

Multi-Purpose Night Vision Monocular

NX-122A



Features

- Lightweight, robust and compact
- Multi-purpose:
 - Helmet mounted
 - Head mounted
 - Hand held
 - Weapon mounted
- Variable gain control for optimum balance in the image seen by both eyes
- Switches off when folded up or detached from Helmet/Head Mount
- Integrated IR illuminator
- High light level cut-off system
- Single 3-Volt CR-123 battery or single AA battery using an adaptor
- Factory collimated Line of Sight
 - Reduced eye fatigue
 - Improved depth perception
 - Binocular version from any two randomly selected monoculars using a Bridge Mount Assembly

Description

The NX-122A is a full MIL-SPEC, multi-purpose, passive, monocular night vision device. The NX-122A can be head or helmet mounted and with an adaptor it can be attached to a Picatinny rail on small arms.

The NX-122A monocular is designed to allow the individual soldier to perform observation, short range surveillance, weapon aiming when mounted behind a collimated red dot sight, maintenance work, map reading and medical aid operations during all night conditions.

In contrast to other simplified designs the monocular has the following features:

Variable Gain Control (VGC) to adjust the brightness of the picture shown by the monocular which enhances the performance in changing light conditions and provides an optimum balance in the image seen by both eyes. The dark-adapted unaided eye provides situational awareness and vision of close-range objects, while the night vision aided eye provides long range vision of potential threats and targets. A monocular version without variable gain control is also available.

Factory adjusted minimal line of sight (LOS) shift. This enables the user's unaided eye to converge to the device's optical LOS without losing depth perception and with significantly less eye fatigue. In addition, using a Bridge Mount Assembly, two randomly selected NX-122A monoculars can be used to form a binocular for driving or other demanding applications.

Switches off when folded up or detached from the head/helmet mount.

Electronics can accommodate both European variable gain tubes with three contacts and US Generation 3 tubes in the MX-11769 format.

The NX-122A uses the same mounting interface as the US AN/PVS-7 and 14 providing full commonality with their mounting accessories.

A full range of accessories, including 3x and 5x magnifiers, weapon, head and helmet mounts are available.



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Technical Specifications

Physical

Weight (including batteries)	340 g (w/o VGC)
Objective cover & eyecup	355 g (w/VGC)
Dimensions (Lx W x H)	109x61x70 mm
Environmental	Complies with MIL-STD-810

Optical

General

Magnification	1X ± 0.03
System Distortion	<3%
Field of View	40° ± 2°
System focus	25 cm to infinity
Resolution	>1.2 lp/mrad
System Brightness Gain	Adjustable from 25 to more than 3000
Collimation	1° ± 1° convergence <1/2° dipvergence

Objective Lens

Focal length	27 mm
F#	1.2
MTF (on axis)	>61 @40 lp/mm

Eyepiece lens

Focal length	27 mm
Exit pupil (on axis)	14 mm
Exit pupil (full field)	6 mm
Eye relief	25 mm
Adjustment range	+2 to -6 dioptries

Electrical

Batteries	One 3-volt CR123 lithium One AA size battery of any voltage between 1.2 & 5 volts with adaptor Internal low battery indicator
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Battery life	>45 hours with CR123
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Image Intensifier

Type	18 mm, inverting Gen 2+, SuperGen, Gen 3, XD4, XR5, with or without Autogating or ONYX (black & white format)
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