



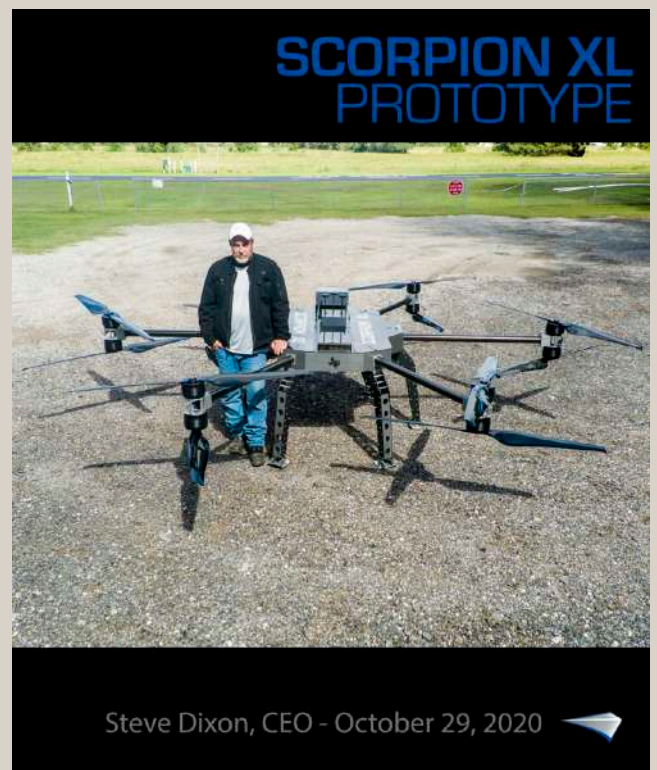
SCORPION XL (PROTOTYPE)

The SCORPION XL UAS is the first of its type super heavy lift drone. With its large frame, the UAS is capable of transporting a broad variety of payloads weighing up to 1000 pounds. Both top and bottom mounting options allow for unparalleled versatility.

The existing prototype is an impressive size, 18 feet from prop tip to prop tip.

Six booms hold twelve motors creating 2,694 pounds of thrust.

Made in Texas



GENERAL SPECIFICATIONS

Diagonal Wheel Base:

18 Feet (Tip To Tip) (5486.4 mm)

Height:

48.75 In. (1238.25 mm)

Gross Weight (Batteries
Included):

732 Pounds. (332.03 Kg)
(Prototype)

Payload Capacity:

1000 Pounds (453.59 Kg)

Maximum Altitude: t

10,000 Feet MSL
(3048 Meters)

Maximum Thrust:

2694 Lbs. (1221.98 Kg)

Maximum Speed:

43 Knots (79.64 Kph)

Battery Power System:

(20) 12S 22000 mAh LiPo in Series

Maximum Flight Duration

Battery:

47 Minutes

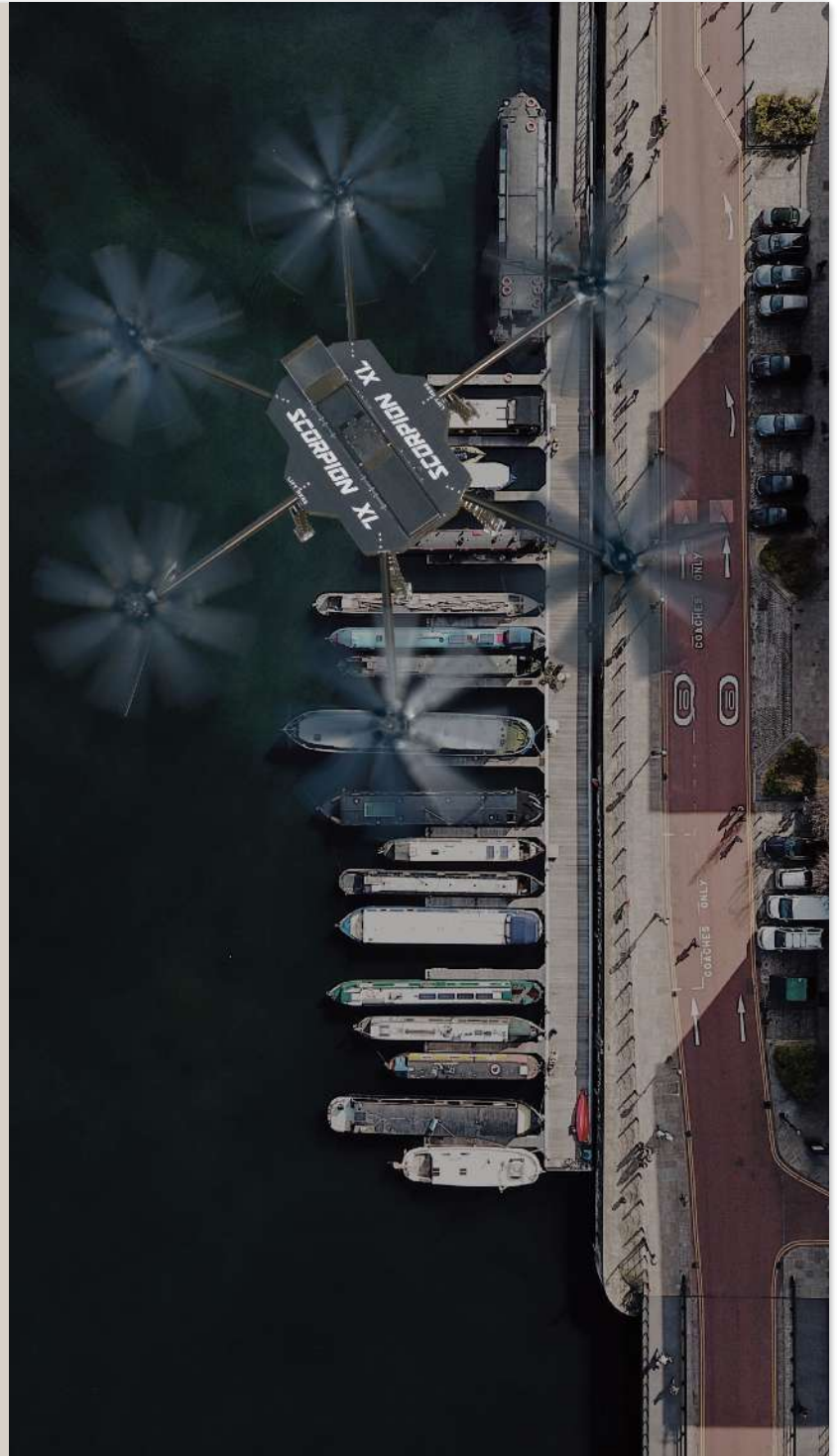
Maximum Flight Duration

Hybrid:

6 Hours. Prototype is battery only

Flight Control System:

Cube Blue (Mfg. In U.S.A.)



ANALYSIS

Power to Weight Ratio

3.7:1

FTA prioritizes power to weight ratios early in our design process. There is no alternative when it comes to safety and performance.

Flight Control System

Pixhawk 2.1 Blue Cube
Made in USA

Selected for security priorities.

Other options available

Flight Characteristics

Max Speed:
43 Knots (79.64 kph)

Max Duration (Battery):
47 Mins at Max Payload

Power

Motors: (12) U15XXL (24S)

Batteries: (20) 12S 22000 mAh
LiPo in Series

Max Thrust: 2,694 LBS

Construction

Props: (12) 62" Carbon Fiber

Booms: 6 Carbon Fiber,
Sleeved with 7075 Aluminum
(Prototype)

Frame: Aluminum (Prototype)

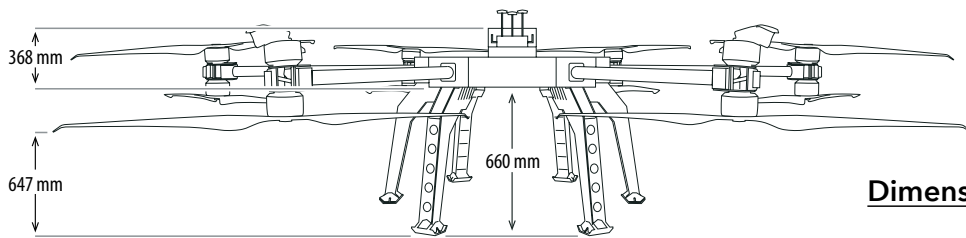
Payload

1000 LBS

Mounting options:
Top
Bottom
Both

SCORPION XL features a rugged structure and IP 66 rating. Fly with confidence in virtually any environment. Boom construction eliminates structural fatigue. Prototype frame is milled from a single ingot of 7075 aluminum. Production model frames are milled from an AZ31 Magnesium ingot making them 45% lighter and 15 times stronger. Production booms are also AZ31, stronger than titanium. Carbon Fiber/Kevlar hybrid panels are used for the outer skin. SCORPION XL can be fully assembled onsite with a crew of two in approximately twenty minutes.

PHYSICAL



Dimensions:

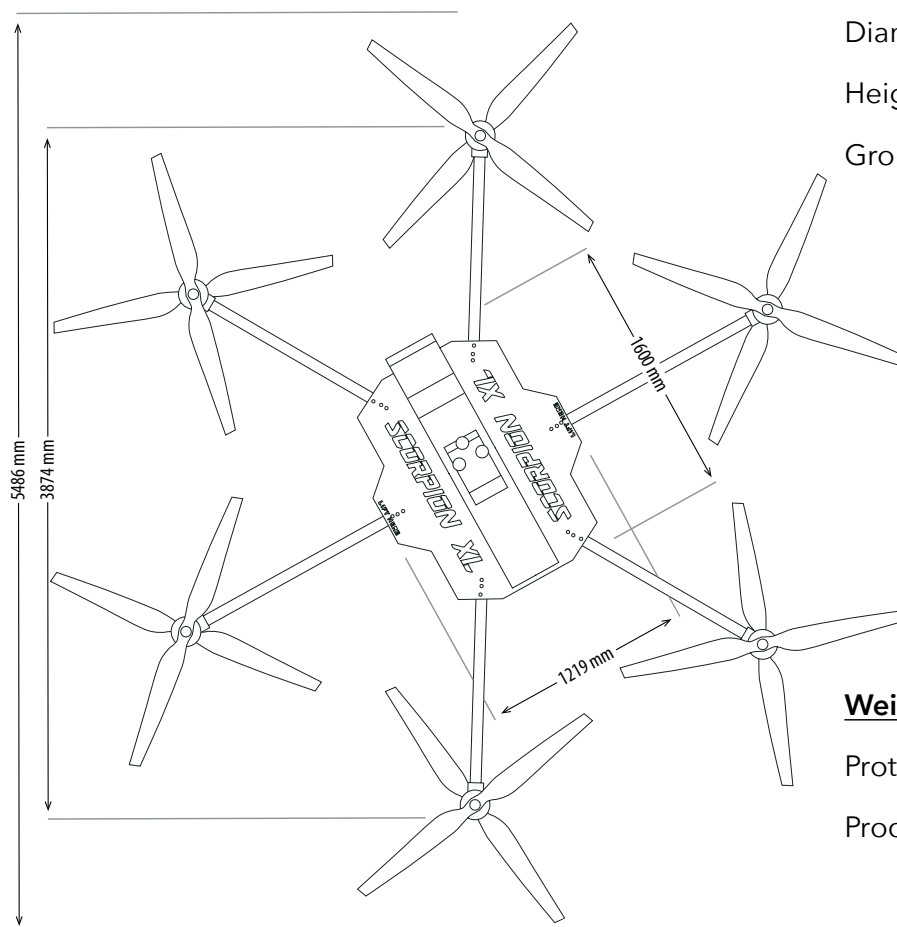
Frame: (LxWxH) 1600x1219x368 mm

Rotor to rotor diagonal: 3874 mm

Diameter with props: 5486 mm

Height up to payload bracket: 660 mm

Ground clearance bottom prop: 647 mm



Weights:

Prototype Gross UAS Weight: 732 Pounds

Production Gross UAS Weight: 338 Pounds



SCORPION XL Prototype Specs Sheet
10 November 2020

CONTACT



SCORPION XL

When the mission demands heavy lift and useful flight times, nothing is more robust or versatile.

Full Throttle Aerial is a Veteran owned and operated enterprise.

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