continuous (18A peak) ESC—this system is built to reliably meet extreme current

demands.

The Champion is equipped with dual-ball bearing Champion 0802 Motors (28000KV) for maximum power, achieving an exceptional 7.1:1 thrust-to-weight ratio for explosive acceleration and track dominance. The Racing features Racing 0802 Motors (25000KV) tuned for razor-sharp throttle response and agility on technical courses. The Freestyle utilizes Freestyle 0802 Motors (22000KV) optimized for smooth control, superior low-end torque, and efficient, fluid flying.

Durability

Flight Controller

The Matrix 1S 5IN1 II FC employs a 3-point mounting system that creates cushioning space during impacts, reducing stress on core components and lowering the damage rate by up to 80%. Its 1.0mm thickened PCB and optimized layout further enhance crash resilience.

New Canopy & Frame

Every version is built on the same foundation: the Air II Canopy and the Air75 II Frame, featuring strategic reinforcements and upgraded materials. This combination ensures consistent durability and reliable performance in every flight.

Community Feedback

In direct response to valuable discussions within the FPV community regarding the durability of Air 5IN1 FC, we conducted a poll across the Tiny Whoop and BETAFPV Facebook groups. The results were clear: over 50% of pilots prioritized improved crash resilience in the Air Series. This feedback became our central design goal for the Air75 II. Learn more about the poll: <https://www.facebook.com/groups/tinywhoop/posts/4292951027592546/>

To develop an effective solution, our R&D team evaluated multiple design approaches. Tests indicated that removing a rubber grommet could significantly improve impact protection. To validate this finding, we executed a systematic crash test protocol, comparing the new configuration directly against previous designs.

- Air Whoops Tested:
 - Air65 (Air 5IN1 FC): With 4 rubber grommets.
 - Air65 (Air 5IN1 FC): With the front rubber grommet removed.
 - Air65 II (Matrix 1S 5IN1 II): With the front rubber grommet removed.
 - Air75 II (Matrix 1S 5IN1 II): With the front rubber grommet removed.
- Method:

Each unit was accelerated 5 meters in a straight line at level flight throttle and crashed horizontally into a wall. Image transmission, OSD, and receiver signals were monitored after each impact. The test concluded after 20 crashes or upon observed failure.

- Test Results:

Configuration Tested	Units Tested	FCs Damaged After 20 Crashes	Failure Rate	Key Observations
Air65 Racing (4 grommets)	5	5	100%	All FCs failed.
Air65 Racing (3 grommets)	5	1	20%	One OSD failure at crash 16; others operational.
Air65 II Racing (3 grommets)	4	0	0%	No failures; no significant deformation.
Air75 II Racing (3 grommets)	4	2	50%	Mixed results; two FCs remained operational.

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- The Engineering Solution:

The data was conclusive: removing the front rubber grommet dramatically reduced stress transfer to the flight controller, lowering the risk of crash-related FC damage by approximately 80%, with negligible impact on flight performance. We took this further in the Air75 II by fully integrating a 3-point mounting system. When combined with the new Matrix 1S 5IN1 II's 1.0mm thickened PCB and internal reinforcements, the result is a significantly more resilient whoop.

Precision-Tuned Flying Experience

Every component, from the motor and propeller combination to the flight controller parameters, is meticulously calibrated for each version. This results in three distinct flying characters: the smooth, efficient Freestyle, the razor-sharp Racing, and the max-power Champion—ensuring an optimized experience for every pilot and environment.

Recommended Parts

- Radio Transmitter: LiteRadio 3, LiteRadio 2 SE
- FC: Matrix 1S 5IN1 II Brushless FC
- Battery: LAVA II 1S 480mAh/580mAh Battery, LAVA 1S 450mAh 75C Battery
- Props: GF 1614 3-B Props
- Motor: 0802 Brushless Motors (2026)
- Frame: Air75 II Frame
- Canopy: Air II Canopy
- Screws: Drone Screw Pack, Meteor Series Motor Fixing Screws Pack (40PCS)
- Sticker: BETAFPV Waterslide Decals

File

- Download the CLI and Firmware for the Air75 II Champion/Racing/Freestyle

Package

- 1 * Air75 II Brushless Whoop Quadcopter | Champion/Racing/Freestyle
- 4 * GF 1614 3-B Props
- 4 * M1.4*3 Screws
- 1 * Air II Canopy
- 2 * M1.4*5 Self-tapping Screws
- 4 * M1.4*4 Self-tapping Screws
- 2 * H0.8 Shock-absorbing Balls
- 1 * Type-C to SH1.0 Adapter Board
- 1 * SH1.0-4Pin Adapter Cable

Produkt posiada dodatkowe opcje:

Wersja: Racing