



# HARRIS F5050, GEN 3 BINOCULAR NIGHT VISION GOGGLE

## F5050 SERIES (AN/PVS-23)

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

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

### KEY 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

The 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 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 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.

SPECIFICATIONS FOR: **HARRIS F5050 GEN 3 BINOCULAR NIGHT VISION GOGGLE**

GENERAL	
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

POWER	
Battery Type	One 1.5 Vdc AA-size alkaline internal or two 1.5 Vdc AA-size alkaline external battery pack

PHYSICAL	
Weight Binocular	680 grams

ENVIRONMENTAL	
Temperature	Operating: 32°C to +52°C

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 Cup	Prevent the emission of stray light or facial reflections
Demist Shields	Snap onto the eyepiece to prevent condensation on the optics
Sacrificial Window	Shields the objective lens from airborne sand, dust, or anything that may scratch the lens
Carrying Case	Provides convenient storage
Shoulder Strap	Attaches to the F5050 carrying case for easy portability
Lens Paper	Used to lightly clean the objective and eyepiece glass surfaces

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

**About Harris Corporation**

Harris Corporation is a leading technology innovator, solving our customers' toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports customers in more than 125 countries, has approximately \$8 billion in annual revenue and 22,000 employees worldwide. The company is organized into four business segments: Communication Systems, Space and Intelligence Systems, Electronic Systems, and Critical Networks.

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