AC-NE-SPECSHEET-2
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www.acecoretechnologies.com

ACECORE TECHNOLOGIES

NEO X8

SPECIFICATION SHEET

Section 01
Product Description

DESCRIPTION

The NEO is a lightweight multipurpose Remotely Operated Aerial Vehicle for commercial use. Its eight - rotor supported frame is designed to give the Pilot in Command the opportunity to use it for almost every mission in various weather conditions. The powerful and custom designed brushless motors increase the level of redundancy and make the system incredibly resistant for stronger wind gusts and high payloads. Due to the flexibility of mounting different battery capacity packs, it enables you to swap payloads. With a maximum take-off mass of 19 kg the NEO is an ideal platform for applicants with the highest demands.

GENERAL FEATURES

Robust carbon fiber frame

Up to 9 kilograms useful payload

All weatherproof

500m/ 5KM/ 16KM range

Single or dual operator setup

ADS-B ready transponder

AES256 encrypted radio link

Triple redundant autopilot

Section 02
Product Specifications

SPECIFICATIONS

WEIGHTS

Maximum gross for takeoff	19 kg/ 41.89 lbs
Maximum payload	9 kg / 19.84 lbs
Minimum standard empty weight*	7.3 kg / 16.09 lbs

DRIVE

Energy type	Electrical
Number of motors	8
Motor type	Direct Drive 3-phase BLDC out runner
Operating voltage	25V
Motor max con tinuous Power	900 W
Idle speed	450 RPM/V
Number of ESCs	8
Max continuous current draw	60A

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 fixed propeller

PAYLOAD

Vibration isolation system	Octo metal wire damper system
Mounting options	Top and bottom mounting possible
Mounting system	Depending on users preference
Battery rack	Top of centerpiece or below on quick release

Section 02
Product Specifications

AVIONICS

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

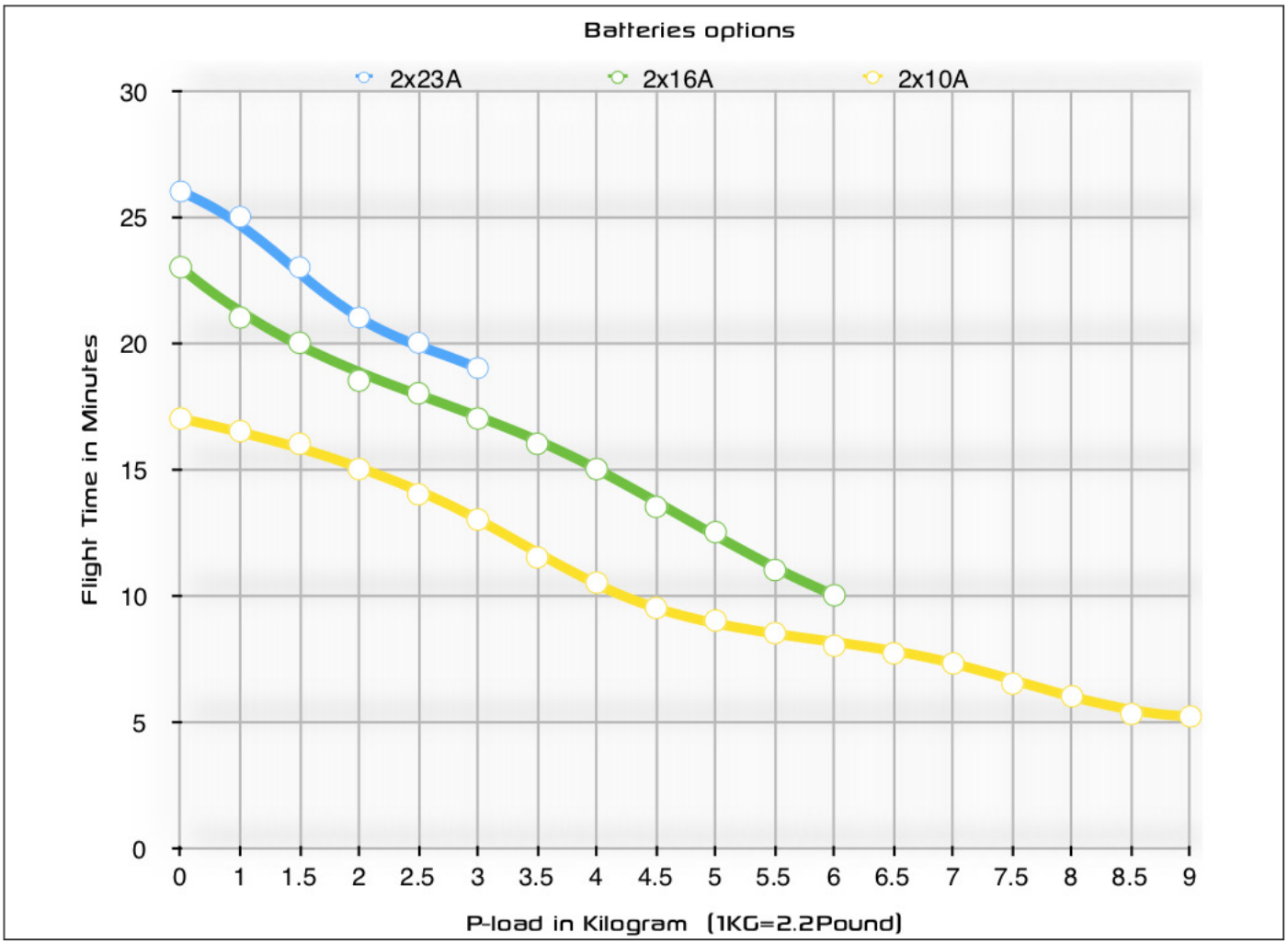
FLIGHT BATTERY

Energy type	Electrical
Battery	Lithium Polymer
Recommended make and models	Tattu 4500mAh, 10000mAh, 17000mAh, 23000mAh
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

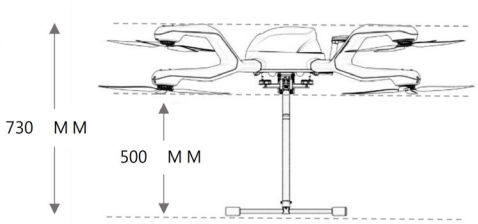
Section 03
Flight table

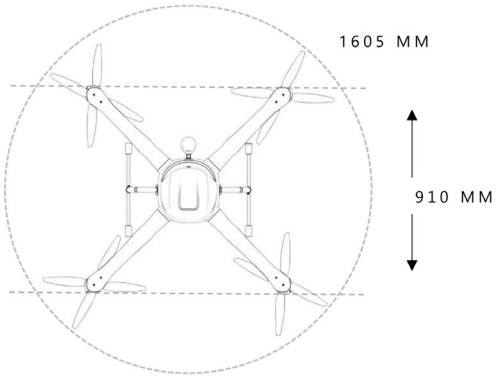
FLIGHT TIMES

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 Neo is put back on the ground with 10 percent battery capacity left.



Section 04
Physical





DIMENSIONS

Frame dimensions	(lxwxh) 910x910x635 mm
Rotor to rotor diagonal	1260 mm
Diameter with propellers	1605 mm
Height up to payload quick release	480 mm
Ground clearance top propeller	650 mm
Ground clearance bottom propeller	500 mm

WEATHER LIMITATIONS

Maximum operating temperature	+50°C
Minimum operating temperature	-15°C
Maximum flight endurance	25 min
Maximum wind speed	35 knots
Maximum wind gusts	40 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 per second
Maximum flight speed	91 km/h horizontal
Flight modes	GPS mode – Attitude 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

Section 06
Product Accessoires

ACCESSOIRES

The Acecore Neo drone comes with a wide array of accessoires to configure to your needs. Depending on the mission, there's options to choose from for controlling, transporting and using the highly dependable octocopter. Payloads are intentionally left out of this list as they can be configured independently of the platform. For a current overview of available payloads please visit www.**acecoretechnologies**.com

ACECORE GEORGE

FrSky and Herelink version available

On-board power

Up to 16km range

Dual- and single operator compatible

GROUND CONTROL STATION

Built in 15.6" 2000 nits monitor

Rugged IP casing

Integrated FrSky remote

On-board power

On-board TX video link

Section 06
Product Accessoires

COMPACT CASE

Carbon fiber or wooden structure

Foam cut interior

Designated slots for George and batteries

TETHER STATION

Achieve unlimited flight time

60-100m power cord

Redundant fail-safe battery

Encrypted data transfer

LR ALL-IN-1 LINK

Up to 5km range

Seamless drone integration

Drone control & video- telemetry link in one