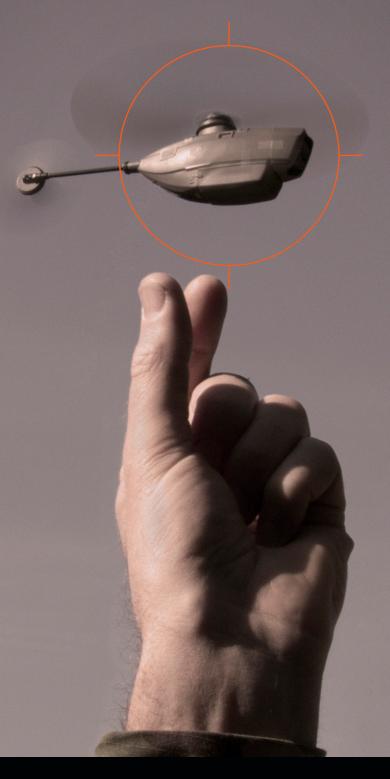
# PERSONAL RECONNAISSANCE SYSTEM





## CARGO POCKET ISR

The PD-100 Black Hornet Personal Reconnaissance System (PRS) is the world's smallest operational unmanned system and has been used extensively in combat operations by NATO forces over the past few years. The system is truly a Cargo Pocket ISR solution for the modern warfighter. It is described by its users as a "Game Changer" and a "Life Saver", and has created a new standard and class for the smallest UAS.

At 18 grams, the Black Hornet is inherently safe, organic and covert. Despite its small size, the Black Hornet provides live motion video and snapshots back to the operator.

The system can be delivered with both day/ lowlight and night vision cameras, covering a 24/7 operational requirement.

PD-100 PRS bridges the gap between aerial and ground-based sensors, significantly enhancing the situational awareness for dismounted and mounted units. At only 1.3 kg total system weight, the PD-100 PRS is compact and easily integrated with an operator's personal equipment.





## VEHICLE RECONNAISSANCE SYSTEM





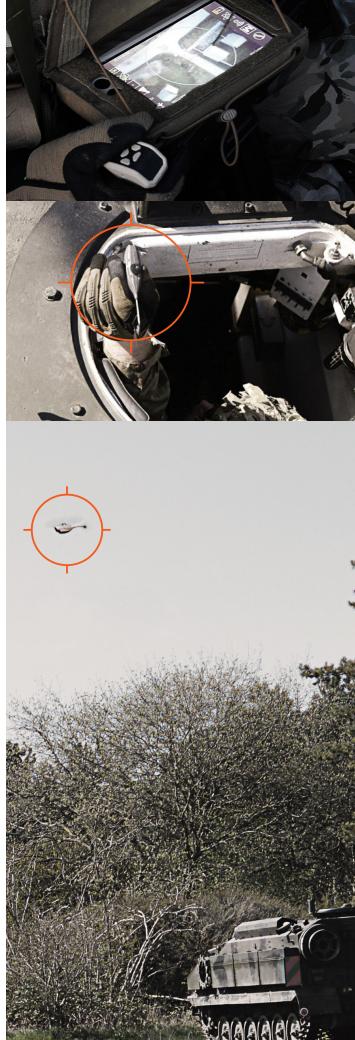
**PD-100 BLACK HORNET** 

## VEHICLE RECONNAISSANCE SYSTEM

The PD-100 Black Hornet Vehicle
Reconnaissance System (VRS) is a unique
system for mounted combat operations. The
VRS is based upon the combat proven PD-100
Black Hornet PRS, and introduces a new
game-changing capability for vehicle based
units. The system allows for active Route and
Point Reconnaissance and can be launched &
recovered from within Vehicles while keeping
up with maneuver units. In addition the VRS
can scout kilometers ahead or in the flank
of columns, ensure positive identification
of hostile units and help with verification of
suspected IEDs along the route.

- Day and night live video and snapshots
- No airspace coordination needed prior to use (considered inherently safe)
- The concept is platform independent and scalable
- Same base equipment for dismounted and mounted operations
- Integrate information, not hardware
- Extreme low weight/volume on complete system (18 gram UAV)
- Very low logistical burden
- No specialists needed to operate





## PD-100 BLACK HORNET SPECIFICATIONS

The PD-100 Personal Reconnaissance System (PRS) is a complete nano UAS consisting of two nano helicopters, base station, controller, display unit and pouch. Total system weight is 1.3 kg. The system is delivered in a waterproof hard transport case.

#### Nano air vehicles

The Black Hornet nano air vehicles are inherently safe and pose virtually no risk to other air vehicles or personnel, allowing the system to be operated almost anywhere at any time without prior airspace coordination. The Black Hornet's low signature makes it virtually inaudible and invisible beyond short distances. It is avalible in daylight, lowlight and night vision versions.

#### **Base station**

The base station houses the two nano air vehicles, and contains all necessary functions to plan, execute and analyse missions. All mission data is stored in real time on the base station. Internal rechargeable batteries supply power to the external display and recharge the nano air vehicles. The base station also contains the detachable single hand controller.

### Display options

Prox Dynamics offers a lightweight daylight readable display for the Black Hornet. The high quality 7 inch screen allows information to be shared between users in all environments. In addition, external head mounted display options may be used.



18 grams



25 minutes endurance



Live video and HD snapshots Optional night vision sensor



1.6 km radio LOS range



5 m/s ground speed 8 m/s wind tolerance, gusts up to 12 m/s





7" daylight readable display or external head mounted options



Up to four UAV recharges on internal batteries



Two UAVs per system

## PD-100 BLACK HORNET ACCESSORIES

#### **External antenna**

The small and lightweight omni directional external antenna connects to the base station, providing a more robust data link. The standard tripod mount allows for a range of mounting options. The external antenna is delivered with a flexible Molle/Velcro harness.



The charger cable allows the PD-100 Base Station to be operated or recharged from any standard BA5590/BB2590 battery.

### Tactical pouch system

An optional flexible MOLLE pouch system is available for tactical use. The pouch system includes:

- Display Pouch
- Base Station Pouch
- Neck Strap

### **Simulator**

Prox Dynamics offers a training simulator that helps to reduce the cost of training new operators. The simulator includes:

- Laptop computer
- Simulator Base Station
- Cables
- VBS3 software











### PROX DYNAMICS

### **COMPANY PROFILE**

### Prox Dynamics' mission

At Prox Dynamics our core mission is to develop, produce and sell the World's smallest and most advanced Unmanned Aircraft Systems (UAS). We create innovative solutions to complex problems based on modern microelectronics, new sensor technology, creative mechanical design and efficient low-cost production techniques. We work closely with industry-leading partners and a broad customer base to deliver optimal and functional products that meet operator's needs.

### Making the impossible possible

We have set goals for our products that may seem to others as impossible to reach. Our World-leading competence in nano helicopter technology combined with excellence in system integration, hardware development and signal processing enables us to continually redefine the previously perceived limit of Nano Unmanned Aerial Vehicle (NUAS) market.

By focusing on our motto – Simplicity, Innovation, Dedication – we achieve our goals, and continue as the World's leading supplier of market-leading NUAS.

### History

Prox Dynamics was founded in December 2007, initially building on many years of experience in micro helicopter technology and the teleconferencing industry. Since its founding Prox Dynamics has always prioritised enhancing the effectiveness of the modern warfighter. This focus has created a company that prioritises its customers' needs to deliver advanced tools for modern forces.

During 2009 the Company more than doubled in size, creating the largest UAS company in Norway. This expansion further strengthened the Company's expertise in the areas including aerodynamics, control, software, mechanics and operations. Using this increased knowledge base the Company continued to expand itself as the World-leader in Nano Unmanned Arial Systems.

The PD-100 Black Hornet Personal Reconnaissance System (PRS) became the World's first operational NUAS with its employment by the UK Armed Forces in Afghanistan from 2012. Combat Proven with a variety of forces, the PD-100 has demonstrated its added value by providing its users with a game-changing capability in the ever-changing and complex operating environment.

### PROX DYNAMICS

### **COMPANY PROFILE**

### Prox Dynamics USA inc.

Prox Dynamics USA Inc. was established in early 2014 to better serve the North American market and allow closer contact with US customers. Our increasing North American footprint places increased focus on the US customers as the Company's major priority. Focus within the US market includes a clear roadmap for North American operations including manufacturing and support.

## Scaled for today's demands - the future lies ahead

Prox Dynamics has become the World's largest NUAS company and is today uniquely situated to meet the rapidly increasing need for 'Cargo Pocket-sized' airborne soldier sensors. Through close cooperation and partnership with our user communities, Prox Dynamics is able to harmonize its Worldleading R&D output and enhance its product development to continue to provide Worldleading and innovative technologies.

The PD-100 size and modularity provides realistic opportunities to integrate the system into vehicles for mechanized/mounted operations, offering additional user groups new ways of enhancing their Situational Awareness.

Prox Dynamics carefully controls all aspects of product production and has established in-house manufacturing for all mission critical components. A In-keeping with our mission statement, the entire product portfolio is continually reviewed and adapted where necessary to ensure that we continue to meet our customers' expectations.

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