

HAWKSIGHT



DATA SHEET | 

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



30% LIGHTER OPTICS

HAWKSIGHT PVS-14 OPTICS FACTS

- **30% lighter optics** - Peak optics weigh less than standard PVS-14 glass optics.
- **Reduce Neck Torque** - Optics weight reduction minimizes neck torque and eliminates counter balance weights.
- **Improved Eye Relief** - Peak eyepieces deliver optimal eye box performance for all visual acuities.
- **Warfighter Safety** - Peak optics replaces glass optics with metamaterials, eliminating hazardous substances.
- **U.S. Made** - Engineered and manufactured in the United States.
- **Engineered in the U.S.** - Protected by over 20 patents.



HAWKSIGHT™

TURBOCHARGE YOUR PVS-14

30% 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 30% 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 unparalleled 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 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 optics.
- 2 **Reduce Neck Torque** - HawkSight optics reduce neck torque by front-end weight and minimizing counterbalance weights in helmet-mounted systems.
- 3 **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

- 30% LIGHTER**
THAN PVS-14 GLASS OPTICS
- ENHANCED IMAGE CLARITY**
- MINIMIZE EYE STRAIN** ACROSS VISUAL ACUITY LEVELS
- DELIVER PVS-15 EYE BOX PERFORMANCE**
- OPTIMAL PERFORMANCE** ACROSS THE FOV
- HAZARDOUS SUBSTANCE-FREE**
- NO 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, replacing 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-15 deliver the following benefits:

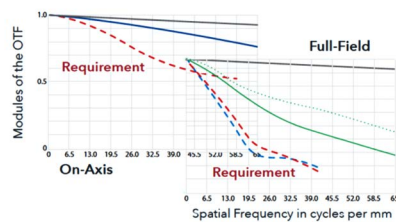
- 30% lighter than the PVS-14 glass lens
- Deliver PVS-15 eye box performance and reduce eye strain across visual acuity levels
- Eliminates hazardous substances

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.

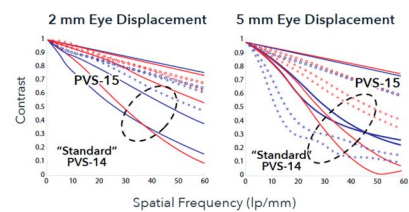
Our optics are built to endure the rigors of demanding environments, excelling in both low-temperature conditions, from high altitudes to the Arctic, and high-temperature settings, spanning jungles to deserts. Peak Optics delivers clarity, reduces warfighter burden, ensuring mission survivability.

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

Part Number	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

Part Number	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