

# Skyfish M6 Drone – Technical Specifications

THE SKYFISH M6 DRONE is a heavy-lift hexacopter designed for professional applications including infrastructure inspection and 3D modeling, infrared missions, gas detection, robotic interactions, and more.

M6 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 M6 to fly a mission in just one pass.

## 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 lbs  |
| All up weight             | 39 lbs  |
| Max. payload              | 12 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                    | 6   |
| Motor max. instantaneous peak power | 9 KW (1500 W per motor) (<5 seconds)            |
| Motor normal power consumption      | 2 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 | 4 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 | 3 CW, 3 CCW      |