Pelican Cargo

PRODUCT BROCHURE

Technical Specifications
Features
Performance



CONTENTS

1. TECHNICAL SPECIFICATIONS 3

2. PERFORMANCE 4

3. DRAWINGS 5

4. LOADING 6

5. GROUND CONTROL STATION 7

6. OPERATION & TRAINING 7

7. CHARGING INFRASTRUCTURE 8

8. GROUND HANDLING 8

9. MAINTENENCE 9

10. FINANCIAL 9

11. DEVELOPMENT TIMELINE 10

12. IMAGERY 11

13. CONTACT 12

1. TECHNICAL SPECIFICATIONS

PROPULSION SYSTEM	
Motors	Four (4) electric motors
Power	100 kW combined
Battery	50 kWh lithium ion
Battery Swap Details	Mechanical battery swap - 2 ground personnel staff required
Battery Charge Time	Variable depending on available infrastructure. Expected charge time: 60-180 minutes
Propellers	Four (4) static propellers • Two (2) in front of wing • Two (2) behind the wing
DIMENSIONS	
Wing Span	11.5 m / 38 ft
Wing Area	12.1 m^2 / 130 ft^2
Length	6.8 m / 22.3 ft
Height	2.1 m / 7 ft
WEIGHTS	
Operating Empty Weight (OEM)	454 kg / 1000 lbs (with Batteries) 236 kg / 520 lbs (without Batteries)
Maximum Takeoff Weight (MTOW)	635 kg / 1,400 lbs
Maximum Landing Weight (MLW)	635 kg / 1,400 lbs
CAPACITY	
Maximum Payload	181 kg / 400 lbs
Cargo Volume	1.98 m^3 / 70 ft^3
Nose Door Size	0.81 m x 0.81 m / 32” x 32”

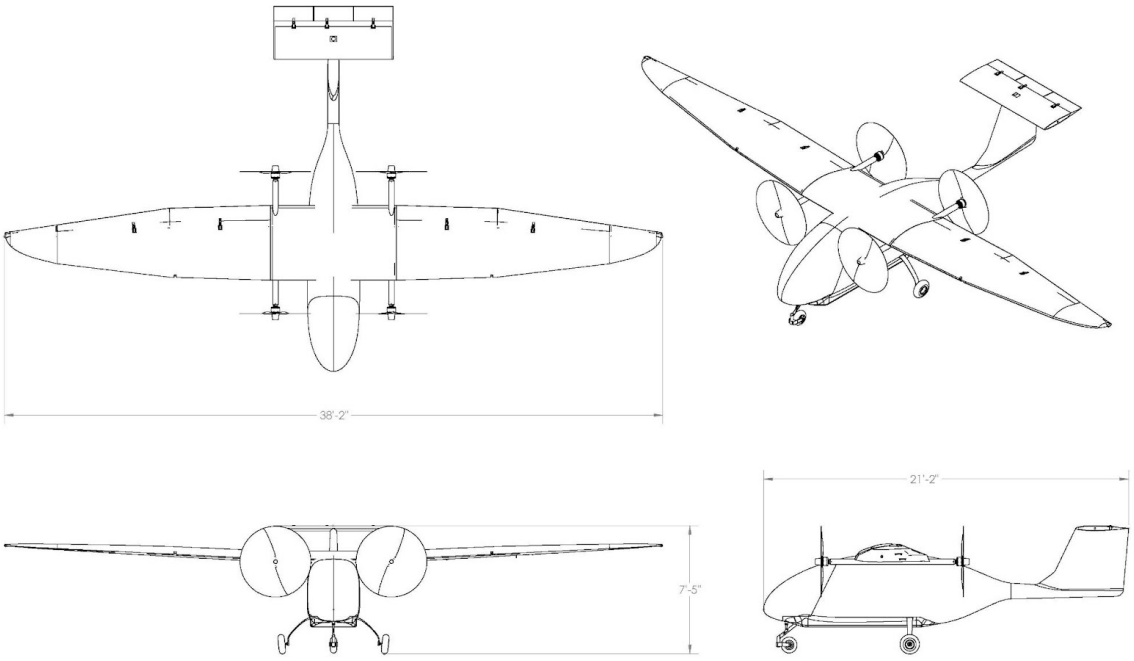
2. PERFORMANCE

SPEEDS	
Cruise Speed	60 - 70 knots / 111 - 130 km/h / 30 - 36 m/s
Stall with flaps	35 knots / 65 km/h / 18 m/s
Landing Speed	45 knots / 83 km/h / 23 m/s
Climb Rate	365 m per minute / 1,200 ft per minute
RANGE	
Range with Max Payload	320 km / 200 miles (+20 min reserve)
Service Ceiling	3,048 m / 10,000 ft density altitude (estimated)
RUNWAY	
Take-off run with Max Payload	150 m / 500 ft
Required Runway	250 m x 8 m / 820 ft x 27 ft
Surface	Paved, gravel, dirt, grass
Maximum demonstrated crosswind	18 knots / 8 m/s
FEATURES	
Fully Autonomous	• Satellite communication-based monitoring • Minimal training required to operate
Safety	• Fully redundant propulsion, controls, and sensor suite • Robust lost link procedures
Night flying	GPS and Laser/RADAR based navigation



Pelican Cargo prepares for mission.

3. DRAWINGS



4. LOADING



FEATURES
Bulk loading system
Low loading height
Nose-door loading
Sliding cargo tray
Complete aircraft load / unload within five minutes

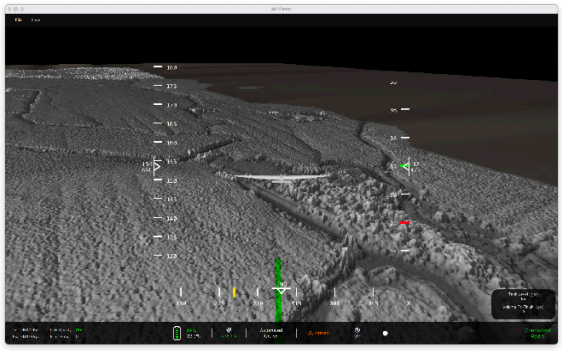
5. GROUND CONTROL STATION



6. OPERATION & TRAINING

OPERATION
Fully autonomous operation
Flight plan programming by single on-ground pilot
Dynamic rerouting via satellite link
On-ground battery swap (approx. 15 min)





TRAINING	
Four week pilot training	• Two week simulator training • Two week aircraft flight training

7. CHARGING INFRASTRUCTURE

GROUND CHARGING STATION	
Grid-charging three phase	220 V, 30 Amps
Generator	Diesel
PV-based solution	[Under development]

8. GROUND HANDLING

ITEM	DESCRIPTION
Trailer Transportation	Standard size, custom holding brackets Requires simple wing removal
Hangar Storage	40 ft HC sea container
Disassembly / Assembly	Under 15 mins



9. MAINTENANCE

ITEM	INTERVAL / COST
Battery	Replacement est. every 2,000 flight hours [Contact Pyka Sales for details]
Motors / Propellers	On condition [Contact Pyka Sales for details]
Landing Gear	On condition
Total Maintenance Cost	Est. around $14.50 / Flight Hour *Assuming 200-hour inspection interval, battery and general parts replacement

10. FINANCIAL

CAPITAL COST	
Annual Lease Rate	[Contact Pyka Sales for details]
Warranties	Standard 12-18 month warranties on all parts Optionality to include all parts replacement and insurance during the lease term
List Price	[Contact Pyka Sales for details]
Economic Useful Life	Est. five (5) years
Financing Options	[Contact Pyka Sales for details]

11. DEVELOPMENT TIMELINE

FLIGHT	
First Flight	December 2022
Proving / demo flights	1 H 2023
Entry into Service	2 H 2023
CERTIFICATION	
FAA - experimental exemption	Q4 2022
UK CAA - BVLOS approval	Q4 2023

12. IMAGERY













13. CONTACT

All product details are subject to change.

For further information, please contact the manufacturer:

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