

# Binocular Night Vision Goggle, Ground Gen 3 AN/PVS-23 (F5050)

ITT Exelis, the world's leading producer of Generation (Gen) 3 image intensification devices, offers the AN/PVS-23 (F5050) binocular night vision goggle for both ground-based and sea-based applications.

The AN/PVS-23 (F5050) is a rugged binocular designed to furnish increased depth perception for activities such as off-road driving and high-speed navigation at sea.

## FEATURES AND BENEFITS

- High-performance Gen 3 tubes
- Binocular vision for greater depth perception
- Mounts available for most types of helmets
- Integral battery for hand-held or head-mounted use
- Adjustable (spot/flood) IR illumination
- Independent eye-span adjustment
- Binocular detaches easily from mount
- Rugged construction

## STANDARD ACCESSORIES

- Objective Lens Covers - Protect the objective lenses when the system is not in use and provide a means for daylight training.
- Low Profile Battery Pack - Allows extended operational use while helmet-mounted
- Eye Cups - Prevent the emission of stray light or facial reflections
- Demist Shield - Snaps onto the eyepiece to prevent condensation on the optics
- Carrying Case - Provides convenient storage
- Sacrificial Window - Shields the objective lens from airborne sand, dust, or anything that may scratch the lenses.
- Shoulder Strap - Attaches to the F5050 carrying case for easy portability
- Lens Paper - Used to lightly clean the objective and eyepiece glass surfaces



F5050 shown attached to PASGT helmet

## OPTIONAL ACCESSORIES

- Bracket and strap assembly for specific helmet being used
- Head Mount - Allows for hands free operation
- Mount Assembly - Attaches F5050 binocular to optional head mount or bracket and strap assembly

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## SPECIFICATIONS

Field of View	40°, +1°/-2°
Magnification	Unity
Resolution	1.3 cy/mr, minimum
Brightness Gain	6,000 fL/fL, minimum
Collimation	≤1.0° convergence; ≤0.3° divergence/dipvergence
Diopter Adjustment	+2 to -6 diopters
Interpupillary Adjustment	52 to 72 mm - individual knobs
Fore-and-Aft Adjustment	25 mm range
Tilt Adjustment	10°, minimum
Objective Lens EFL	27 mm F/1.23, T/1.35
Eyepiece Lens EFL	27 mm
Exit Pupil/Eye Relief	On axis: 14 mm @ 25-mm distance Full field: 6 mm @ 25-mm distance
Focus Range	41 cm (16 in.) to infinity
Flip-Up/Flip-Down	Button release for up and down motion
Battery Type	One 1.5 Vdc AA-size alkaline internal or Two 1.5 Vdc AA-size alkaline external battery pack
Weight Binocular	650 grams
Operating Temperature	-32°C to +52°C

## DESCRIPTION

The AN/PVS-23 (F5050) binocular has aviation standard optics and high-resolution Gen 3 F9800 image intensifier tubes. It has outstanding performance because each eye receives a unique image giving greater clarity than can be obtained from single-tube devices. With a different image in each eye, it is easier to judge distances and relative motion so the ability to perform tasks such as driving is greatly improved. The binocular includes a powerful infrared (IR) illuminator with wide or narrow beam capability. The AN/PVS-23 (F5050) can be hand held, head mounted or helmet mounted. When hand held or head mounted, it is powered by a single AA battery integral to the binocular. When helmet mounted, it is powered by a rear-mounted battery pack that contains two pairs of AA batteries for extended operational endurance.

The basic AN/PVS-23 (F5050) system includes the binocular, rear mounted battery pack, soft carrying case, and accessories. To complete the system, an optional bracket and strap assembly tailored to specific helmets is required. When ordering the F5050, please specify the exact type of helmet that will be used.

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