

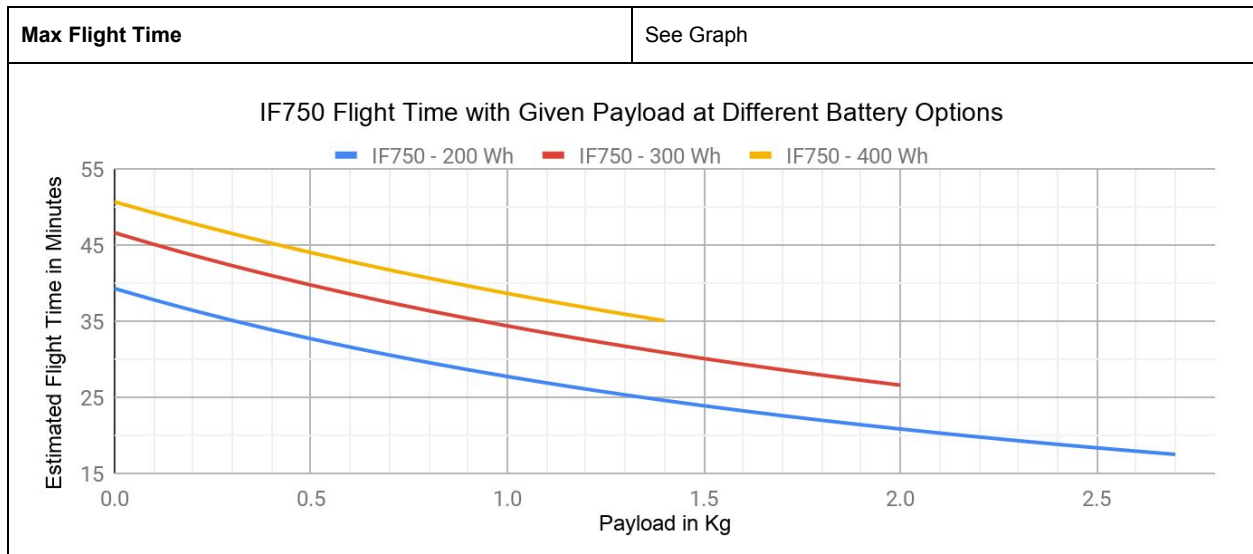
# IF750 Base SPEC SHEET



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

## AIRCRAFT PERFORMANCE

<b>Max Rated Takeoff Weight</b>	6.2 kg (13.7 lbs)
<b>Aircraft Weight (2 batteries, no Payload)</b>	3.5 kg (7.7 lbs)
<b>Max Payload Weight</b>	2.7 kg (6.0 lbs)
<b>Diagonal Size (propeller center to center)</b>	750 mm (29.5 inches)
<b>Dimensions (unfolded)</b>	572 x 572 x 457 mm (22.5 x 22.5 x 18 inches)
<b>Dimensions (folded)</b>	368 x 413 x 305 mm (14.5 x 16.3 x 12 inches)
<b>Operating Temperature Range</b>	-20 to 50°C (-4°F ~ 122°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>	80 km/h (49.7 mph) (reduced with higher payload)
<b>Max Tilt Angle</b>	30 deg
<b>Max Angular Velocity (Yaw)</b>	120 deg/s
<b>Max Altitude</b>	3500 m (11,483 ft)
<b>Max Wind Speed</b>	40 km/h (24.9 mph)



## FLIGHT HARDWARE

<b>Flight Controller</b>	<b>FC</b>	Pixhawk@ 4
	<b>Architecture</b>	FMUv5 Reference Design
	<b>Operating Software</b>	PX4 DroneCode
	<b>Barometer Accuracy</b>	+/-1.5 mbar
<b>Global Positioning</b>	<b>GPS</b>	Ublox Neo-M8N GPS (Pixhawk 4 GPS)
	<b>Positioning Accuracy</b>	2.5 m Horizontal
<b>Power Distribution Board</b>	<b>PDB</b>	IF PDB4
	<b>Motor Outputs</b>	4x - 30A Continuous
	<b>Auxiliary Power Channels</b>	5v @ 5A, 12v @ 5A, battery voltage @ 60A
<b>Propulsion</b>	<b>Motor</b>	4x - IF Bernoulli 3
	<b>Max Motor Amperage</b>	30A
	<b>Propeller</b>	17" x 6.2" (432 x 157.5 mm) (Folding)
	<b>Max Thrust per Motor</b>	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>		~13 kg (28.7 lbs)



## REMOTE CONTROL

<b>Remote Control Radio</b>		FrSky Taranis X9D Plus
<b>Radio Battery</b>		7.2V 2000mAh NiMH
<b>Transmitter Module (TX)</b>		FrSky XJT (internal)
<b>Transmission Power</b>		100 mW or 500 mW
<b>Operating Frequency</b>		2.4 GHz (XJT)
<b>Aircraft Receiver (RX)</b>		FrSky R-XSR
<b>Signal Range</b>		Up to 5 km (3.1 miles)
<b>Operating Temperature Range</b>		-10~60°C (14-140°F)
<b>Optional Upgrade Radio</b>	Transmitter Model	FrSky Horus X10S
	Radio Battery	7.4V 2600mAh Li-ion
<b>Optional Upgrade TX &amp; RX</b>	Transmitter Module (TX)	FrSky R9M (external) (X9D & X10S Compatible)
	Transmission Power	100 mW, 500 mW, or 1 W
	Operating Frequency	900 MHz (868 MHz EU Version)
	Aircraft Receiver (RX)	FrSky R9 Slim+
	Signal Range	15 km (9.3 miles)

## OPTIONAL 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, 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>Descent 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



## INSPIRED FLIGHT 99Wh BATTERY (Standard 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)
<b>IF750 Aircraft Battery Configurations</b>	2 Battery - Max Payload Available	2.7 kg (6.0 lbs)
	3 Battery - Max Payload Available	2.0 kg (4.5 lbs)
	4 Battery - Max Payload Available	1.4 kg (3.1 lbs)