

DATA SHEET



**PVS-14 ULTRA-LIGHTWEIGHT  
EYEPIECE AND OBJECTIVE**



# 35%

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# LIGHTER

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# OPTICS

## HAWKSIGHT PVS-14 OPTICS FACTS

- **35% lighter optics** - Peak optics weigh less than standard PVS-14 glass optics.
- **Reduce Neck Torque** - Optics weight reduction minimizes neck torque and counter balance weights.
- **Improved Eye Relief** - Peak eyepieces deliver optimal eye box performance for all visual acuities.
- **Warfighter Safety** - Peak LGRIN lenses eliminates the use of hazardous substances.
- **U.S. Made** - Engineered and manufactured in the United States.
- **Engineered in the U.S.** - Protected by over 20 patents.



HAWKSIGHT™

## MAXIMIZE YOUR PVS-14

### 35% Lighter Optics, Optimized Clarity, Improved Eye Relief

HawkSight Optics utilizes our HawkAI™ optics software, integrating innovative Layered Gradient Refractive Index (LGRIN) technology. By employing our NanoPlex metamaterials in the LGRIN optics, we've achieved 35% reduction in the weight of our PVS-14 replacement optics. This advancement employs safety, as we've completely eliminated the use of hazardous substances including lead and nickel found in traditional glass. Peak's LGRIN technology ensures improved focus and clarity, across the FOV—a distinctive advantage over glass optics.

HawkSight's LGRIN technology delivers broader fields of view in a smaller and lighter optics footprint, outperforming traditional glass-only optics. This dual improvement in performance and weight reduction is accomplished by developing optics with overmatch target identification capabilities across distances improving warfighters' night vision advantages over adversaries.

- 1 | **Lightweight Optics** - Peak PVS-14 upgrades with HawkSight LGRIN optics are lighter than glass-only optics.
- 2 | **Reduce Neck Torque** - HawkSight optics reduce neck torque with less front-end weight and lighter counterbalance weights in helmet-mounted systems.
- 3 | **Proven Optics Performance across FOV** - Our PVS-14 optic upgrade is rigorously tested for military-grade durability.
- 4 | **Full Mil-Spec** - PVS-14 optics upgrades meet FOM specifications for military, FMS, and commercial deployments.





**HAWKSIGHT PVS-14 OPTICS FACTS**

- **35% LIGHTER**  
THAN PVS-14 GLASS-ONLY OPTICS

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- ENHANCED  
**IMAGE CLARITY**

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- **MINIMIZED EYE STRAIN** ACROSS VISUAL ACUITY LEVELS

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- **DELIVERS PVS-15** EYE BOX PERFORMANCE

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- **OPTIMAL PERFORMANCE** ACROSS THE FOV

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- HAZARDOUS  
**SUBSTANCE-FREE**

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- NON ADVERSARIAL  
**SUPPLY CHAIN**



**HawkSight LGRIN Optics Technology**

Peak’s HawkSight Optics introduces the next generation of LGRIN (Layered Gradient Refractive Index) made from patented metamaterials, reducing traditional glass lenses. LGRIN-based optics, thinner, lighter, and smaller than their glass counterparts, offer superior performance. This advantage alleviates the burden on warfighters by reducing excessive weight, neck torque, snag factors, and eyestrain. The result is an improvement in operational tempo and enhanced situation awareness. The upgraded optics for HawkSight PVS-14 deliver the following benefits:

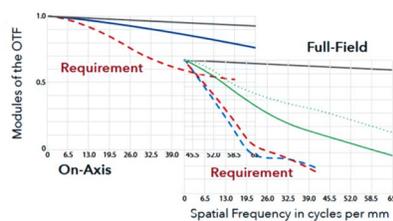
- 35% lighter than the PVS-14 glass-only lenses
- Deliver PVS-15 eye box performance and reduce eye strain across visual acuity levels
- Eliminates hazardous substances

**Upgrading PVS-14 Optics Performance**

The impact of integrating HawkSight optics into the PVS-14 night vision device is evident in measurable improvements in eye box performance. We can improve eye displacement from 2mm to 5mm, achieving eye box performance at levels comparable to the gold standard set by the PVS-15.

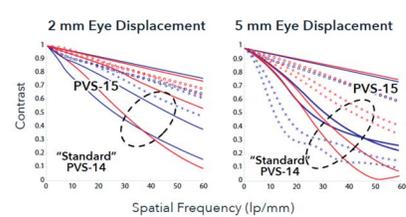
Our optics are built to endure the rigors of demanding environments, excelling in both low-temperature conditions (from high altitudes to the Arctic) and high-temperature (spanning jungles to deserts) settings. Peak Optics delivers clarity and reduces warfighter burden, ensuring mission survivability.

**PVS-14+ Optics Performance**



The as-designed and as-manufactured performance surpasses MIL-SPEC requirements across the temperature range.

**PVS-14+ Eye Box Performance**



The key metric for the eyepiece is its performance over the eye box, showcasing a performance level commensurate with the PVS-15 (gold standard) over the eye box



**HAWKSIGHT PVS-14 EYEPIECE**

<b>Part Number</b>	901-0202-A1
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>	901-0102-A1
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