

# Technical Datasheet

# ASCEND



## Aircraft

### Dimensions

Wingspan	2000 mm
Length	1562 mm
Height (Empennage)	351 mm
Ground Clearance (Fuselage)	126 mm
Ground Clearance (Pusher Propeller)	25 mm

### Weight

MTOW (Maximum Takeoff Weight)	9.5 kg
Empty Airframe	3 kg
RTF (Dry Weight)	6 kg
RTF (Including Fuel & Batteries)	8.9 kg
Max Payload	600 g

### Flight Performance

Stall Speed	13-16 m/s
Cruise Speed	20 m/s
VNE (Velocity Never Exceed)	30 m/s
Maximum Crosswind	10-15 m/s
Maximum Service Ceiling	10,000 ft. AMSL
Flight Time (VTOL)	Up to 3 minutes
Flight Time (Fixed Wing)	Up to 6+ hours
Temperature Range	-10° C to +50° C

### VTOL Propulsion

Motors	ALTI T-Motor MN501
Motor KV	550 KV
ESC	ALTI T-Motor 60A
Propeller	Master Airscrew 3x Power 13x12
Battery Power Supply	2 x 3800mAh 4S Lipo

### Fixed Wing Propulsion

Internal Combustion Engine	Saito FG14
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## Transportation Case

### Dimensions

Length	1230 mm
Width	840 mm
Height	400 mm

## Command & Control | C<sup>2</sup> Lite

### Dimensions

Length	630 mm
Width	394 mm
Height	208 mm

### Weight

Ground Control Station	12 kg
Volumetric Weight	14 kg (Avg) (Shipping Purposes)
Case	Pelican 1555 AIR

### Hardware

Intel NUC8	
Storage (SSD)	120 GB
Display	1x ASUS 15.6" HD Monitors
HDMI Out	1x External UHD Compatible
USB	3x External USB 3.0 Ports
Bluetooth	Yes
LAN	1x External LAN port
Cooling	1x Active Cooling Fans
Pilot Controller	Futaba
Keyboard & Mouse	Yes
Main AC Power	120-220v - 19V
Battery Power	2 x 9000mAh 4S Lipo
Intelligent Power Management	Yes

### Links

#### Groundside

Data Telemetry/Video Link: 2.4GHz

- TaiSync
- AES128 or 256
- Omni Antenna, 4 Section Collinear, 6 dBi Gain
- Cylindrical Sector Antenna, 12 dBi Gain

#### Airside

Data Telemetry/Video Link: 2.4GHz

- TaiSync
- AES128 or 256
- 2 x Omni Antenna, Half Wave Dipole 2.15 dBi Gain



v2020.2 | All information subject to change without notice