

QuadEye™

Panoramic Night Vision Goggles



Elbit Systems Of America's QuadEye™ is an advanced Panoramic Night Vision Goggles (PNVG) with advanced features and performance so pilots and aircrew can accomplish difficult night missions successfully and safely. QuadEye™ provides a central 40° binocular field of view plus monocular vision of an additional 30-degrees to either side. This extended view is similar to the normal eye's peripheral vision and reduces the need and degree to which panning the head is needed when wearing goggles.

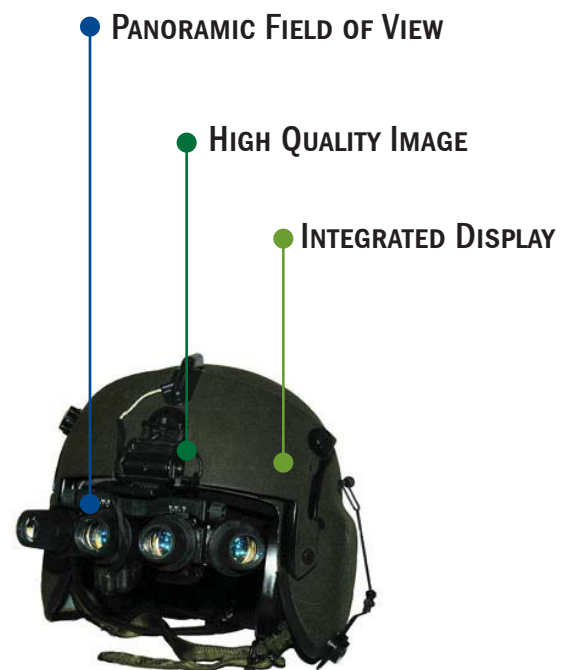
QuadEye™ is designed around four advanced 16mm image intensifier tubes. Its modular construction permits the user to select between using only the two inner channels or four panoramic channels. Additionally, QuadEye™ provides for projection of Avionics HUD symbology or the aircraft's targeting sensor's video image into the goggle's eyepiece through a miniature, high resolution display. A miniature debriefing camera is also integrated to the eyepiece to record what the user sees in the central channel and the display. The camera's video output can be recorded on an aircraft video recorder for later mission debriefing or user training. QuadEye™ uses the standard Position and Adjustment Shelf (PAS) for pupillary distance and tilt adjustment and eye relief (fore/aft). It attaches to any helmet using an ANVIS mount. QuadEye™ is compatible with ANVIS HUD through an interconnect cable and interface box.

MAIN FEATURES:

- High Quality Image
- Panoramic Field of View
- Modular Construction
- Integrated Display
- Integrated Debriefing Camera
- Compatible with Laser Protection Spectacles or Eyeglasses

APPLICATIONS:

- Rotary and Fixed Wing Night Pilotage
- Transport Aircraft Night Pilotage
- In-Air Refueling
- Personnel Search & Rescue
- Aircraft Interdiction Missions
- Targeting



QuadEye™

Physical Description

Unit Weight with 2ch. display and camera	470 grams
Unit Weight with 4ch. (PNVG) 1 display and camera	5.2 lbs.

Fields of View

Direct View	100° Horizontal x 40° Vertical
Physical Eye Clearance	32 mm
¼ Moon Illumination	1.32 cycles per milliradian (20/26 visual acuity)
Clear Starlight Illumination	0.9 cycles per milliradian (20/38 visual acuity)
Overcast Starlight Illumination	0.49 cycles per milliradian (20/70 visual acuity)
Brightness Gain	not less than 5,500 fL per fL
Signal to Noise Ratio	>26:1
Halo	<0.67 MM

Technical Data

Image Intensifier Tubes	16 mm cathode diameter, 64 line pairs per mm resolution
Display	Organic LED, SVGA+, color or white, 20° x 20° FOV
Debriefing Camera	30 x 22.5 FOV; RS-170 video out, 1/3 Inch Format



CAMERA



DISPLAY



PANORAMIC GOGGLES