IF750A SPEC SHEET

Shown with Optional Gremsy Gimbal & Sony A6500

AIRCRAFT PERFORMANCE

Max Rated Takeoff Weight	6.2 kg (13.7 lbs)
Aircraft Weight (2 batteries, no Payload)	4.4 kg (9.7 lbs)
Max Payload Weight	1.8 kg (4.0 lbs)
Diagonal Size (propeller center to center)	750 mm (29.5 inches)
Dimensions (unfolded)	572 x 572 x 483 mm (22.5 x 22.5 x 19 inches)
Dimensions (folded)	368 x 413 x 305 mm (14.5 x 16.3 x 12 inches)
Operating Temperature Range	-20 to 50°C (-4°F ~ 122°F)
Storage Temperature Range	-20 to 40°C (-4°F ~ 104°F)
Max Ascent Speed	5 m/s (16.4 ft/s)
Max Descent Speed	3 m/s (9.9 ft/s)
Max Horizontal Speed	70 km/h (43.5 mph)
Max Tilt Angle	30 deg
Max Angular Velocity (Yaw)	120 deg/s
Max Altitude	3000 m (9,850 ft)
Max Wind Speed	35 km/h (21.7 mph)
Max Flight Time	See Graph

IF750A Flight Time with Given Payload
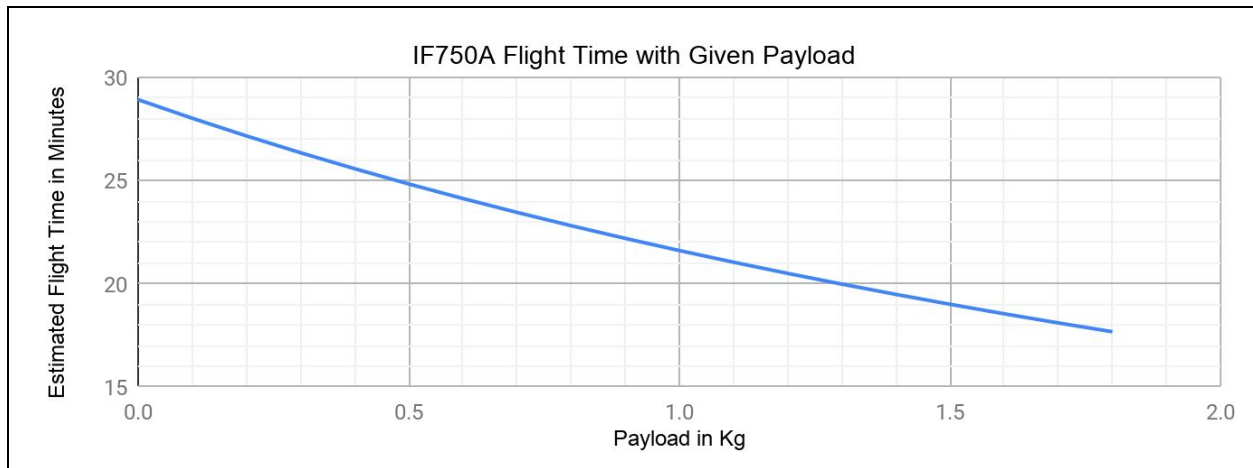
FLIGHT HARDWARE

Flight Controller	FC	Pixhawk® 4
	Architecture	FMUv5 Reference Design
	Operating Software	PX4 DroneCode
	Barometer Accuracy	+-1.5 mbar
Global Positioning	GPS	Ublox Neo-M8N GPS (Pixhawk 4 GPS)
	Positioning Accuracy	2.5 m Horizontal
Power Distribution Board	PDB	IF PDB4
	Motor Outputs	4x - 30A Continuous
	Auxiliary Power Channels	5v @ 5A, 12v @ 5A, battery voltage @ 60A
Propulsion	Motor	4x - IF Bernoulli 3
	Max Motor Amperage	30A
	Propeller	17" x 6.2" (432 x 157.5 mm) (Folding)
	Max Thrust per Motor	3.4 kg (7.5 lbs)
Navigation Light Color Options		Red, Green, Blue, Cyan, Magenta, Yellow, White
Navigation Light Patterns		OFF, ON & Single Blink, Double Blink Patterns
Travel Case Dimensions		676 x 525 x 378 mm (26.6 x 20.7 x 15 inches)
Travel Case Weight (including drone)		~13 kg (28.7 lbs)

Advanced Flight Hardware

Onboard Computer	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
Digital Data Downlink	Downlink Radio	Taisync
	Operating Frequency	2.4 GHz
	Downlink Throughput	2.3 Mbps ~ 15.3 Mbps (10 MHz band)
	Uplink Throughput	115.2 Kbps (2.5 MHz band)
	Operating Range	8 km (5 miles) @ 1080p60 Video
Real Time Kinematic	RTK	Trimble MB-Two (Satellite Based)
	Positioning Accuracy	1 cm horizontal, 2 cm vertical

REMOTE CONTROL

Remote Control Radio		FrSky Taranis X9D Plus
Radio Battery		7.2V 2000mAh NiMH
Transmitter Module (TX)		FrSky XJT (internal)
Transmission Power		100 mW or 500 mW
Operating Frequency		2.4 GHz (XJT)
Aircraft Receiver (RX)		FrSky R-XSR
Signal Range		Up to 5 km (3.1 miles)
Operating Temperature Range		-10~60°C (14-140°F)
Optional Upgrade Radio	Transmitter Model	FrSky Horus X10S
	Radio Battery	7.4V 2600mAh Li-ion
Optional Upgrade TX & RX	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)

INSPIRED FLIGHT 99Wh BATTERY (2 per aircraft)

Max Energy at Nominal Voltage		99.9 Wh
Nominal Voltage		22.2 V
Nominal Capacity		4500 mAh
Classification		Lithium Polymer 6S1P
Net Weight		640 g (1.41 lbs)
Charging	Max Current	9.0 Amps (2C)
	Max Voltage	25.2 Volts
Discharge	Max Continuous Current	157.5 Amps (35C)
	Max Burst Current	315.0 Amps (70C)
	Voltage Cut-off	18.0 Volts
Self - Discharge		<5% per month
Operating Temperature Range	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)

Optional Parachute Safety System

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