



HBL night vision devices

HBL offers battle-tested Night Vision Viewers (NVDs) soldiers and commanders and Passive Night Sights for various weapons using breakthrough optical design and state-of-the-art Gen 2+/Gen 3 Image Intensifier Tubes (IITs), that have a life 5-7 times that of conventional Gen 2 systems. Waterproof, compact and lightweight, these NVDs offer any Military or Law Enforcement, the ability to see under the darkest condition. And all this at prices more affordable compared to international competition. These NVDs use Li primary & secondary cells of HBL make; thereby functioning of the NVDs is ensured even in low temperatures such as -40° C.

The Image Intensifier Tube (II Tube) forms the heart of any NVD. HBL's NVDs are built around the following types of 18 mm II Tubes, which meet MIL specifications:

Tube Type	Photocathode Sensitivity, $\mu\text{A}/\text{lm}$	Resolution, lp/mm	S/N Ratio	MTBF, hours
Gen 2+ HD (High Definition)	500-600	51-57	16-20	10,000
Gen 2+ XT (Extra Performance)	600-700	57-64	20-23	15,000
Gen 3	1200-2100	51-57	20-24	10,000



NVS 7 Goggles and Binoculars

The NVS 7 series of PNVG/PNVB are light-weight high performance NVDs with following features:

- ★ Available with Gen 2+ HD, Gen 2+ XT or Gen 3 II Tubes
- ★ Long eye-relief for strain-free viewing
- ★ In-built IR Illuminator
- ★ Indicators for "Low Battery" and "IR ON"
- ★ Wide eye-piece design covers the complete IPD range of 58-72 mm automatically
- ★ Head-mount & helmet mounting options with flip-up feature (goggle only)
- ★ Option of 1x, 3x, 4x, and 8x objective lenses.



Night Vision Monoculars, NVS-14

The NVS 14 is one of the most compact and light-weight Night Pocket Scope available and has the following features:

- ★ Available in 1X & 3X configurations
- ★ "Low Batt." & "IR ON" indicators
- ★ Stereoscopic Goggle & Binocular
- ★ Very Low Weight ... 1X weigh only 300 gms
- ★ Very Compact Size ... can fit into a soldier's pocket
- ★ Weapon Mount Option ... good option for close quarter combat
- ★ Use in conjunction with Other Sights e.g. image stabilized binos, LRFs etc



Specifications	NVS 7 Goggles	NVS 7 4x Binocular	NVS 7 8x Binocular	NVS 14 Monocular	NVS 14/3x Monocular
Magnification, x	1	4	8	1	3
Field of View, 0	40	10	5	40	12.5
Focus Range, m	0.25 - ∞	10 - ∞	10 - ∞	0.25 - ∞	10 - ∞
Eye Relief, mm	25	25	25	30	30
Dioptric correction	± 5	± 5	± 5	± 5	± 5
II Tube Type	18mm, Gen 2+ HD/ Gen 2+ XT / Gen 3 Non-inverting; MIL Spec.				
Battery Life, hrs.	80			50	

Specifications	NVS 7 Goggles	NVS 7 4x Binocular
Magnification	3.7	6.1
Field of View, 0	10	8
Objective Lens	100mmF/1.5	165mmF/2.0
Eye Relief Distance, mm	45	
Dioptric Setting, D	+3 to -4	
Image Intensifier Tube	Gen 2+ HD, Gen 2+ XT or Gen 3	
Dimensions, mm	280x85x75	370x91x91
Weight, gms (without mount)	830	1,100
Power Supp	2 x 1.6V AA Batteries	
Battery Life, hr	60 (without IR)	

Custom Mounts

Custom mounts can be supplied along with the DN 482 to mount the sight on a variety of weapons such as Dragunov, 7.62 SLR, 5.56 INSAS, AK-47, mortars, rocket launchers etc.

Night Vision Weapon Sight

The NV Weapon Sight DN 482 is a modern, multi-purpose weapon scope, built to most demanding military specifications and utilizing a state-of-the-art Gen 2+ or Gen 3 II tube. The body of the scope is built with light-weight, composite materials to optimize its weight and, yet, be shock-proof and well-suited for use on high recoil weapons. It has a illuminated, red mil-dot reticle with adjustable brightness and precision windage/elevation adjustment with audio clicks. A powerful IR Illuminator and camera/video adaptor can also be provided as options.



Opto-Electronics

a division of : HBL Power Systems Ltd.

Road # 10, Banjara Hills, Hyderabad - 500 034, India.

Tel: +91-40-23355575, Telefax: +91-40-23355048, Fax: +91-40-23353189

E mail: psprasad@hbl.in

www.hbl.in