



IFT800 TOMCAT

Aircraft Specifications



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IF800



Performance

Max Ascent Speed	5m/s	16 ft/s
Max Descent Speed	3m/s	10 ft/s
Max Air Speed	22m/s	49 mph
Max Wind Resistance	10m/s, 12m/s gusts	19 knot, 23 knot gusts
Max Tilt Angle	30°	
Max Angular Velocity	Tilt: 300°/s, Yaw: 120°/s	
Operating Temperature	-20°C ~ 45°C	-4°F ~ 113°F
Ingress Protection	IP43, 5%~99% Humidity	
Service Ceiling (with given payload)	4.2km (14,000 ft) w/0.0 kg, 3.2 km (10,500 ft) w/ 1.5 kg, 2.0 km (6,500 ft) w/ 3.0 kg	

Physical Features

Diagonal Size (propeller center to center)	905 mm	35.6 inches
Unfolded Size (flight ready, WxLxH)	132 x 114 x 52 cm	51.8 x 44.8 x 20.3 inches
Folded Size (stow, WxLxH)	36 x 44 x 20 cm	14.2 x 17.4 x 7.8 inches
Empty Weight (w/o batteries)	4.2 kg	9.2 lbs
Weight w/ Batteries	8.5 kg	18.7 lbs
Max Gross Takeoff Weight	11.5 kg	25.3 lbs
Max Payload Capacity	3.0 kg	6.6 lbs
Transport Case Size (WxLxH)	52.8 x 80.7 x 31.7 cm	20.8 x 31.8 x 12.5 inches
Transport Case Weight (w/ aircraft & GCS)	18 kg	40 lbs

Flight Stack

Flight Controller	CubePilot Cube Blue H7, Triple Redundant IMU
GNSS / Compass	Dual CubePilot Here4
Downward Ground Sensor	LightWare SF000/B
Payload Power Rails	18v, 12v
Payload Interface	IF800 Universal Payload Interface
Operating Software	Copter by Ardupilot

Flight Mode

Position Hold	Maintains GPS position and altitude with responsive controls for faster speeds.
Loiter	Holds GPS position and altitude for slow, precise, and stable flying.
Auto	Executes pre-defined waypoint mission
RTL	Auto returns to takeoff location and lands
Land	Auto land while maintaining horizontal position
Altitude Hold	Holds altitude only, failsafe mode if GPS signal lost

IF800 Max Flight Time @ Given Payload Weight

