

BLACK HORNET® PRS

Airborne Personal Reconnaissance System
(PRS) for Dismounted Soldiers

APPLICATIONS

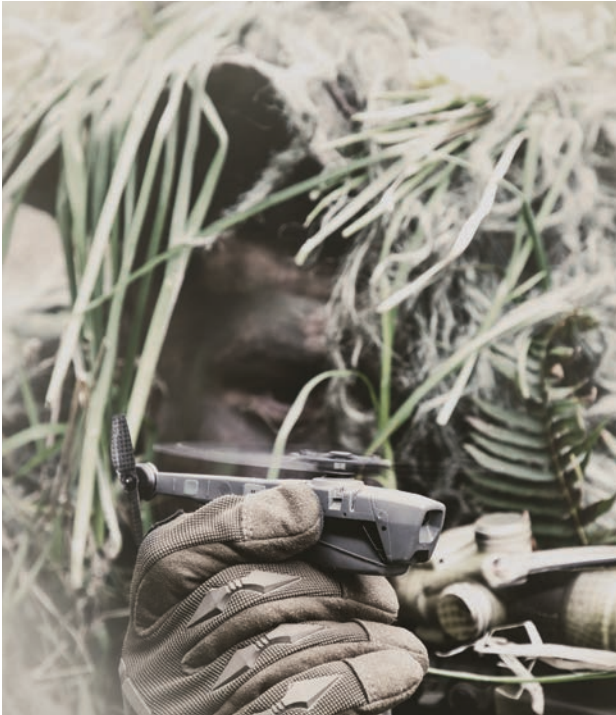
IMMEDIATE ISR

COVERT OPERATIONS

SITUATIONAL AWARENESS

**BEYOND LINE-OF-SIGHT
RECONNAISSANCE**

FORCE PROTECTION



The Black Hornet PRS equips the non-specialist dismounted soldier with immediate covert situational awareness (SA). Game changing EO and IR technology bridges the gap between aerial and ground-based sensors, with the same SA as a larger UAV and threat location capabilities of UGVs. Extremely light, nearly silent, and with a flight time up to 25 minutes, the combat-proven, pocket-sized Black Hornet PRS transmits live video and HD still images back to the operator.

With a less-than 33-gram UAV, GCS with integral UAV containers, Black Hornet PRS is compact and requires minimal training. An upgraded GCS features removable mission data SD cards, increased processing capability, improved user interface, robust chargers, and enhanced vision-based navigation. Imagery is transmitted through encrypted data link with ranges up to 2 km to safely engage targets beyond visual line-of-sight. The world's smallest and lightest, the proven Black Hornet PRS provides dismounted soldiers autonomous, mission-critical SA.

FEATURES

SQUAD-LEVEL IMMEDIATE SITUATIONAL AWARENESS

Save lives and minimize collateral damage. Detect and identify threats day and night without being detected. Increase speed of movement and expand maneuver options.

NON-SPECIALIST NANO UAV SYSTEM

At 1.3 kg and small enough for a dismounted soldier to carry on a utility belt, Black Hornet PRS deploys easily, with minimal training required.

COVERT AIRBORNE SENSOR

Extremely low visual and audible signatures allow covert operation and increased security for dismounted soldiers. It can operate almost anywhere any time without prior airspace coordination.*

BEYOND VISUAL LINE-OF-SIGHT CAPABILITY

Expand visual range in complex and urban environments. Rapidly engage targets beyond visual line-of-sight, and Conduct post strike assessment.

RESILIENT AND BATTLE-TESTED

Combat-proven on the battlefield by NATO forces, Black Hornet PRS is wind tolerant up to gusts of 20 knots (10 m/s) and multi-mission capable with ground speeds up to 6 m/s

*Due to its extremely small size and light weight, the UAV is regarded by several Military Aviation Authorities to expose minimal risk to other aircraft or personnel on the ground, and as such simplifies the required certification process and minimizes the need for airspace clearance to operate. This allows the user to launch a UAV immediately and operate with maximum freedom of operation. Different national rules and regulations may apply. Our company has gained approval from the US Federal Aviation Authorities to operate the Black Hornet without restrictions in CONUS (limitations apply in areas close to airports).

SPECIFICATIONS

Item	Specification
Rotor diameter	123 mm (4.8 in)
Total length	168 mm (6.6 in)
Weight	< 33 grams (1.16 oz)
Signature	
Visual detection	Best in class, details upon request
Audio	Best in class, details upon request
Payload	
Replaceable	Yes
Day Imager	2 EO Cameras
Night Imager	Fused thermal and EO with user selectable LED light
Performance	
Endurance	Up to 25 minutes
Max. speed	6 m/sec ground speed (~20 ft/sec)
Environment	
Temperature	-10°C to +43°C
Wind	15 knots/gust 20 knots
Precipitation	2.5 mm (.1 in)//hr (Light rain)
Data Link	
Frequency	Details on request
Radio Range	2 km (1.24 mi)
Performance	Encrypted, dynamic power, frequency hopping, beyond line-of-sight
Resolution	
EO Video	640x480
EO Snapshot	1600x1200
Thermal Imaging Video	160x120
Thermal Imaging Snapshot	160x120
Flight modes	
	Auto and Manual Hover & Stare Route and user selectable waypoint actions Automatic return Lost link
Navigation	
	GNSS navigation Vision Base Navigation for GPS-denied and indoor operation (upgrade option) Embedded Vector and Raster maps (upgrade option)
Mission Data	
	AES 256 encrypted Video, Snapshots, and Metadata Removeable 64 Gb SD-card for mission data AES 256 STANAG 4609 and Cursor on Target (COT) compliant ATAK Compatible Can be integrated with selected BMS
Launch Time	
	30-120 Seconds depending on launch mode


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