

HAWKSIGHT



DATA SHEET 

**PEAK HAWKSIGHT™ OPTICS**  
**PVS-14 NVD MONOCULAR**  
**RESET/UPGRADE**



# LIGHTER OPTICS

## PVS-14 UPLEVEL FACTS

- **Mission Scalable** - Upgrade your PVS-14 NVD performance.
- **Lightweight Optics** - Peak Hawk sight optics reduces the PVS-14 system by 65 grams.
- **Cost Effective** - The PVS-14 monocular upgrade is a low-cost option to provide mission scalability within constrained budgets.
- **Reduce Neck Torque** - Forward system objective weight reduction in the optics helps to reduce user neck torque and fatigue.
- **Improved Eye Performance** - Greater eyepiece performance and FOV over the industry's gold-standard PVS-15 optics.
- **Warfighter Safety** - Peak HawkSight optics exclude hazardous substances found in traditional glass optics.
- **Improve Visibility for the Battlefield** - Provides optimal performance with white phosphor L<sup>2</sup>Ts and enhanced abilities to capture more ambient light.
- **U.S. Made** - Peak products are engineered and manufactured in the U.S.
- **US Engineering** - Over 20 U.S. global patents protect Peak products and technology.



# RESET THE PVS-14 NVD MONOCULAR

## Lightweight PVS-14 Bino for Improved Situational Awareness

The AN/PVS-14 monocular night vision system (MNVS) continues to be the "workhorse" solution for warfighters across the globe. Leaders are always looking for ways to provide improvements while still adhering to budget constraints. Peak and L3Harris have created a new product combination that will provide white phosphor image intensification upgrades and significant system weight reductions with the integration of LGRIN optical assemblies.

- 1 | **Peak Lightweight Optics** - Lightweight design provides enhanced clarity and superior night vision performance and ergonomics.
- 2 | **White Phosphor Tubes Upgrade** - Upgraded L<sup>2</sup> tubes provide a more natural and realistic view, with better contrast and clarity than green phosphor.
- 3 | **Full System Refresh and Validation** - Peak will provide a fully tested and spec-validated solution ready for your next deployment.



White Phosphor Output



P45 White Phosphor Tubes



Peak HawkSight Eyepiece and Objective





**PVS-14 MONO UPGRADE BENEFITS**

- **LIGHTWEIGHT DESIGN** REDUCES NECK TORQUE
- **UPGRADED VISIBILITY** AND OPTICS PERFORMANCE
- **OPTIMIZED CONTRAST AND CLARITY** WITH WHITE PHOSPHOR
- **BUDGET-FRIENDLY**

**PVS-14 Monocular Upgrade**

Peak’s PVS-14 night vision monocular reset introduces improvements that enhance clarity, alleviate strain on warfighters, and offer cost-effective solutions. Additionally, users have the option to upgrade to a white phosphor image intensifier tube for enhanced performance.

PVS-14 NVG Upgrade (New P45 tubes)	
- Peak HawkSight eyepieces	- New carry case
- Peak HawkSight objectives	- New manual
- New P45 White Phosphor tubes	- Weight: 290 grams

**White Phosphor Benefits**

Mission requirements and budget demands play a critical role. While green phosphor may traditionally reduce eye strain, white phosphor offers a more natural view and potentially better depth perception and clarity. The adoption of white phosphor solutions is growing as a percentage of new NVG deployments.

- 1 | **Natural View and Detail Recognition** - White phosphor provides a more natural and realistic view, simplifying scene interpretation for the user. The black-and-white image is often described as more intuitive and can offer improved depth perception and clarity.
- 2 | **Improved Contrast in Certain Conditions** - White phosphor can offer improved contrast for some environments and lighting conditions compared to traditional green phosphor.
- 3 | **Preference and Modernity** - New users increasingly prefer white phosphor for its modern appearance and perceived clarity. This preference can be subjective but is an important consideration in user satisfaction.
- 4 | **Adaptability** - White phosphor might be more adaptable to various operational environments, especially urban settings where details and depth perception are critical.

**PVS-14 NVG Delivers Cost-Effective Mission Scalability**

The PVS-14 monocular upgrade delivers significant mission scalability, improving performance to the edges of the FOV while reducing warfighter burden in the field at an optimal price point over the industry’s gold-standard PVS-15 optics



**PVS-14 WHITE PHOSPHOR SPECIFICATIONS**

<b>Part Number</b>	<b>DH-0000-00</b>
Weight	355 grams (12.5 oz)
Dimensions	4.5"(L) x 2.0" (W) x 2.25" (H)
Battery	1 AA-Size (50+ hours)
Power Management	Off when stowed
Magnification	1X
Stowage	Dual Channel or Single Channel
Interpupillary Adjustment	Independent, 51-76 mm
Focal Range	9.8" to infinity
Objective Lens Focus Range	25cm to infinity
Diopter Adjustment	+2 to -2 diopters
Spectral Response	Visible to 0.90 micrometers
EFL	27.03 +/- 0.5mm
Flange Focal Distance	1.2 mm
F/#	< 1.23
Field of View	40.0° +/- 2" for a 17.5 mm image format
Relative Illumination	40% of the on-axis illumination
Distortion	9.5% at 9 mm semi-field height
Immersion	Yet to be measured

**HAWKSIGHT PVS-14 EYEPIECE**

<b>Part Number</b>	<b>901-0202-A1</b>
Weight	<36 grams
Eye Relief	25mm +0/-0.2mm
EFL	27.03 +/- 0.5mm
Flange Focal Distance	10mm
Exit Pupil Diameter	5mm
Field of View	40.0 +/- 1° for a 18mm image format
Diopter Focus	+2 to -6 diopters with 25mm eye relief
Distortion	9.5% +/- 0.5% at 9mm semi-field height
Immersion	Yet to be measured

**HAWKSIGHT PVS-14 OBJECTIVE**

<b>Part Number</b>	<b>901-0102-A1</b>
Weight	<40 grams
EFL	27.03 +/- 0.5mm
Flange Focal Distance	1.2 mm
F/#	< 1.23
Field of View	40.0° +/- 2" for a 17.5 mm image format
Relative Illumination	40% of the on-axis illumination
Distortion	9.5% at 9 mm semi-field height
Immersion	Yet to be measured