



ALTA⁶ SPECIFICATIONS

DIMENSIONS

UNFOLDED

Diameter	1126 mm
Height (to base of TITH)	220 mm

FOLDED

Diameter	550 mm
Height (to base of TITH)	220 mm

POWERPLANT

Number of Motors	6
Motor Type	Direct Drive 3-Phase PMAC Outrunner
Motor Model	F45
Motor Continuous Power Output	350 W
Motor Instantaneous Peak Power	950 W
Electronic Speed Controller	Freely Silent-Drive Sine Wave ESC

PROPELLERS

Material	Carbon fiber with balsa core
Propeller Orientation	(3) CW and (3) CCW Props
Propeller Type	18 x 6 Folding

BATTERY

Nominal Battery Voltage	6S / 22.2V
Maximum Battery Size	240 x 180 x 80 mm
Maximum Battery Quantity	2 Battery Packs (Parallel)
Battery Connectors	2x EC5 (Parallel)

WEIGHTS

Maximum Gross for Takeoff ¹	13.6 kg (30.0 lbs)
Maximum Useful Load ²	9.1 kg (20.0 lbs)
Maximum Payload ³	6.8 kg (15.0 lbs)
Typical Standard Empty Weight	4.5 kg (10.0 lbs)

SPECIFIC LOADINGS

Typical Specific Power ⁴	145 W/kg
Thrust Ratio at Max Takeoff Weight ¹	1.85 : 1

FLIGHT CONTROLLER

Model Name	Freely Synapse Flight Controller
Flight Modes	Manual Height Hold Position Mode Return-To-Home Auto-land
Supported Inputs	DSMX, DSM2, S.Bus, S.Bus 2, PPM, FPV SD Video
Supported Radios	Futaba S.Bus & S.Bus 2 DSMX, DSM2 (Spektrum/JR) PPM, PPM Invert, PPM Graupner
Supported Radio Controller Telemetry Systems	Futaba w/ built-in voltage sense port
Supported First-Person View Transmitters	Skyzone BOSCAM Immersion RC Fatshark
First-Person View OSD Telemetry	User Configurable
Installed Transceivers	Wi-Fi
Data Logging Rate	25 Hz

LIGHTING AND INDICATION

Orientation Lights	3 Watt RGB LEDs
Orientation Light Locations	Outboard on Boom Ends
Orientation Light Color	Red, Yellow, Blue, Green, White
Status Light	Rear-Facing Red/White LED
Accessory Lighting Port	12 VDC
Accessory Lighting Port Location	Outboard on Boom Ends

ISOLATION SYSTEM

Vibration Isolation System	Silicone O-Rings
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ISOLATION SYSTEM OPTIONS

1.Soft / Light Payloads	Red O-Rings
2.Medium / Mid Payloads	Teal O-Rings
3.Stiff / Heavy Payloads	Black O-Rings

PAYLOAD MOUNTING

Mounting Locations	Bottom and Top Mount
Mounting System	Freely Toad In The Hole Quick Release

1. AT SEA LEVEL, STANDARD CONDITIONS.

2. TOP AND BOTTOM MOUNT. INCLUDES BATTERIES.

3. PAYLOAD WEIGHT TOP OR BOTTOM MOUNT. BATTERY WEIGHT NOT INCLUDED AND MOUNTED ON OPPOSITE SIDE FROM PAYLOAD IN TYPICAL CONFIGURATIONS.

4. AT MAXIMUM TAKEOFF WEIGHT, SEA LEVEL, STANDARD CONDITIONS.