

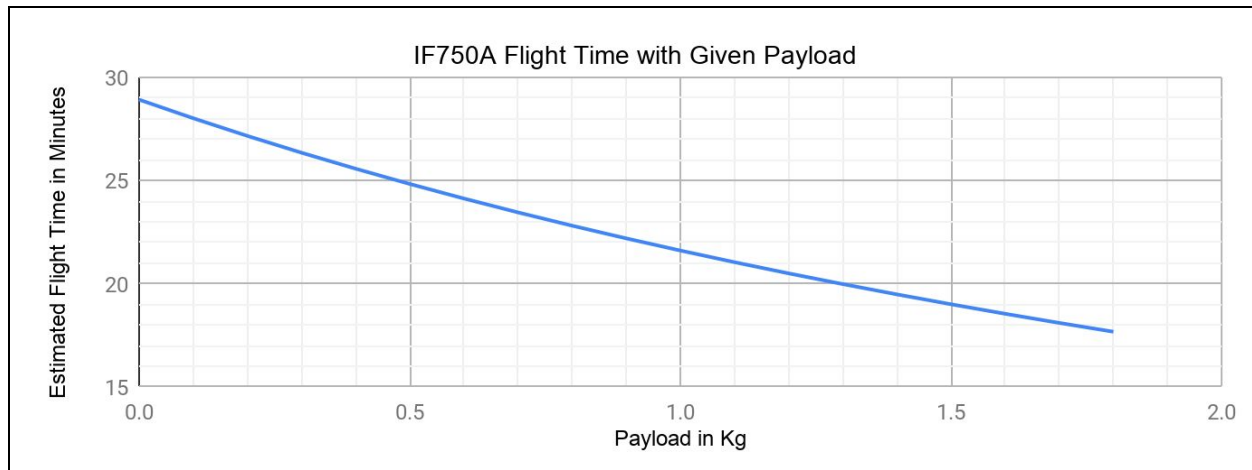
# IF750A SPEC SHEET



*\*Shown with Optional Gremsy Gimbal & Sony A6500*

## AIRCRAFT PERFORMANCE

<b>Max Takeoff Weight</b>	6.2 kg (13.7 lbs)
<b>Aircraft Weight (excluding sensor)</b>	
<b>Max Payload (sensor) Weight</b>	
<b>Diagonal Size (propeller center to center)</b>	750 mm (29.5 inches)
<b>Dimensions (unfolded)</b>	572 x 572 x 483 mm (22.5 x 22.5 x 19 inches)
<b>Dimensions (folded)</b>	368 x 413 x 305 mm (14.5 x 16.3 x 12 inches)
<b>Operating Temperature Range</b>	-10 to 45°C (14°F ~ 113°F)
<b>Storage Temperature Range</b>	-20 to 40°C (-4°F ~ 104°F)
<b>Max Ascent Speed</b>	5 m/s (16.4 ft/s)
<b>Max Descent Speed</b>	3 m/s (9.9 ft/s)
<b>Max Horizontal Speed</b>	60 km/h (37 mph)
<b>Max Tilt Angle</b>	30 deg
<b>Max Angular Velocity (Yaw)</b>	120 deg/s
<b>Max Altitude</b>	3000 m (9,850 ft)
<b>Max Wind Speed</b>	35 km/h (21.7 mph)
<b>Max Flight Time</b>	See Graph (payload includes gimbal)



## FLIGHT HARDWARE

<b>Flight Controller</b>	FC	Pixhawk® 4
	Architecture	FMUv5 Reference Design
	Operating Software	Auterion Operating System (Auterion OS)
	Barometer Accuracy	+/-1.5 mbar
<b>Global Positioning</b>	GPS	Ublox Neo-M8N GPS (Pixhawk 4 GPS)
	Positioning Accuracy	2.5 m Horizontal
<b>Power Distribution Board</b>	PDB	IF PDB4
	Motor Outputs	4x - 30A Continuous
	Auxiliary Power Channels	5v @ 5A, 12v @ 5A, battery voltage @ 60A
<b>Propulsion</b>	Motor	4x - IF Bernoulli 3
	Peak Motor Current	30A
	Propeller	17" x 5.8" (432 x 147 mm)
	Max Thrust per Motor	3.4 kg (7.5 lbs)
<b>Navigation Light Color Options</b>		Red, Green, Blue, Cyan, Magenta, Yellow, White
<b>Navigation Light Patterns</b>		OFF, ON & Single Blink, Double Blink Patterns
<b>Travel Case Dimensions</b>		676 x 525 x 378 mm (26.6 x 20.7 x 15 inches)
<b>Travel Case Weight (including drone)</b>		~15 kg (33.1 lbs)



## Advanced Flight Hardware

<b>Onboard Computer</b>	Computer Model	Intel NUC7i3BNK
	Processor	i3-7700U
	Memory	8 GB (32 GB max)
	Storage	128 GB (1 TB max)
	Wireless Connection	Intel® Wireless-AC 8265 + Bluetooth 4.2
<b>Digital Data Downlink</b>	Downlink Radio	
	Operating Frequency	
	Downlink Throughput	
	Uplink Throughput	
	Operating Range	
<b>Real Time Kinematic</b>	RTK	Trimble MB-Two (separate ground station required)
	Positioning Accuracy	1 cm horizontal, 2 cm vertical

## REMOTE CONTROL

<b>Remote Control Radio</b>	FrSky Horus X10S
<b>Radio Control Battery</b>	7.4V 2600mAh Li-ion
<b>Transmitter Module (TX)</b>	FrSky R9M (external)
<b>Transmission Power</b>	100 mW, 500 mW, or 1 W
<b>Operating Frequency</b>	900 MHz (868 MHz EU Version)
<b>Aircraft Receiver (RX)</b>	FrSky R9 Slim+
<b>Signal Range</b>	Up to 15 km (9.3 miles)
<b>Operating Temperature Range</b>	-10~60°C (14-140°F)



## INSPIRED FLIGHT 99Wh BATTERY (2 per aircraft)

<b>Max Energy at Nominal Voltage</b>		99.9 Wh
<b>Nominal Voltage</b>		22.2 V
<b>Nominal Capacity</b>		4500 mAh
<b>Classification</b>		Lithium Polymer 6S1P
<b>Net Weight</b>		640 g (1.41 lbs)
<b>Charging</b>	Max Current	9.0 Amps (2C)
	Max Voltage	25.2 Volts
<b>Discharge</b>	Max Continuous Current	157.5 Amps (35C)
	Max Burst Current	315.0 Amps (70C)
	Voltage Cut-off	18.0 Volts
<b>Self - Discharge</b>		<5% per month
<b>Operating Temperature Range</b>	Charge	0°C ~ 45°C (32°F ~ 113°F)
	Discharge	-20°C ~ 60°C (-4°F ~ 140°F)
	Storage	-20°C ~ 40°C (-4°F ~ 104°F)

## Parachute Safety System

<b>Manufacture</b>	Fruity Chutes Inc.
<b>Model Number</b>	IF Harrier 55-66
<b>Parachute Diameter</b>	1.68 m (66 inches)
<b>Weight (including rigging)</b>	300 g (10.6 oz)
<b>Triggered by</b>	Flight Controller (automatic), Operator (manually), or optional Mayday Trigger System (automatic and aircraft independent)
<b>Trigger Mechanism</b>	Coil Spring Loaded Servo Trigger
<b>Deployment Velocity</b>	~6 m/s (~20 ft/s)
<b>Fall Distance until Parachute Fully Unfurled</b>	15 m (50 ft)
<b>Decent Velocity w/ 6.2 kg</b>	4.5 m/s (15 ft/s)
<b>Certified Parachute Repacking Available</b>	YES - Contact INSPIRED FLIGHT for more info