

HERA

Autonomous Multi-Payload Platform

The most versatile NDAA-compliant autonomous aerial platform. HERA delivers multi-payload capability with 105 TOPS edge AI, backpack-portable deployment in under 60 seconds, and complete vertical integration from airframe to analytics.

KEY CAPABILITIES

- 4 simultaneous gimballed payload bays — 33 lb (15 kg) total capacity
- 105 TOPS onboard AI (Nvidia Jetson SOM) — zero cloud dependency
- Backpack-portable: folds to 22" x 13.7" x 9", deploys in <60 seconds
- 56-minute flight time (46 min with Phase One P3 payload)
- 360° obstacle avoidance — effective in all weather conditions
- NDAA Section 889 fully compliant — no foreign-controlled components
- Universal Payload Mount with I/O breakout interface
- 100% in-house design — airframe, electronics, firmware, GCS, and AI

APPLICATIONS

Defense & ISR | Law Enforcement | Infrastructure Inspection
Precision Agriculture | Emergency Response | Surveying & Mapping

COMPATIBLE PAYLOADS

- VianSight Dual Camera (EO + FLIR Thermal)
- Phase One P3 150MP
- RIEGL miniVUX LiDAR
- Velodyne LiDAR Puck
- Teledyne EchoONE Bathymetric LiDAR
- MicaSense Altum-PT Multispectral
- Sony ILX-LR1 61MP
- Corona UV Camera
- LED Module (200W, 32K lumens)
- Loudspeaker, Drop System, SAR Kits

PHYSICAL

Dimensions (Unfolded)	39" x 43" x 22" (100 x 110 x 56 cm)
Dimensions (Folded)	22" x 13.7" x 9" (55 x 34 x 22 cm)
Empty Weight	33 lbs (15 kg)
Max Takeoff Weight	66 lbs (30 kg)
Frame Material	Carbon Fiber Composite
Landing Gear	Concealed — hidden in flight and storage
Deployment Time	Under 1 minute

FLIGHT PERFORMANCE

Flight Time (No Payload)	56 minutes
Flight Time (Phase One P3)	46 minutes
Control Range	7 miles (11 km)
Max Speed	45 mph (72 km/h)
Wind Tolerance	31 mph (14 m/s) — Beaufort Force 6
Operating Ceiling	16,400 ft (5,000 m)
Operating Temp	-20°C to 50°C
Battery	Smart Battery 44.4V, 29,400 mAh

PAYLOAD SYSTEM

Payload Capacity	33 lbs (15 kg)
Payload Bays	4 gimbaled, simultaneous
FOV Coverage	360° per bay
Gimbal	3-axis stabilized
Quick-Swap	Tool-free hot-swap
Universal Mount	Large platform for LiDAR and heavy sensors

AI & COMPUTING

AI Compute	Up to 105 TOPS
Processor	Nvidia Jetson SOM
Object Detection	Real-time multi-target
Auto-Tracking	Proprietary lock-on with auto-center zoom
Edge Processing	4 payloads simultaneously

UNIVERSAL MOUNT I/O INTERFACE

Power	12V-10A, 5V-3A, 3.3V-1A
Data	Ethernet 100M, USB, UART, CAN
Control	S-Bus, PWM
Video	HDMI Encoding — IP streaming over Ethernet

SAFETY & COMPLIANCE

Obstacle Avoidance	360°, all weather: day, night, smoke, rain, dust
GPS	RTK and PPK ready
Redundancy	Dual IMU, dual GPS
NDAA Compliance	Section 889 — fully compliant