



IF1000 HEXACOPTER





Adaptable Payload





THE ULTIMATE US-BUILT HEAVY-LIFT SOLUTION

Safety, reliability, and adaptability. These key tenets to the IF1000 combine to create an industrial UAV capable of completing any objective. Large payload capacity and longer flight times enable users to survey large-acreage sites, inspect a greater number of utility assets and perform mission-critical applications. Whether you're looking for a mission-ready full-stack solution or an OEM platform, the IF1000 enhances the capabilities of any enterprise.

ADVANCED SECURITY SOLUTION



The IF1000 provides a cost-effective, rapidly deployable, and secure system adaptable around mission requirements. Available EO/IR & secure data link integrations present an out-of-the-box solution for both federal and commercial security applications. For more unique applications Inspired Flight will work with your team to integrate required payloads and communication links. We have experience integrating mil-spec cameras and sensors for critical infrastructure & defense applications, contact us to learn more about our project history.

All Inspired Flight vehicles are built to comply with the NDAA section 848, we are happy to provide complete transparency into our sourcing and manufacturing practices.





CUSTOM CONFIGURATIONS

Inspired Flight vehicles are designed to facilitate the integration of custom payloads to create your specific OEM configuration. With our hardware is designed for modularity, nearly any sensor, computer, or payload can be integrated to facilitate an application. Open-source flight control firmware & available Mavlink SDK provide extensive flexibility to control your custom solution. We understand that each unique application comes with unique requirements. Our team is eager to assist your efforts in customizing the IF1000 to your specific needs.

ADAPTABLE IMAGING SOLUTION



Whether you're inspecting utility assets, federal infrastructure, an oil pipeline, a vineyard, or a solar farm the IF1000 is capable of integrating with a wide range of optical, thermal, & multispectral imaging systems to efficiently obtain actionable data. Geotagging and HD video streaming help pilots and asset managers ensure they're obtaining accurate and serviceable data.



DYNAMIC SURVEYOR'S TOOL

Impressive lift capacity and easy integration allow for Lidar sensors & large-format mapping cameras to perform surveys of large acreage sites. Prioritizing safety and stability, the IF1000 has multiple redundancies and an autonomous parachute recovery system to ensure the complete protection of your investment. The IF1000 enables surveyors to obtain accurate point cloud data more safely and accurately than ever before.

IF1000 SPECIFICATIONS

AIRCRAFT PERFORMANCE

DIAGONAL SIZE	950 mm (37.4 in)	
DIMENSIONS (UNFOLDED)	1375 x 1250 x 515 mm	
MAX TAKEOFF WEIGHT	9.9 kg (21.8 lbs)	
PAYLOAD CAPACITY	3.3 kg (7.3 lbs)	
WIND RESISTANCE (CONTINUOUS)	19 knots	
WIND RESISTANCE (GUST)	22 knots	
MAX GROUND SPEED	18 m/s (40 mph)	
OPERATING TEMPERATURE RANGE	-10°C ~ 50°C (14°F ~ 122°F)	
SE 55 50 45 40 45 30 25 20 40 40 40 40 40 40 40 40 40 40 40 40 40	N PAYLOAD (W/ 10% RESERVE)	
— U U.S I I.S	2 2.5 3 3.5 OAD IN KG	

FLIGHT HARDWARE

FLIGHT CONTROLLER	MODEL	MODAL AI Flight Core
	OPERATING SOFTWARE	PX4 Ecosystem
POWER DISTRIBUTION	PDB MODEL	2x - IF PDB 4
	MOTOR OUTPUT	8x - 30A Continuous
	AUXILIARY POWER	5v-5A, 12V-5A (volt-60A)
PROPOLUSION	MOTOR	6x - IF Bernoulli 3
	PROPELLOR	432 x 147 mm (17 x 5.8 in)
	MAX THRUST PER MOTOR	3.4 kg (7.5 lbs) @ 24v