



# ACECORE TECHNOLOGIES

## **NOA 6** <25 KG

SPECIFICATION SHEET

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# Section 01

## Product Description

### DESCRIPTION

Noa is the ultimate multipurpose Remotely Operated Aerial Vehicle for commercial use. Its six enlarged custom Acecore rotors were designed to enable the Pilot in Command to fly for an extended amount of time with various payloads. Thanks to Noa's modular quick release, there is no limit to the amount of payload that can be used. Gremsy, Freefly, DJI and LiDAR all fall within the possibilities. Due to the flexibility in battery options, users can balance payload and battery weight to allow for optimal flight efficiency. The six aerodynamic carbon fiber booms can be removed and redeployed through Acecore's quick release system, allowing for improved portability and a toolless setup.



### GENERAL FEATURES

- Robust carbon fiber frame
- Up to 8.1 kg kilograms useful payload
- Up to 60 minutes real-world flight time
- 500M/ 5KM/ 16KM range options
- Downfall resistant
- Single or dual operator setup
- ADS-B ready transponder
- AES256 encrypted radio link
- Triple redundant autopilot
- Dual GNSS GPS



## Section 02 Product Specifications

### SPECIFICATIONS

#### WEIGHTS

Maximum gross for takeoff	24.9 kg/ 54.9 lbs
Maximum payload	8.1 kg / 17.9 lbs
Minimum standard empty weight	11.4 kg / 25.1 lbs

#### DRIVE

Energy type	Electrical
Number of motors	6
Motor type	Direct Drive 3-phase BLDC out runner
Operating voltage	42V - 52V
Motor max continuous Power	2000 W
Idle speed	120 RPM/V
Number of ESCs	6
Max continuous current draw	40A/ motor

#### PROPELLER

Material	Carbon Fiber Reinforced Plastic ( CFRP ) / foamed core 3K Twill weave
Propeller setup	3 CW and 3 CCW propeller
Propeller type	28 x 9.2 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 locked by shark fin



# 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

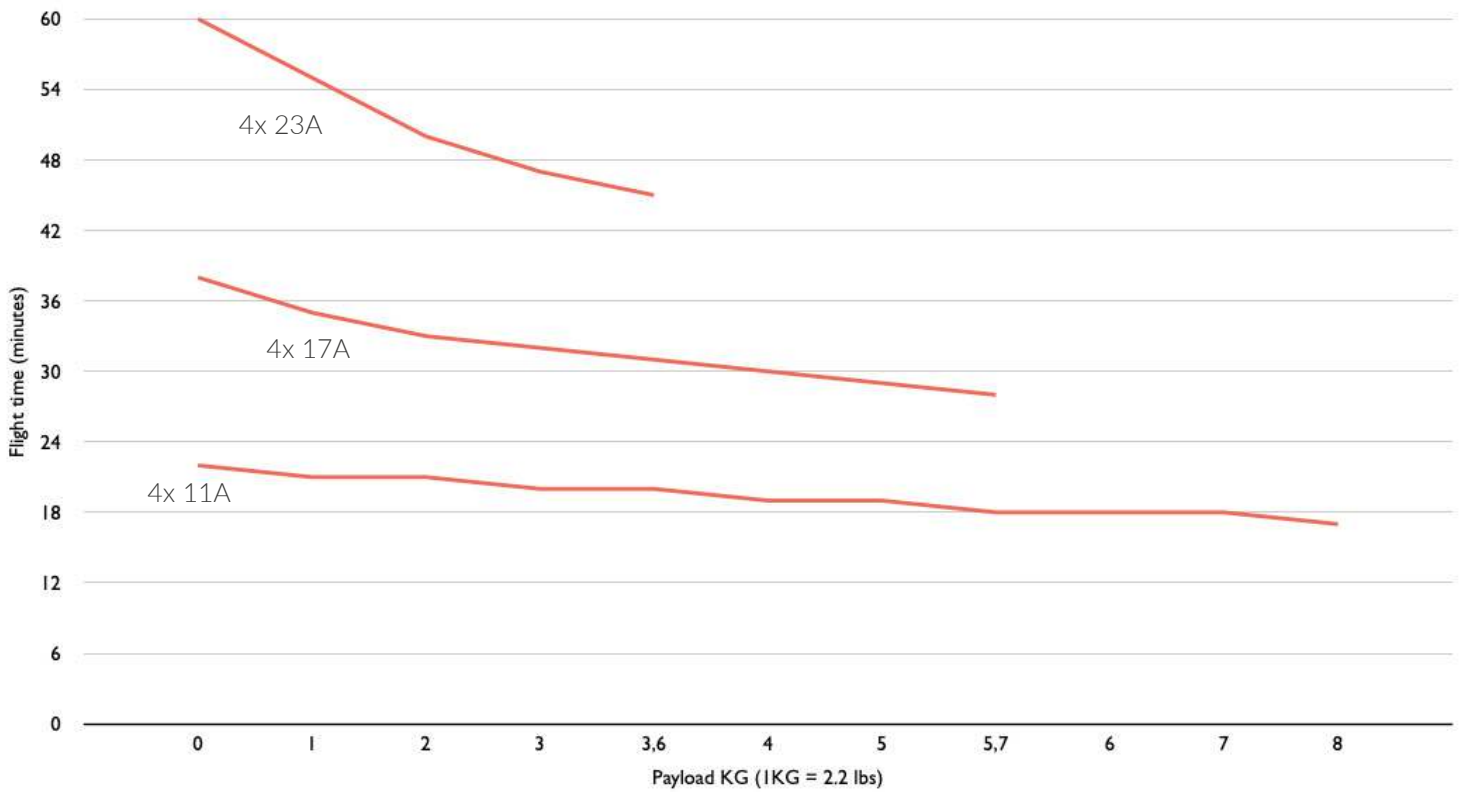
Energy type	Electrical
Battery	Lithium Polymer
Recommended make and models	11000mAh, 17000mAh, 23000mAh
Nominal battery voltage	48 V/ 12S
Minimum battery quantity	2x double battery pack serial
Maximum battery voltage	52V
Minimum average battery voltage	42V



# Section 03 Flight table

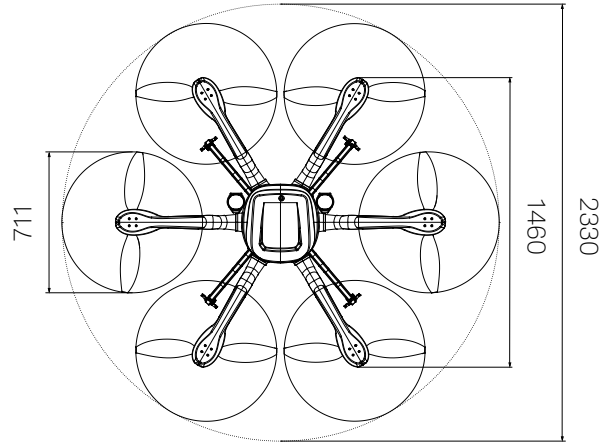
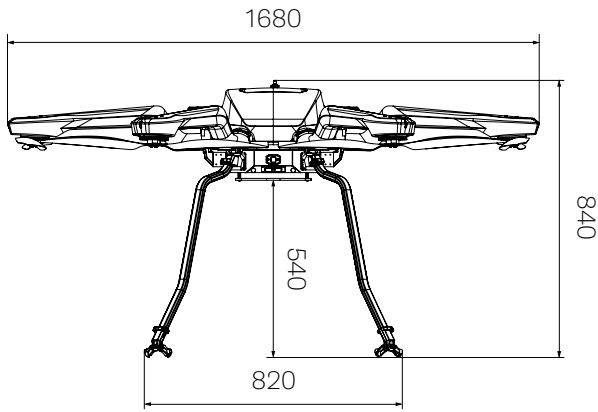
## FLIGHT TIMES

These flight times are representations of the typical flight time in normal conditions and depends 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 Noa is put back on the ground with 10 percent battery capacity left.



# Section 04

## Physical



### DIMENSIONS

Frame dimensions	(l x w x h) 1680x1680x840 mm
Rotor to rotor diagonal	1680 mm
Diameter with propellers	2330 mm
Height up to payload quick release	540 mm
Ground clearance to propeller	670 mm

### WEATHER LIMITATIONS

Maximum operating temperature	+50°C
Minimum operating temperature	-15°C
Maximum flight endurance	60 min
Maximum wind speed	28 knots
Maximum wind gusts	35 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	85 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

