



ALL-WEATHER ***FALCON II Nyx***

Built for missions in the most operationally complex and demanding environments, WaveAerospace's Nyx aircraft gets eyes in the sky fast, in any weather, day or night, for ISR, RIF, and Search & Rescue. See what no one else can, when and where no one else can go.

RF and magnetically shielded, the Nyx can fly missions with real-time communications or autonomously in complete darkness and radio silence. All communications are encrypted, and the seven-system GNSS hardware is protected from spoofing. The Nyx also fuses a redundant AHRS with a dedicated Inertial Navigation Unit for unparalleled reliability in GNSS-denied and highly contested environments.

Payload agnostic, the Nyx can carry a wide range of sensors and avionics. Full BVLOS capabilities and a flight time over 60 minutes allow shrewd tactical vectors for both inbound and outbound incursion.

FALCON II Nyx

TRUE ALL-WEATHER, HIGH WIND VTOL



DISTINCTIONS

» ENDURANCE



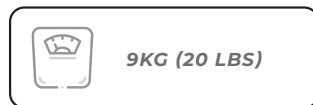
» ALL-WEATHER INGRESS PROTECTION



» WIND RESISTANCE



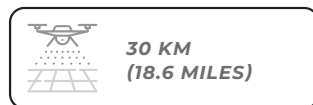
» USABLE PAYLOAD CAPACITY



» MAXIMUM AIRSPEED



» LINK RANGE



SPECIFICATIONS

DIMENSIONS	1270mm (50in) span diagonal - engine to engine
MAX RECOMMENDED TAKEOFF WEIGHT	20 kg (44 lbs)
AIRCRAFT WEIGHT W/ 1X 1443 WH BATTERY	10.4 kg (22.9 lbs)
PAYLOAD CAPACITY W/ 1X 1443 WH BATTERY	9 kg (20 lbs)
MAX ANGULAR VELOCITY TILT	300°/s, Yaw: 200°/s
WIND RESISTANCE	30.8 m/s (60 knots) continuous
MAX SPEED	35.7 m/s (80 mph)
OPERATING TEMPERATURE RANGE	-17°C to 50°C (0°F ~ 122°F)
MAX FLIGHT TIME	60+ minutes with camera payload
MAX ALTITUDE	5,000m (16,400ft)
POWER SUPPLY	30,000 mAh, 1443 Wh, 48 V Solid State Lithium Polymer 13S1P
PROPELLERS	3-blade, 470 mm (18.5 in) prebalanced Carbon Fiber

MISSION PROFILES

- » ISR, RIF, Search and Rescue
- » Low-level incursion
- » Electronic Sensing and Scouting
- » Air Launch Capable

KEY FEATURES*

- » Extreme weather, high-wind VTOL
- » Emission-free operation
- » Low-level, terrain tracking
- » Shielded, reduced radar cross section
- » Kevlar Components
- » Equipped with GNSS anti-spoofing hardware
- » Dedicated AHRS IMU for navigation in GPS Spoofed airspace
- » AES-256 encrypted communications
- » Autonomous Take off and Landing

**Additional camera/payload options available at customer request.*

OPTICAL & IR SPECS

» OPTICAL

Zoom: x20 + x2 digital (total x40)

» THERMAL

IR Resolution: 1280 x 720

» FIELD OF REGARD

Pitch: Pan : 360° (non-continuous); Tilt :-45° to +135°

» FEATURES

Electronic Stabilization, EO/IR object tracking, Geo location, Video compression, License plate recognition capabilities

