

# Skyfish *M4* Drone – Technical Specifications

THE SKYFISH M4 DRONE is our flagship sUAS model designed for professional applications including infrastructure inspection and 3D modeling, infrared missions, gas detection, robotic interactions, and more.

M4 is designed for rapid deployment (set-up times under 2 mins) and easy “pack and go” transportation. Skyfish uses a quick release modular gimbal system that allows the user to quickly (under 30 seconds) switch between payloads. Our high quality Li-ion flight batteries have 500+ life cycles each and enable M4 to fly a mission in just one pass.

## AIRCRAFT:

|                           |   |
|---------------------------|---|
| Dimensions (unfolded)     | 51.0" L x 46.25" W x 18.5" H  |
| Dimensions (folded)       | 19.16" L x 18.78" W x 18.5" H   |
| Ground clearance          | 13.36"  |
| Empty weight              | 16 lbs  |
| All up weight             | 26 lbs  |
| Max. payload              | 6 LBS   |
| System architecture       | Modular motherboard   |
| Max. air speed            | 65 mph  |
| Max. ascent/decscnt speed | Customizable up to 16 ft/s  |
| Max. pitch angle          | Customizable up to 45°  |
| GPS                       | RTK ready, sub 5cm-level accuracy   |
| Operation temperature     | 32°F to 115°F   |
| Service ceiling AGL       | 2,000 ft.   |
| Flight modes              | 4 autonomous modes (Loiter, Guided, Stabilize, RTL), manual, custom modes |

## POWERPLANT:

|                                     |   |
|-------------------------------------|---|
| Number of motors                    | 4   |
| Motor max. instantaneous peak power | 6 KW (1500 W per motor) (<5 seconds)            |
| Motor normal power consumption      | 1.3 KW (330 W per motor)                        |
| Equivalent KV                       | 170 rpm/V                                       |
| Onboard power                       | 2 programmable power outputs (1-14V, 2.5A each) |

## BATTERY:

|                         |                           |
|-------------------------|---------------------------|
| Number of battery packs | 2 Li-ion packs onboard    |
| Battery capacity        | 12,000 MaH (per pack)     |
| Peak battery voltage    | 25 V (per battery)        |
| Nominal battery voltage | 22.2 V (per battery)      |
| Battery life cycle      | 500+ life cycles per pack |
| Battery connectors      | BAM, anti-spark           |

## SKYMIND – LINUX-BASED ONBOARD COMPUTER:

|                               |   |
|-------------------------------|---|
| Takeoff and landing           | Automated   |
| 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, option to combine, customize, and add failsafes |

## PROPELLERS:

|             |                  |
|-------------|------------------|
| Material    | Carbon composite |
| Dimensions  | 22" (L)          |
| Orientation | 2 CW, 2 CCW      |