AC-ZO-ZT-SPECS
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ACECORE TECHNOLOGIES

ZOE ZETONA 8

SPECIFICATION SHEET

Section 01
Product Description

DESCRIPTION

The Zoe Zetona is a lightweight, multipurpose Remotely Operated Aerial Vehicle for commercial use. Its compact and aerodynamic frame, supporting eight rotors, is designed to meet the versatile demands for the inspection and mapping industries. Although the Zetona is lightweight, it is still powerful enough to lift payloads up to 2.2 kg due to the stiff frame and custom designed coaxial motors.

GENERAL FEATURES

Front mounted payload in 2-axis gimbal
26 minutes endurance with A7r IV
Redundant propulsion system
Lightweight carbon fiber frame
All weatherproof

Single or dual operator setup
F9P RTK
ADS-B transponder
LiDAR obstacle avoidance
AES256 encrypted radio link

Full A7R iv control
Automatic image geotagging

Section 02
Product Specifications

SPECIFICATIONS

WEIGHTS

Maximum gross for takeoff (MTOW)	11.95 kg/ 26.35 lbs
Maximum payload	2.2 kg/ 4.85 lbs
Minimum standard empty weight*	4.95 kg/ 10.91 lbs

DRIVE

Energy type	Electrical
Number of motors	8
Motor type	Acecore MN-COAX360
Operating voltage	Up to 50V
Motor max con tinuous Power	2000 W
Idle speed	380 RPM/V
Number of ESCs	8
Max continuous current draw	55A

PROPELLER

Material	Carbon Fiber Reinforced Plastic (CFRP) / foamed core 3K Twill weave
Propeller setup	4 CW and 4 CCW propeller
Propeller type	18x6. 5-inch foldable propeller + 18x6. 5-inch fixed propeller

PAYLOAD

Vibration isolation system	Vertical wire damper system
Mounting options	Front mounted payload
Mounting system	Depending on user's preference
Battery rack	Top of centerpiece

Section 02
Product Specifications

AVIONICS

Flight controller	Cube flight controller
Version	Orange
Operating temperatures	-40°C (-40°F) to + 85°C (185°F)

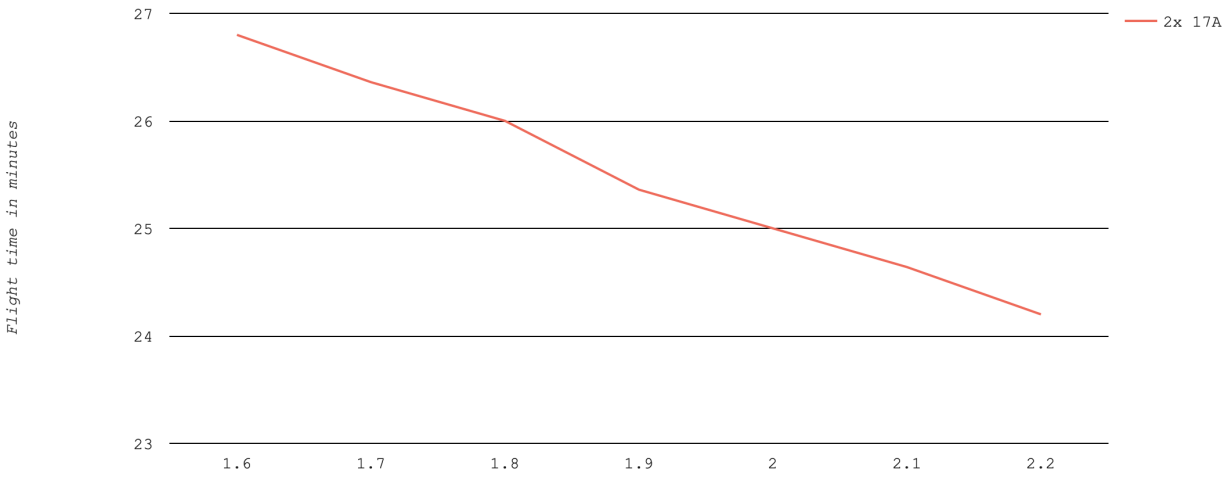
FLIGHT BATTERY

Energy type	Electrical
Battery	Lithium Polymer
Recommended make and models	Tattu 17000mAh,
Nominal battery voltage	22.2 V/ 6S
Minimum battery quantity	2 battery packs parallel
Maximum battery voltage	25.2V
Minimum average battery voltage	21.0V

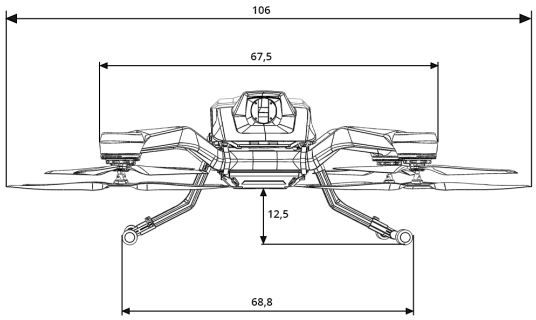
Section 03
Flight table

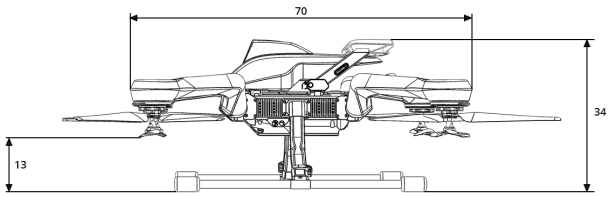
FLIGHT TIMES

These flight times are representations of the typical flight time in normal conditions and are depending on several factors. The conditions in which these flight times have been tested are at 20°C ambient temperature, a nominal wind speed of 8 knots while hovering at a height of 5 meters above ground. The Zoe Zetona is put back on the ground with 10 percent battery capacity left.



Section 04
Physical





DIMENSIONS

Frame dimensions	(lxwxh) 700x675x340 mm
Rotor to rotor diagonal	940 mm
Diameter with propellers	978,5 mm
Height up to bottom plate	125 mm
Ground clearance bottom propeller	130 mm

WEATHER LIMITATIONS

Maximum operating temperature	+50°C
Minimum operating temperature	-15°C
Maximum flight endurance	26 min @ 1.6KG payload
Maximum wind speed	25 knots
Maximum wind gusts	31 knots
Maximum precipitation	Moderate rain conditions, although it is recommended to fly in dry conditions.
Maximum downfall	10 mm/h, 30mm/3h

Section 05
Flight limitations

FLIGHT LIMITATIONS

Maximum pitch/ roll angle	45 Degrees from horizontal
Maximum yaw rate	150 Degrees a second
Maximum flight speed	91km/h horizontal
Flight modes	GPS mode – Atti tude mode – Auto mode – Brake – Stabilize
Typical ascent	5m/s
Typical descent	4m/s
Hovering accuracy	Vertical 0.05m/ Horizontal 0.05m
RTL cruise speed	Variable from 3 m/s to 9 m/s