

# SWITCHBLADE® 600 LOITERING MUNITION



## DIMENSIONS

Wingspan: 67 in (1.7 m)  
Length: 50 in (1.3 m)

## WEIGHT

Munition: 33 lb (15 kg)  
AUR: 65 lb (29.5 kg)



**RANGE**  
40+ km



**ENDURANCE**  
40+ min



**SPEED**  
Cruise: 70 mph (113 km/h)  
Dash: 115 mph (185 km/h)



**EFFECTS ON TARGET**  
Anti-armor & anti-personnel effects

## FIRE CONTROL SYSTEM

Tablet-based FCU with tap-to-target guidance & built-in mission planner & trainer

## TARGETING OPTICS

2-axis, 4-sensor gimbal (Dual EO/IR) integrated sensor suite

## OPERATING ALTITUDE

Below 650 ft (198 m)  
AGL: ceiling >15,000 ft (4572 m) MSL

## LAUNCH METHOD

Self-contained launcher for ground, air & maritime

## LETHALITY

Precision strike with anti-armor warhead

## KEY FEATURES

*Patented wave-off feature & recommit capability*

*Enhanced Digital Data Link™ covering more frequencies & supporting AES-256-bit encryption*

*Intuitive touch screen tablet Fire Control Unit (FCU)*

*<10 minute system setup & launch*

## ALL-IN-ONE, MAN-PORTABLE, ANTI-ARMOR, SMART MUNITION SYSTEM



Best-in-Class Target Acquisition Sensor Suite



Anti-Armor Warhead



Self-Contained Tube-Launcher



Mission Planning on FCU



Integrated Training Simulator (T-sim)



Fire Control System

# SWITCHBLADE® 300 BLOCK 20



## DIMENSIONS

Wingspan: 29 in (73 cm)  
Length: 18 in (46 cm)

## WEIGHT

Munition: 4 lb (1.8 kg)  
AUR: ~8 lb (3.6 kg)  
(includes payload, launcher, etc.)



**RANGE**  
10+ km



**ENDURANCE**  
20+ min



**SPEED**  
Cruise: 63 mph (101 km/h)  
Dash: 100 mph (161 km/h)



**EFFECTS ON TARGET**  
Anti-personnel effects

## FIRE CONTROL SYSTEM

Tablet-based FCU with tap-to-target guidance & built-in mission planner & trainer

## TARGETING OPTICS

Enhanced EO/IR with forward to left hand panning camera suite

## OPERATING ALTITUDE

Flight <500 ft (152.4 m)  
AGL: supports operation >15,000 ft (4572 m) ASL

## LAUNCH METHOD

Self-contained launcher for ground, air & maritime; configurable multipack capability

## LETHALITY

Precision strike with low collateral effects

## KEY FEATURES

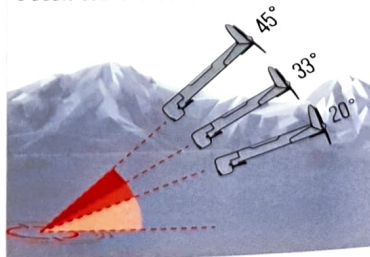
» *Patented wave-off feature & recommit capability*

» *Enhanced Digital Data Link™ covering more frequencies & supporting AES-256-bit encryption*

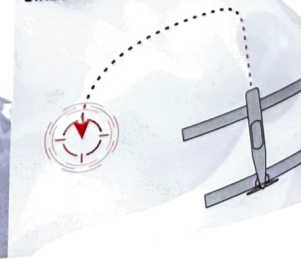
» *Intuitive touch screen tablet Fire Control Unit (FCU)*

» *Advanced Munition—multiple commit angles, user-selectable point of detonation, left hand commit with continuous Positive Identification (PID)*

## 3 USER-SELECTABLE ATTACK ANGLES



## DIRECT ATTACK FROM ORBIT // MAINTAIN PID



# BLACKWING™ LOITERING RECONNAISSANCE SYSTEM



**DIMENSIONS**

Wingspan: 27 in (68.6 cm)  
Length: 19.5 in (49.5 cm)  
Diameter: 3 in (7.6 cm)

**WEIGHT**

4 lb (1.8 kg)

**SENSORS**

Integrated EO/IR sensors—day/night operations

**LAUNCH METHOD**

Underwater-to-air delivery canister, tube, MPL

**KEY FEATURES**

- » *Rapid response ISR*
- » *C3 tactical data relay from UAS to UUV*
- » *Modular payload*

# MPL MULTIPACK LAUNCHER



**DIMENSIONS**

36 in D x 30 in W x 36 in H

**WEIGHT**

~130 lb empty  
~160 lb loaded

**CONFIGURATIONS**

6-pack standard (Alternates for 2-20 AURs possible)

**MOUNTING**

Hold-downs for vehicle or shipboard use

**POWER**

Solar panel & internal battery, Shore/TacVeh power augments to maintain internal operating temps

**CONTROL**

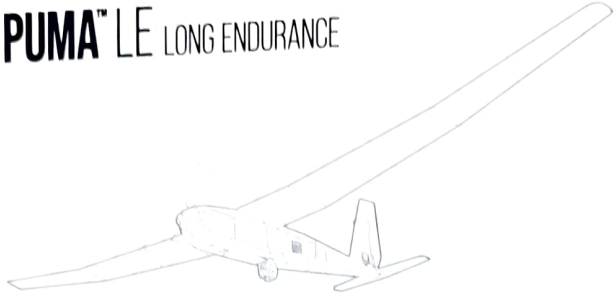
100 ft remote operation control cable (FOB/COP ops cell bunker/buildings, tactical vehicles, ship CIC)




**KEY FEATURES**

- » *Compatible with Switchblade® 300 & Blackwing™*
- » *Rapid Reload—<30 seconds per round*
- » *Low observable remote ops*
- » *Tactical vehicle/MRAP*



PUMA™ LE LONG ENDURANCE



<b>DIMENSIONS</b> Wingspan: 15 ft (4.6 m) Length: 7.3 ft (2.2 m)		<b>WEIGHT</b> 23.5 lb with Mantis™ i45/i45 N (10.7 kg)	
	<b>LINK RANGE</b> 20 km, 60 km with LRTA	<b>SPEED</b>	Cruise: 47 km/h (25 kts) Dash: 76 km/h (41 kts) 300-500 ft (91-152 m)
	<b>ENDURANCE</b> 6.5 hr with Puma™ Smart 2500 Battery*	<b>OPERATING ALTITUDE</b>	AGL, typical Max. launch 10K ft (3,048 m) MSL
	<b>TOTAL PAYLOAD CAPACITY</b> 5.5 lb (2.5 kg)**	<b>GCS</b>	Crysalis™ and legacy common GCS
		<b>LAUNCH METHOD</b>	Hand-launched, bungee or vehicle launch
		<b>RECOVERY METHOD</b>	Autonomous or manual deep-stall; land or sea

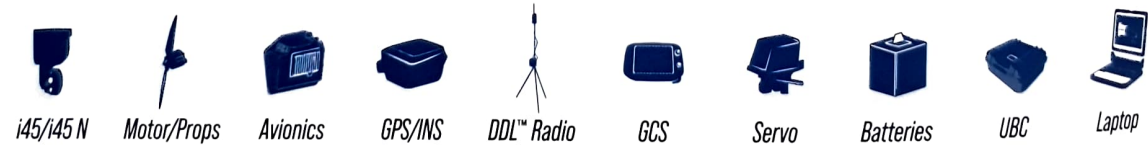
\* Puma™ Smart 2500 Battery is not compatible with other Puma™ AE aircraft  
\*\* Payload capacity is reduced by 0.3 lb (140 g)

KEY FEATURES

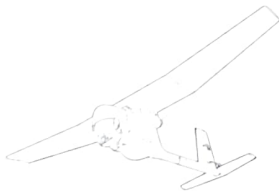
- » 6.5 hours of ISR capability & full-motion video in all environments
- » Support two flights with 2-case mission packout
- » Dedicated secondary payload bay with power supply & Ethernet

INTEROPERABLE LRU SHARING ACROSS PUMA™ PRODUCT LINE

Puma™ 3 AE and Puma™ LE share many of the same Line Replaceable Units (LRUs), retaining similar operation, transport and logistics support within the Puma™ family.



RAVEN® B RQ-11B



<b>DIMENSIONS</b> Wingspan: 4.5 ft (1.4 m) Length: 3 ft (0.9 m)	
<b>WEIGHT</b> 4.8 lb (2.2 kg)	

PUMA™ 3 AE ALL ENVIRONMENT // RQ-20C



<b>DIMENSIONS</b> Wingspan: 9.2 ft (2.8 m) Length: 4.6 ft (1.4 m)		<b>WEIGHT</b> 15.4 lb with Mantis™ i45/i45 N (7 kg)	
	<b>LINK RANGE</b> 20 km, 60 km with LRTA	<b>SPEED</b>	Cruise: 49 km/hr (26 kts) Dash: 76 km/h (41 kts) 300-500 ft (91-152 m)
	<b>ENDURANCE</b> 2.5 hr with Mantis™ i45	<b>OPERATING ALTITUDE</b>	AGL, typical Max. launch 10K ft (3,048 m) MSL
	<b>TOTAL PAYLOAD CAPACITY</b> 4 lb (1.8 kg)	<b>GCS</b>	Crysalis™ & legacy common GCS
		<b>LAUNCH METHOD</b>	Hand-launched, optional bungee launch or VTOL kit
		<b>RECOVERY METHOD</b>	Autonomous or manual deep-stall; land or sea; VTOL option

KEY FEATURES

- » Increased payload capacity with optional underwing transit bay for secondary payloads
- » Single-case mission packout provides two full flights

	<b>LINK RANGE</b> 10 km		<b>ENDURANCE</b> 75+ min
<b>SPEED</b>	Cruise: 32 km/h (17 kts), Dash: 81 km/h (44 kts)		
<b>OPERATING ALTITUDE</b>	100-500 ft (30-152 m) AGL, typical Max. launch 14K ft (4,267 m) MSL		
<b>GCS</b>	Crysalis™ & legacy common GCS		
<b>LAUNCH METHOD</b>	Hand-launched		
<b>RECOVERY METHOD</b>	Autonomous or manual deep-stall		



## PUMA™ KITS AND ACCESSORIES

### COMPATIBLE WITH PUMA™ PRODUCT LINE

#### PUMA™ BUNGEE LAUNCH SYSTEM

- » For environmental scenarios where hand launch is not preferred
- » Setup & operational in <10 min
- » Multiple ground fastener options securely installed in a variety of soil types or mounted to low, immovable objects

### COMPATIBLE WITH PUMA™ 3 AE ONLY

#### PUMA™ VTOL KIT

- » Automated one-button launch & recovery in confined environments
- » Fixed-wing to VTOL in minutes
- » Available as add-on or retrofit kit

#### PUMA™ UNIVERSAL TRANSIT BAY

- » Optional under-wing transit bay for additional payload capacity
- » Easy integration of third-party payloads
- » Three heights available: 1.75 in, 2.25 in & 3 in

#### PUMA™ VNS VISUAL NAVIGATION SYSTEM

- » Seamless mission continuity through GPS-denied environments
- » Low-SWAP retrofit kit on existing & new Puma™ AE
- » Enables integration of future autonomy capabilities

## MANTIS™ IMAGING PAYLOAD SENSORS

### COMPATIBLE WITH PUMA™ PRODUCT LINE



#### MANTIS™ i45 N

- » Maximum visibility during night & low-light ISR
- » Wide & narrow LWIR camera imagers
- » 5 MP monochrome Low Light camera
- » Enhanced laser illuminator



#### MANTIS™ i45

- » Superior daylight & low-light capabilities
- » Dual 15 MP high-res EO cameras
- » Low Light, LWIR cameras
- » Laser illuminator

### COMPATIBLE WITH RAVEN™



#### MANTIS™ i23 D

- » High-performance daytime imaging
- » Dual 18 MP high-res EO sensors
- » 25x digital zoom



#### MANTIS™ i23

- » Daylight & thermal imaging system
- » 5 MP EO camera imager
- » Laser illuminator

## VAPOR™ 55 MX ALL-ELECTRIC HELICOPTER UAS



#### DIMENSIONS

Aircraft: 6 ft x 2.2 ft x 2.1 ft  
(1.8 m x .67 m x .64 m)

Rotor Diameter: 7.5 ft (2.29 m)

#### GTOW WEIGHT\*

55 lb (24.9 kg) for commercial use  
65 lb (29.5 kg) for defense missions  
with less endurance



#### RANGE

Up to 32 km



#### ENDURANCE

Cruise: 75 min  
Hover: 60 min



#### USABLE PAYLOAD\*

Up to 12 lb (5.4 kg) @ 55 lb  
Up to 22 lb (10 kg) @ 65 lb

#### GROUND

**SPEED** 33 mph (15 m/s)  
**LIMIT**

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

**ALTITUDE\*** MSL (density)

**MAX WIND** Sustained: 34.5 mph  
**PEAK\*** (30 kts)

**DATA LINKS** 900 MHz, 2.4 GHz or  
5.8 GHz (Video), Silvus,  
Persistent Systems,  
MicroHard

\*FAA restricts the max Gross Take-off Weight (GTOW) of drones operating in the NAS to 55 lb unless you have special authorization

### KEY FEATURES

- » *Payload Flexibility—payload modules with rail design enables quick & easy payload integration for increased mission flexibility*
- » *Sleek, modular airframe design for easy assembly & disassembly*
- » *Telescoping tail & folding landing gear for greater portability*

### EXAMPLES OF POSSIBLE PAYLOADS



EO/IR Sensor



SIGINT



Drop Mechanism



Lidar



Hyperspectral



PPK Mapping



Multi-Payload

# JUMP® 20 VTOL FIXED-WING



## DIMENSIONS

Wingspan: 18.8 ft (5.7 m)  
Length: 9.5 ft (2.9 m)

## WEIGHT

215 lb MGTOW\* (97.5 kg)  
Fuel & Payload



**LINK RANGE**  
185 km (115 mi)



**ENDURANCE**  
14+ hr



**USABLE PAYLOAD CAPACITY**  
Up to 30 lb (13.6 kg)



**POWER SUPPLY**  
MOGAS, 190 cc EFI Engine  
Battery Powered VTOL Jump

## OPERATING ALTITUDE

17,000 ft DA

## GCS

Common GCS with T-20™

## LAUNCH METHOD

No launch system or runway required; vertical take-off & landing (VTOL)

## RECOVERY METHOD

VTOL landing

\*MGTOW - Maximum Gross Take-off Weight



**LINK RANGE**  
185 km (115 mi)



**ENDURANCE**  
24+ hr



**USABLE PAYLOAD CAPACITY**  
Up to 50 lb (22.7 kg)



**POWER SUPPLY**  
MOGAS, 190 cc EFI Engine

## WEIGHT

225 lb MGTOW\* (102 kg)  
Fuel & Payload

## OPERATING ALTITUDE

20,000 ft DA

## GCS

Common GCS with JUMP® 20

## LAUNCH METHOD

Catapult-launched

## RECOVERY METHOD

Autonomous or manual skid landing

\*MGTOW - Maximum Gross Take-off Weight

## KEY FEATURES

*Multi-INT/Multi-Domain in a single integrated aircraft*  
*Best-in-class range & endurance, delivering superior performance*  
*Fully Integrated Payload Options—synthetic aperture radar, mapping capabilities, laser designation, anti-jamming, COMINT/SIGINT*

## KEY FEATURES

» *Runway Independent—small operational footprint with PLS (catapult)*  
» *High-Performance Optics—long-range day/night imaging, onboard tracking & stabilization*  
» *Class-leading endurance & payload flexibility in a Group 3 UAS*  
» *Group 4 capabilities in a Group 3 footprint*

## SENSOR OPTIONS



**HOODTECH 09E0960/09E0IR3**  
JUMP 20 ONLY



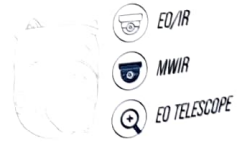
**WESCAM MX-8**  
JUMP 20 ONLY



**HOODTECH 11E0IR5**  
JUMP 20 ONLY



**TRILLIUM HD80/95**  
JUMP 20 & T-20™



**HOODTECH 06E0IR**  
T-20™ ONLY

## SWAPPABLE IMAGING SYSTEMS

» Superior long-range day and night imaging systems that offer onboard tracking, MWIR, image stabilization, analog and digital output with H.264/5 compression.

## DATA LINKS

» Provides ISR support, MUM-T interoperability, OSRVT downlink to ground or air forces, and the ability to communicate across multiple channels and bands.

## COMMUNICATIONS RELAY

» Provides unobstructed ground-to-ground and pilot-to-ground voice/video communication in urban environments or challenging terrain.

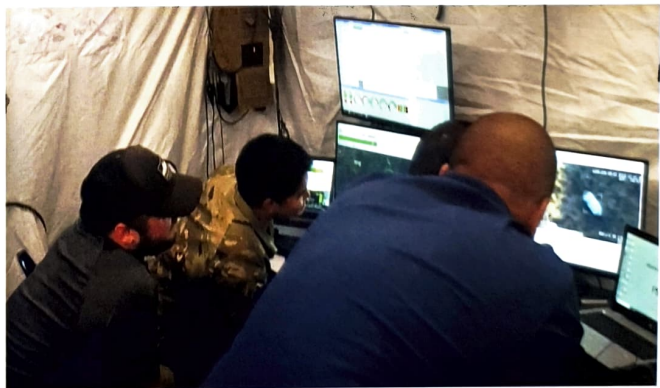




## ISR SERVICES

AeroVironment's ISR services ensures uninterrupted operations and mission success through effective mission planning, on-site operational support, maintenance, repairs, and timely supply chain management. Our highly trained staff of Field Service Representatives (FSR) are ready to quickly mobilize to support customer mission requirements in any theater of operation.

- » **Fully Equipped & Staffed**  
Turnkey Solutions for *COCO & GOCO* operations
- » **OEM-SME remote pilot**  
certified operators, instructors  
& maintainers
- » **Design & Development of**  
mission-tailored *TTPs & SOPs*
- » **Development of on-site**  
sustainment operations &  
delivery
- » **Total Logistical & Operational Support** *mission planning, coordination & monitoring*
- » **Maintenance & Repair Services** *on-site to ensure mission sustainment & success*



## TRAINING AND FIELD SERVICES



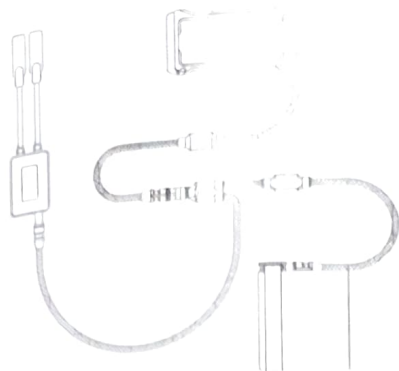
### STUDENT TRAINING

- » Tailored FSR training for air vehicle operators and mechanics to include a "dual-qualification" in 8 weeks
- » Built in simulator through Quattro autopilot with Vigilant Spirit interface

### FIELD SERVICE

- » Factory support program
- » Ongoing global logistics support
- » Component replacement tracking
- » On-site FSRs
- » Crew member currency training support

## CRYSalIS™ RVT



PORTABILITY

Wearable



SETUP TIME

5 min



LINK RANGE

5 km



WEIGHT

System: 3.3 lb (1.5 kg)

### USE CASE

Single operator (wearable); provides situational awareness, battlefield coordination and support to large and/or small teams; passive downlink video viewing and UAS telemetry data.

## CRYSalIS™ ULTRALIGHT GCS



PORTABILITY

Wearable



SETUP TIME

5 min



LINK RANGE

5 km



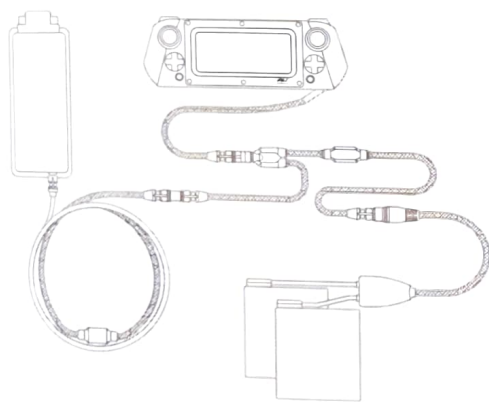
WEIGHT

System: 4.7 lb (2.1 kg)

### USE CASE

Single operator (wearable); ideal for on-the-move and mobile ISR operations; virtual touch screen or tactile joystick control of UAS and payloads.

## CRYSalIS™ TACTICAL GCS



PORTABILITY

Backpackable



SETUP TIME

10 min



LINK RANGE

20 km



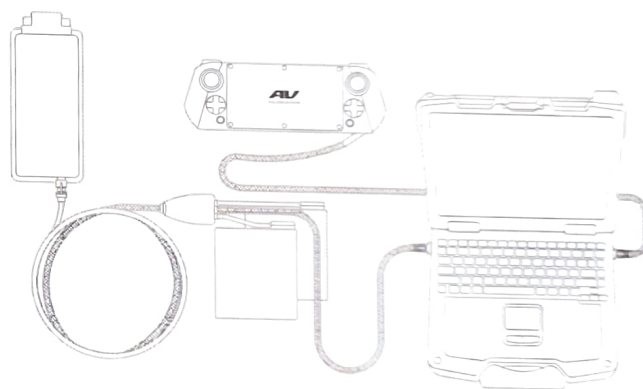
WEIGHT

System: 8.6 lb (3.9 kg)

### USE CASE

Single operator deployment and launch; full control of UAS and payloads through virtual or tactile joysticks; backpackable, lightweight and rugged for use in any environment with an operational range up to 20 km.

## CRYSalIS™ COMMAND GCS



PORTABILITY

Man-packable



SETUP TIME

15 min



LINK RANGE

20 km



WEIGHT

System: 14.3 lb (6.49 kg)

### USE CASE

Single or dual operator deployment; all-in-one modular and flexible ground control system and payloads through tactile joysticks; ideal for command-level operations; semi-fixed positions.