

# AOEXO 15-inch FPV Drone Specifications

深圳市飞雄科技有限公司

Shenzhen AOEXO Technology Co., Ltd.

*15-inch FPV drone, UAV carbon fiber long-distance heavy-load FPV drone*

*(stable supply of 50,000+ drones per month, customized configurations available*

*according to demand)*



## Product Overview

The AOEXO 15-inch FPV Drone is engineered for long-range, heavy-payload industrial applications. Built with a **3K T300 carbon fiber frame** (bare weight:

2080g), it combines lightweight agility with military-grade durability. Equipped with **4214 380KV motors** and **80A ESCs**, it supports a **max takeoff weight of 12kg** and offers customizable 3W VTX/1800TVL night vision cameras for 24/7 operations. The F405ICM8SMINIOSD flight controller ensures millimeter-level hover accuracy and anti-interference capabilities, ideal for cinematography, industrial inspections, and emergency response. With a 6S 20000mAh battery, it achieves **25-minute flight time (light load)** and **15km+ control range**.

## Key Features

**Aerospace-Grade Frame:** 3K T300 carbon fiber, 647mm wheelbase, 30% higher torsional strength.

**High-Efficiency Powertrain:** 4214 380KV motors + 80A ESCs, 3200W peak power, thrust-to-weight ratio 1:3.8.

**Modular Design:** Optional F405 FC, 3W VTX, 1800TVL camera, ELRS/Crossfire compatibility.

**Precision Control:** Dual-redundant IMU + barometer,  $\pm 0.3\text{m}$  hover accuracy (GPS mode), Level 7 wind resistance.

**Extended Range:** 15km+ control, 25min endurance (6S 20000mAh).

**All-Day Imaging:** 1800TVL camera with 0.00005Lux sensitivity, IR illumination + Super HDR.

**Industrial Protection:** IP55 rated, operational at  $-20^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ .

**Payload Flexibility:** Quick-release mounts for gimbals, LiDAR, or cargo pods (5kg max).

**Safety Systems:** Dual GPS, auto-return, low-voltage alerts, geofencing.

**Open-Source Compatibility:** Supports Betaflight/INAV/ArduPilot.

## Technical Specifications

### Aircraft Parameters

Parameter	Value
Bare Weight	2080g
Max Takeoff Weight	12kg
Wheelbase	647mm
Frame Material	3K T300 Carbon Fiber (4mm)
Dimensions (Unfolded)	517×517×80mm
Max Horizontal Speed	85km/h (full load)
Ascent/Descent Speed	8m/s / 6m/s
Hover Accuracy (GPS)	Vertical ±0.3m / Horizontal ±0.5m
Wind Resistance	Level 7

Parameter	Value
Operating Temperature	-20°C ~ +50°C
IP Rating	IP55

### Powertrain

Component	Specification
<b>Motor</b>	
Model	AOEXO-4214
KV Rating	380KV
Poles	14
Stator Size	Φ42×14mm
Max Power	800W (per motor)
Cooling	Aluminum alloy shell + internal airflow
<b>ESC</b>	
Model	AOEXO-80A Pro
Continuous Current	80A×4

<b>Component</b>	<b>Specification</b>
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Peak Current 100A (10S)

Firmware	BLHeli_32 32.9
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### **Propeller**

Model	1507 Fiber-Nylon
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Size 15×5.5inch (2-blade)

Weight	48g (per prop)
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Balance Precision ≤0.1g·cm

### **Electronics**

<b>Component</b>	<b>Specification</b>
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#### **FC (Optional)**

Model	F405ICM8SMINI OSD
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Processor STM32F405

Gyro	ICM-20689 + BMI088 (dual)
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Barometer Sensirion SDP810

Component	Specification
GPS	Dual M8N (GPS+BeiDou)
<b>VTX (Optional)</b>	
Power	3W (FCC/CE certified)
Frequency	1.2GHz/2.4GHz/5.8GHz (customizable)
Max Range	15km (interference-free)
Latency	≤40ms (1080P@60fps)
<b>Camera (Optional)</b>	
Sensor	1/1.8" Sony STARVIS 3
Resolution	1800TVL / 4K@30fps
Low-Light	0.00005Lux (IR-CUT auto)

### Certifications

**EMC:** FCC Part 15 / CE RED / SRRC

**Aviation Safety:** GB/T 38931-2020 Compliance

**Battery:** UN38.3 / MSDS / Air Transport Certified