



Features and Benefits

- Optimal performance-to-platform size ratio
- Large payload bays supporting multiple payloads
- Highly reliable fuel injected engine
- Accurate GPS/INS navigation and targeting
- Fully automated takeoff / landing ATOL
- Extended BLOS high throughput SATCOM
- Persistent PD-1 at mission radius of 450nm
- Redundant flight control surfaces
- Remotely piloted or autonomous
- Wing mounted external mission pods

PD-1

Next-Generation Autonomous PD-1

The PD-1 unmanned aircraft system (UAS) provides real-time intelligence, surveillance and reconnaissance (PD-1) in both tactical and strategic applications over very large distances. With full payload, flight times exceed 24 hours giving the ability to reach targets 500 miles away. The on-board sensor suite gives 360 degrees of persistent surveillance in all conditions.

Built to deliver Group 4/5 capabilities in a high-end Group 3 cost and logistics footprint, the PD-1 platform is a game-changing aircraft – reducing costs and increasing capabilities from existing systems.

The combination of pusher prop, Computational Fluid Dynamics (CFD) design optimizations and increased aspect ratio wings offer unmatched performance and stability for the PD-1 mission. Propulsion is provided by industry-leading Rotax engines, which are both reliable and require minimal warmup for quick reaction (QRF/ALERT5).

In-house design and advanced composite manufacture enables PD-1 Systems to meet the customers' specific technical payload requirements and ensures delivery of systems on time and on budget.

PD-1 Systems offer a company-owned, company-operated (COCO) platform, which delivers high performance PD-1 as a service anywhere in the world for the most demanding missions.

PD-1-ONE

Specifications

Physical Specifications	
Gross Take-off Weight	590 kg (1300 lbs)
Useful Payload Weight	100 kg (220 lbs)
Dedicated Power	4 kW
Propulsion	Rotax 912iS
Flight Endurance	24+ hours
Ferry Range	1000 nm
Loiter ceiling	18,000'
Normal Operating Speeds	75-120 kts
LOS Comm Range	150nm (airborne directional) 75nm (omi)
BLOS Comm Range	Global coverage
Launch/Recovery	Conventional ATOL/STOL

Dimensions	
Span	9.45 m (31')
Height	1.79 m (5'10")
Length	5.90 m (19'4")

Range / Time on Station (Full payload, net of transit time and reserves)		
Hours	Miles	Type
24	Local	Line of Sight
21	75	
19	150	
20	100	Beyond Line of Sight
19	150	
16	250	
13	350	

Payload Options
FMV (MX15D/HD, 1 x MX15 & 1 x MX10, 2 x MX10 or FLIR 380)
Wide Area Motion Imagery (WAMI/VMTI)
Synthetic Aperture Radar (SAR imaging / GMTI tracking)
LOS & BLOS Comm Relay (COMRLY)
Signals Intelligence (SIGINT)
Other Customer Technical Payloads (GFE)

Forward Payload Bay
Max mass: 45.3 kgs (100 lbs)
Volume: 229cc ³
Power: 2 kW
Field of view: FWD, AFT, NDIR, LT, RT

Right Payload Pod:
Max mass: 12 kg (26.5 lbs)
Volume: 85cc ³
Power: 500 W
Field of view: FWD, AFT, RT

Left Payload Pod
Max mass: 12 kg (26.5 lbs)
Volume: 85cc ³
Power: 500 W
Field of view: FWD, AFT, LT

Additional Details

ANY MISSION. ANY TIME. ANYWHERE.

Because of ongoing enhancements, specifications may change. Contact your sales representative for current information.