M6

SKYFISH

Fly with LiDAR

The Power of LiDAR

Harness the power of cutting-edge drone technology paired with LiDAR systems to supports infrastructure inspections, surveying, precision measurements, high-resolution mapping and geospatial data collection.

RTK System

The M6 uses a high end dual RTK system combined with an RTK base station. The M6 has plenty of reserve power for demanding payloads such as longer range LiDAR systems.

Flies Longer

Flight times on the M6 with a lidar unit ranges from 25-40 minutes depending on weight, environmental factors, and battery selected.

Ground Remote Control

Skyfish has customized QGroundControl for flight navigation and is integrated with our proprietary remote controller. The controller features a Panasonic tablet and offers an 8" or 10" screen for viewing of real-time video feeds and 4 joysticks (2 for navigation, 2 for sensor control).

Heavy Payloads

Skyfish's M6 (6-rotor) heavy lift drone specializes in industrial applications and heavy payloads, including electro-optical, thermal, and robotic. The M6 can perform specific tasks that require efficient, repeatable and accurate outcomes.

Redundant Power Systems

The M6 has a redundant power system, meaning that the craft can lose a motor due to mechanical failure and still successfully land keeping your payload is safe.

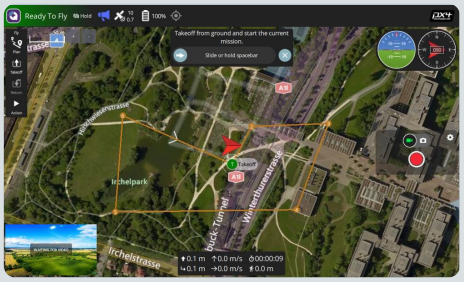
Made in the USA and NDAA Compliant

Based in Missoula, MT, Skyfish designs drones, battery systems, airborne guidance, and ground stations, which provide real-time video and telemetry feeds from the aircraft — all in house, for the past 10 years. Skyfish is certified Airworthiness Level 3 by U.S. Army DevCom and Green UAS (in process).

LiDAR Payloads

Skyfish supports the following payloads out-of-the-box and can integrate new payloads quickly.

Riegl	MiniVux2
Phoenix	Ranger UAV Lite
GeoCue	TrueView
RockRobotics	R2A
Custom	Please inquire



Supports QGroundControl

Intuitive and powerful ground control station for the MAVLink protocol

C1 Remote Controller

The C1 remote controller houses a rugged Panasonic tablet computer, offering a 10" detailed view of QGroundControl.

Technical Specifications

Aircraft

Dimensions (unfolded)	68.5" L x 68.5" W x 22.62" H
Dimensions (folded)	23.25" L x 20" W x 22.62" H
Ground clearance	16.66"
Empty weight	23 lb
All up weight	39 lb
Max. payload	12 lb
Max. air speed	45 mph
Max. ascent/descent speed	Customizable up to 16 ft/s
Max. pitch angle	Customizable to 45°
System architecture	Modular motherboard
GPS	RTK ready, sub 5cm-level accuracy
Operation temperature	32°F to 104°F
Service ceiling AGL	2,000 ft
Flight modes	4 autonomous modes, manual or custom modes
Flight time	25-35 minutes, depending on battery selected
Propellers (material)	Carbon composite
Propellers (dimensions)	22", 3 CW, 3 CCW

Skymind - Onboard Computer

Takeoff and landing	Automated (includes RTL)
Obstacle detection capability	Forward-facing obstacle notification system
Terrain following	SRTM
Special features	Real-time geometric projection system for mapping camera view objects
Failsafe behaviors	Low voltage, automated component connection, in-flight actions, combine/customize/add failsafe behaviors

Remote Controller

FORM FACTOR	
Construction	Magnesium alloy chassis, ergonomic hand grips, proprietary RC control electronics and radio
Control	2 control sticks, integrated hall effect gimbals
Switches	6 assignable 2- and 3-way switches, lockable hat switch, momentary switch, custom switches available
TABLET	
Model	Panasonic® Toughbook™ FZ G1
Display	10.1" diagonal, 1920 x 1200 pixels, daylight-readable, gloved multi-touch
Battery	Li-ion 11 V, 8+ hours operating time, 2.5 hours charging time from fully depleted state
Software	Windows® 10 64-bit (base OS), QGroundControl (Skyfish customized)
RADIO	
Frequency	Dual-band 2.4 GHz / 5.8 GHz, 30 dBm
Battery	14.8 V / 3250 mAh battery pack

Power

Number of motors	6
Max. instant peak power	9 KW (1.5 KW /motor) (<5 sec)
Normal power consumption	2 KW (330 W /motor)
Equivalent KV	170 RPM/V
Onboard power	2 programmable power outputs (1-14V 2.5A each)

Battery

Number of battery packs	4 Li-ion packs onboard
Capacity	12,000 mAh / 18,000 mAh
Peak voltage	25 V
Nominal voltage	22.2 V
Life cycles	500+
Connectors	Skyfish BAM, anti-spark

To learn more about the Skyfish Osprey drone platform, please contact sales@skyfish.ai / 844-SKY-FISH

Designed and manufactured in the USA.
www.skyfish.ai