At AeroVironment, our purpose is to secure lives and advance sustainability through transformative innovation. Our solutions give our customers a fresh vantage point, positioning them to see the world with new eyes and extending their reach beyond the line of sight. That is the power of our breakthrough unmanned aircraft systems, perfected and refined over a half century. As the pioneer and leader in Tactical Unmanned Aircraft Systems and Tactical Missile Systems, our product roadmap extends well into the future, ensuring that our customers will continue to enjoy a tactical advantage on the battlefield through new products, new capabilities and advanced technologies that will help them proceed with certainty long into the future.

WHO WE ARE

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AEROVIRONMENT HAS DELIVERED THE VAST MAJORITY OF ALL UNMANNED AIRCRAFT IN THE U.S. DEPARTMENT OF DEFENSE INVENTORY*

35,000
MORE THAN 35,000 UNITS DELIVERED

4 MILLION+
ACCUMULATED UAS FLIGHT HOURS (EST)

50
ALLIED NATIONS USING OUR TACTICAL UAS

The All Environment Puma LE delivers Group 2 capabilities in a Group 1 optimized, two-case mission payload. This ultra-lightweight Group 2 aircraft more than doubles the time on station of a Puma 3 AE, featuring 6.5 hours of flight endurance and a 60 km range when used with the optional Long-Range Tracking Antenna (LRTA) and Puma Smart 3000 Battery. Puma LE comes equipped with AeroVironment’s Mantis™ i45 gimbaled sensor suite featuring dual Electro-Optical (EO) cameras, an InfraRed (IR) camera, a low-light camera, and an NVG-visible laser illuminator. The aircraft is multi-mission capable, with a total payload capacity of 5.5 lb and secondary payload bay with dedicated power supply and Ethernet connectivity. The Puma LE’s secondary payload bay is designed for the integration of multi-mission payloads such as Electronic Warfare, RF Geolocation or Communications Relay. Puma LE is hand or bungee launchable, employing a precise, waypoint-controlled landing and does not require additional equipment for recovery.
Switchblade 600 represents the next generation of extended-range loitering missiles. Featuring high precision optics and more than 40 minutes of endurance, Switchblade 600 provides unprecedented RSTA and precision strike capabilities against larger, hardened targets via an anti-armor warhead. This provides the ability to prosecute non-line-of-sight targets with precision lethal effects at a greater stand-off distance, without the need for external ISR or fires assets.

This all-in-one, man-portable solution includes everything required to successfully execute missions across ground, maritime, and air domains. Easily train, plan missions and execute flight operations through an intuitive, touchscreen tablet Fire Control System (FCS).
The all-electric VAPOR 55 Helicopter UAS delivers precision flight control performance, endurance, and payload flexibility. Featuring military-grade components, intelligent HW/SW system design, and a high-energy-density, lithium-polymer battery, VAPOR 55 provides enhanced flight stability and up to one hour of flight time on a single battery charge.

With an expansive modular payload bay and up to 10 lb usable payload capacity, VAPOR 55 is multi-mission capable with access to a variety of available integrated sensors and third-party payloads including EO/IR, survey grade PPK mapping, LiDAR, and hyperspectral sensors, and Drop/Delivery Mechanism. Every VAPOR Helicopter UAS incorporates proprietary HeliSynth™ technology for system level optimization including advanced avionics, payload control & operation, and mission performance efficiency.
Quantix™ Recon is a powerful, simple-to-use UAS that delivers rapid, automated reconnaissance and hands-free data collection. Mapping and scouting tasks are effortless with its fully-automated takeoff, flight and landing functions— even first-time users can successfully operate it. With its Radio Frequency (RF) Silent Mode, Quantix Recon flies undetected and undeterred by jammers to deliver accurate, up-to-date maps within minutes for quick mission planning and verification. On-board processing provides georeferenced, high-resolution imagery on the user’s tablet as soon as Quantix Recon lands— no other devices, internet or software required. Due to its innovative hybrid design, Quantix Recon outperforms traditional quadcopters in range and efficiency. That means you can cover more ground faster and obtain aerial maps of remote, inaccessible areas and rapidly changing environments to ensure the safety of ground forces.
Crysalis Remote Video Terminal (RVT) provides the user with receive-only access to actionable intelligence from AeroVironment’s family of unmanned aircraft systems (UAS). Its intuitive touch screen interface allows users to easily obtain vital battlefield information through real-time EO/IR video downlink, geolocation data, and the ability to record video and capture high-resolution imagery. These advanced capabilities give the user a distinct advantage in making informed, mission-critical decisions.

Compatible with Nett Warrior and AeroVironment’s pocket DDL (pDDL) transceiver, the Crysalis RVT System seamlessly connects to the robust & secure DDL network while easily integrating into tactical vest/utility belt configurations.
QUALITY
AeroVironment’s ISO-9001:2008 production and service facility ensures the highest level product and support quality. The company’s unmatched experience and technology roadmap combine to deliver an outstanding customer experience in situations where reliability and effectiveness can make the difference between success and failure.

AIRWORTHINESS
AeroVironment’s airworthiness organization monitors and evaluates airworthiness regulation initiatives in key markets and regions across the globe to ensure our products conform to our customers’ Airworthiness Certification needs.

TRAINING
We specialize in student-centered learning using state-of-the-art, interactive 3-D digital training media that aids in the retention of information and promotes student participation. Courses include simulator-housed mission scenarios providing a real world digital experience, hands-on practical exercises, mission planning and live flight field operations. We offer all levels of operator training from basic to advanced courses in a safe and controlled environment. Our distinctive training program is recognized both domestically and internationally.

SUPPORT SERVICES
FLIGHT OPERATION SERVICES
AeroVironment provides world-class flight operation services on a global scale. Our flight operation services include fully-equipped and staffed turnkey solutions and outstanding OEM-certified operators, instructors and maintainers.

FIELD SERVICE REPRESENTATIVES
Our Field Service Representatives (FSRs) provide on-site field service support and act as the liaison between customers and our engineering team. The FSRs are highly qualified to provide on-site flight standardization program development and training support package development.

PROGRAM MANAGEMENT & SME SUPPORT
We supply customer-focused program management and subject matter expert support. Our exceptionally skilled staff provides tailored mission planning and operational support, and we include engineering support from the original equipment manufacturer. We also offer on-site sustainment operations development and delivery.

SUSTAINMENT OPERATION
We support our customers with sustainment operations, including professional inventory control and comprehensive logistical services. Our logistical support includes extensive planning, coordination and monitoring to successfully plan and maintain operations.

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**TACTICAL UAS**

**PUMA™ LE LONG ENDURANCE**

**KEY FEATURES**

- Increased payload capacity with optional underwing transit bay and reinforced airframe
- Shares Mantis™ i45 gimbal payload and common LRUs with Puma LE
- Single case mission packout for two full flights with a single aircraft
- 6.5 hours of ISR capability in all environments
- Support 2 flights with 2-case packout
- Dedicated aerial payload bay with power supply and Ethernet

**PUMA™ 3 AE ALL ENVIRONMENT // RQ-20C**

**DIMENSIONS**

| Width | 3.7 ft (1.1 m) |
| Length | 7.7 ft (2.3 m) |
| **WEIGHT** | 30 lb MGTOW* (13.6 kg) |
| **TOTAL PAYLOAD CAPACITY** | 6.3 lb (2.9 kg) |

**SPEED**

- Cruise: 32 km/h (17 kts)
- Dash: 83 km/h (45 kts)

**OPERATING ALTITUDE**

- 300–500 ft (91–152 m) AGL, typical

**GCS**

- Common GCS with Raven®, Puma™ AE, and Wasp AE

**LAUNCH METHOD**

- Hand-launched

**RECOVERY METHOD**

- Deep stall landing

**LINK RANGE**

- 5 km

**ENDURANCE**

- 50 minutes

**TOTAL PAYLOAD CAPACITY**

- 4 lb (1.8 kg)

**MANTIS™ i22 ALL ENVIRONMENT SENSOR SUITE**

- Advanced Gimbaled EO/IR Sensor
- 5 MP EO camera
- LWIR camera and Low Light camera for night operations
- Laser Illuminator

**MANTIS™ i23 SENSOR SUITE**

- Advanced Gimbaled EO/IR Sensor
- 5 MP EO camera
- LWIR camera and Low Light camera for night operations
- Laser Illuminator

**KEY FEATURES**

- Increased payload capacity with optional underwing transit bay and reinforced airframe
- Shares Mantis™ i45 gimbal payload and common LRUs with Puma LE
- Single case mission packout for two full flights with a single aircraft
- Backpackable lightweight & hand-launched
- Autonomous navigation and autonomous landing
- Rugged for extended, reliable use in harsh environments

**RAVEN™ RQ-4B**

**DIMENSIONS**

| Width | 4.3 ft (1.3 m) |
| Length | 15.5 ft (4.7 m) |
| **WEIGHT** | 120 lb MGTOW* (54 kg) |

**SPEED**

- Cruise: 47 km/h (25 kts)
- Dash: 81 km/h (44 kts)

**OPERATING ALTITUDE**

- 300–500 ft (11–152 m) AGL, typical

**GCS**

- Common GCS with Raven®, Puma™ AE, and Wasp AE

**LAUNCH METHOD**

- Hand-launched

**RECOVERY METHOD**

- Deep stall landing

**LINK RANGE**

- 20 km, 60 km with LRTA

**ENDURANCE**

- 2.5 hr with Mantis i45

**TOTAL PAYLOAD CAPACITY**

- 5.5 lb (2.5 kg)

**MANTIS™ i22 SENSOR SUITE**

- Advanced Gimbaled EO/IR Sensor
- 5 MP EO camera
- LWIR camera and Low Light camera for night operations
- Laser Illuminator

**KEY FEATURES**

- Backpackable lightweight & hand-launched
- All environment recovery with deep-stall landing in confined areas
- Quiet operation to avoid detection

**WASP™ AE ALL ENVIRONMENT // RQ-22A**

**DIMENSIONS**

| Width | 3.7 ft (1.1 m) |
| Length | 8.1 ft (2.5 m) |
| **WEIGHT** | 75 lb (34 kg) |

**SPEED**

- Cruise: 49 km/hr (26 kts)
- Dash: 76 km/h (41 kts)

**OPERATING ALTITUDE**

- 300–500 ft (91–152 m) AGL, typical

**GCS**

- Common GCS with Raven®, Puma™ AE, and Wasp AE

**LAUNCH METHOD**

- Hand-launched, optional rail or bungee launch

**RECOVERY METHOD**

- Autonomous or manual precision deep-stall landing

**LINK RANGE**

- 20 km, 60 km with LRTA

**ENDURANCE**

- 6.5 hr with Puma Smart 2500 Battery**

**TOTAL PAYLOAD CAPACITY**

- 5.5 lb (2.5 kg)

**MANTIS™ i45 ALL ENVIRONMENT SENSOR SUITE**

- Dual 15mp EO cameras
- 50x zoom
- LWIR camera and Low Light camera for night operations
- High Power Laser Illuminator

**MANTIS™ i23 SENSOR SUITE**

- Advanced Gimbaled EO/IR Sensor
- 5 MP EO camera
- LWIR camera and Low Light camera for night operations

**KEY FEATURES**

- Increased payload capacity with optional underwing transit bay and reinforced airframe
- Shares Mantis™ i45 gimbal payload and common LRUs with Puma LE
- Single case mission packout for two full flights with a single aircraft
- Backpackable lightweight & hand-launched
- Autonomous navigation and autonomous landing
- Rugged for extended, reliable use in harsh environments

**WASP™ AE ALL ENVIRONMENT // RQ-22A**

**DIMENSIONS**

| Width | 3.7 ft (1.1 m) |
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| **WEIGHT** | 75 lb (34 kg) |

**SPEED**

- Cruise: 47 km/h (25 kts)
- Dash: 81 km/h (44 kts)

**OPERATING ALTITUDE**

- 300–500 ft (91–152 m) AGL, typical

**GCS**

- Common GCS with Raven®, Puma™ AE, and Wasp AE

**LAUNCH METHOD**

- Hand-launched

**RECOVERY METHOD**

- Deep stall landing

**LINK RANGE**

- 10 km

**ENDURANCE**

- 1-1.5 hr

**TOTAL PAYLOAD CAPACITY**

- 4 lb (1.8 kg)
**KEY FEATURES**

- **Patented wave-off/recommit capability**
- **Intuitive touch tablet controller**
- **< 10 minute system setup and launch**

**FIRE CONTROL SYSTEM**

- **Tablet-based FCU with Tap-to-Target guidance with built-in mission planner and retriever**
- **2-axis, 4-sensor gimbal (Dual EO and IR) integrated sensor suite**
- **Self-contained launcher for ground, air and maritime**
- **Precision of shot with Northrop Grumman advanced munition**

**TARGETING OPTICS**

- **2-axis, 4-sensor gimbal (Dual EO and IR) integrated sensor suite**
- **Stabilized electronic pan-tilt-zoom**
- **Precise shot with Northrop Grumman advanced munition**

**OPERATING ALTITUDE**

- **Below 650 ft AGL (ceiling >15,000 ft MSL)**
- **Below 500 ft AGL (ceiling >15,000 ft MSL)**
- **Self-contained launcher for ground, air and maritime**

**LETHALITY**

- **Precision strike with anti-armor warhead**
- **Precision strike with anti-personnel effects**
- **Anti-personnel effects**

**RANGE**

- **40+ km**
- **10 km**

**ENDURANCE**

- **40+ minutes**
- **15 minutes**

**SPEED**

- **Cruise: 70 mph, Dash: 115 mph**
- **Cruise: 63 mph, Dash: 100 mph**

**EFFECTS ON TARGET**

- **Light armor and anti-personnel effects**
- **Anti-personnel effects**

**GROUND CONTROL SYSTEM**

- Interoperable with Common Ground Control Station for Puma™, Raven®, and Wasp® AE
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**DIMENSIONS**

- **DIMENSIONS**
  - **Length: 19.5 in (49.5 cm)**
  - **Diameter: 3 in (7.6 cm)**

**WEIGHT**

- **4 lb (1.8 kg)**
- **AUR: 5.5 lb (2.5 kg)**
- **System [1 AUR and FCS]: 120 lb (54.4 kg)**

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**MPL MULTIPACK LAUNCHER**

**KEY FEATURES**

- **Compatible platforms – Switchblade™ 200, Blackwing™**
- **Rapid Reload – < 30 seconds per round**
- **Low observable remote ops**
- **Tactical Vehicle/Shipboard Integration**

**DIMENSIONS**

- **36 in D x 30 in W x 36 in H**

**WEIGHT**

- **< 10 lb (4.5 kg)**
**GROUND SPEED LIMIT**
31 mph (14 m/s)

**OPERATING ALTITUDE**
0-12,000 ft (3,657 m) MSL

**MAX WIND PEAK**
Sustained: 27 km/h (15 kts),
Gust: 37 km/h (20 kts)

**DATA LINKS**
900 MHz, 2.4 GHz, 5.8 GHz, Satellite

**PAYLOAD OPTIONS**
Purpose-built for multi-mission operations
VTOL Automated mission execution—plan, simulate & execute
Versatile payload bay for integration of sensors and third party payloads
Configurable to perform single and/or multiple payload missions

**RANGE**
8 km standard GCS

**ENDURANCE**
Cruise: 60 minutes, Hover: 45 minutes

**USEABLE PAYLOAD**
10 lb (4.5 kg)

### Key Features
- Purpose-built for multi-mission operations
- VTOL Automated mission execution—plan, simulate & execute
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**PAYLOAD OPTIONS**
EO/IR Sensor
Lidar
Hyperspectral
PPK Mapping
Drop Mechanism
Multi-Payload

**DIMENSIONS**
- Aircraft: 6.4 ft x 2.2 ft x 1.6 ft (1.95 m x 0.64 m x 0.49 m)
- Rotor Diameter: 5.6 ft (1.71 m)

**WEIGHT**
32 lb (14.5 kg)

**KEY FEATURES**
- RF Silent Mode prevents detection
- Dual 18 MP cameras for complete hands-free data collection
- Ready to fly in ~5 minutes, accurate up to date maps within minutes of landing
- Quick and easy mission planning and verification, no connectivity required

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**DATA LINKS**
900 MHz Encrypted & wifi

**PAYLOAD OPTIONS**
On-board SD card

**DIMENSIONS**
- Aircraft: 8.4 ft x 2.2 ft x 1.9 ft (2.56 m x 0.67 m x 0.58 m)
- Rotor Diameter: 7.5 ft (2.29 m)

**WEIGHT**
55 lb (24.9 kg)

**KEY FEATURES**
- Rotary Blade Offers improved aerodynamic and aerodynamic efficiency
- Vertical takeoff and landing

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**WEIGHT**
55 lb (24.9 kg)
KEY FEATURES

» Intuitive touchscreen user interface with multiple view modes
» Real-time, mission critical intel with EO/IR video downlink, geodata, high-res imagery
» Lightweight & portable with complete system weighing less than 3.3 lb
» 3 km digital broadband data connection radius, with AES-256 data encryption

COMPATIBLE OS
Android® 5.0+

LINK RANGE
Up to 5 km

OPERATING BANDS
M1/2/5 or M3/4/6

INTERFACE
USB Digital Interface
Nett Warrior compatible
SMA RF Connectors

POWER REQUIREMENTS
Input Voltage: 5 to 30 V DC (USB Compatible)
Current Draw: 0.7 A / 5.0 V
Battery Life: up to 2.5 hr (2,000 mAh USB battery)

OPERATING TEMPERATURE
0–43 °C (end user device)

ENVIRONMENTAL RATING
pDDL: All Environment
Juggernaut case: IP67, Mil 810G

SYSTEM COMPONENTS
pDDL Transceiver
Samsung S20 in Juggernaut case
Bren-tronics BB2257 Battery

DIMENSIONS
4 in x 2.25 in x 0.75 in
(10.2 cm x 5.71 cm x 1.9 cm)

WEIGHT
7.1 oz (200 g)

Note: excludes the GCS RF Head, hub and system battery

DIMENSIONS
Height: M1/2/5: 5.8–9.4 ft
(1.8–2.9 m)
M3/4/6: 5.25–8.8 ft (1.6–2.7 m)

Base Diameter: 5.3 ft (1.6 m), legs not extended

WEIGHT
M1/2/5: 304 lb (138 kg)
M3/4/6: 300 lb (136 kg)

TX POWER
1.5 W

RX SENSITIVITY
-98 dBm @ 2 Mbps
-93 dBm @ 6 Mbps

POWER CONSUMPTION
9 W

DATA RATE
4.5 Mbps

SUPPORTED COMPRESSION
MPEG2 or H264 SD

INTERFACES
USB

ENCRYPTION
AES-128/AES-256

DIMENSIONS
Height: 8.2 ft (2.5 m)
Base Diameter: 11 ft (3.5 m)

WEIGHT
11 lb (5 kg)

NOTE: excludes antenna and cables
AEROVIRONMENT'S FAMILY OF TACTICAL UNMANNED AIRCRAFT SYSTEMS

Warfighters are the ground need to make missions critical decisions in seconds. In order to do this, they need superior tactical intelligence, surveillance and reconnaissance un-deployed. Aerovironment's rugged, small, consumer aircraft systems combine powerful sensors, secure communications, superior aerodynamics, manual or autonomous navigation, and versatile ground control stations to help warfighters rely on their situational awareness. Our VITAL systems leverage our mission proven systems. By technologically advanced products and our commitment to excellence, Aerovironment's family of systems can help warfighters make life or death decisions.
For more product information, visit avinc.com