



THERMAL IMAGING



NIGHT VISION SYSTEMS



LASER RANGEFINDERS



LASER AIMERS



TACTICAL OPTICS



Newcon Optik, headquartered in Toronto, Canada, is a world leader in the design and manufacture of precision electro-optical devices. Our product portfolio is comprised of industry-leading thermal imagers, image intensified night vision systems, laser rangefinders, laser aimers & illuminators and tactical optics systems. With a dealer network present on five continents, Newcon Optik's products are relied upon in more than 60 countries.

By working closely with our customers and partners, Newcon Optik consistently produces technologically advanced products that serve the needs of military, law enforcement, search & rescue, surveillance, hunting, camping and marine professional users around the globe.

## Newcon Optik's Major Product Lines:

### Thermal Imaging Systems

- Observation Systems
- Ground Systems
- Weapon Systems

### Night Vision

- Aviation Systems
- Ground Systems
- Weapon Systems
- Image Intensifier Tubes

### Laser Rangefinders

- OEM modules for system integrators
- Binoculars and monoculars
- Laser speed detectors

### Laser Aimers and Illuminators

- Visible and Infrared

### Tactical Optics

- Gyrostabilized Binoculars
- Sniper Detection
- Riflescopes
- Spotting Scopes
- Binocular Systems
- Holographic Sights

## Manufacturing Excellence

Since 1992, Newcon Optik has been home to innovation in research, design and manufacturing of electro-optical devices. A Canadian defense industry success!

Although most of our R&D, manufacturing and assembly is done in Canada, globalization allows Newcon Optik to source high-quality, competitively priced components from acknowledged leaders in the optical industry throughout the world. Our success is based on four key factors:

### 1. CAPABILITY

Our dedicated R&D team is focused on setting the standard of innovation in design. Highly trained specialists working in our state of the art manufacturing facility assure that our entire design, assembly and testing process delivers superior electro-optical products. Our manufacturing processes use the most advanced technologies available in laser, night vision and optical testing technology. An in-house modern SMT line allows speedy prototyping and large quantity production.

### 2. QUALITY

Cutting-edge technologies, modern machinery and testing equipment enable us to manufacture complex optical, electronic, and mechanical parts for devices designed to operate under the most extreme conditions. All products undergo a triple quality assurance inspection. Newcon Optik is certified to ISO 9001:2008 standards.

### 3. SERVICE

Full service on Newcon Optik's products is conducted by factory-trained technicians and engineers at our facility in Toronto, Canada, where all necessary spare parts are kept in stock to expedite repairs and maintenance. For prompt shipment we keep in excess of \$1 million worth of inventory stocked in our warehouse.

### 4. PRICE

Because we control the manufacturing process from beginning to end we are able to control our cost and pass the reduced savings to you, our customer.

## Customer Service Focus

Newcon Optik products meet and exceed all applicable rigorous industry standards, including military standards. All products are covered by a comprehensive one year warranty.

Commitment to the highest quality standards, reliable on-time delivery, competitive pricing, and ensuring client satisfaction on every order have made Newcon Optik an internationally recognized leader in the electro-optical market.

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### NEWCON OPTIK CD CATALOGUE

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## FEATURED PRODUCTS FOR 2012

**NEW**

LRB 12K LONG RANGE BINOCULAR RANGEFINDER

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**NEW**

TVS 13M THERMAL RIFLESCOPE

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**FEATURED**

NVS 33 WEAPON SCOPE ATTACHMENT

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**NEW**

SENTINEL THERMAL BINOCULAR

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**FEATURED**

LRB 6000CI MEDIUM RANGE BINOCULAR RANGEFINDER

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**FEATURED**

LRM 3500CI MEDIUM RANGE MONOCULAR RANGEFINDER

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## TVS 13M THERMAL RIFLESCOPE

The TVS 13M Tactical Thermal Riflescope offers outstanding performance, impressive features and rugged mil-spec construction. Designed to increase performance in the most demanding situations facing border patrol, law enforcement, tactical teams and special operations forces. The TVS 13M is ideal for medium and long range observation, reconnaissance, border protection and tactical operations.

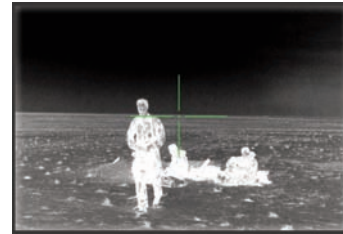
The TVS 13M comes standard with a MIL-STD-1913 mount and can also be used as a hand-held device. The latest achievements in thermal technology and OLED display were integrated in this device letting users distinguish target objects from their immediate surroundings. Unlike traditional night vision devices, the TVS 13M operates 24 hours a day without any degradation in performance when used in daylight, smoke or fog. Available in 320 or 640 resolution.



TVS 13M - Delivery Set



TVS 13M (336-75)



TVS 13M - Display

### FEATURES:

- Start-up in less than 3 seconds
- 2x - 4x digital zoom
- 10 stored ballistic profile
- Video output

<b>Detector</b>				
Model	336-60	336-75	640-60	640-75
Resolution (pixels)	336 x 256	336 x 256	640 x 512	640 x 512
Full frame rates	30 Hz (NTSC); 25 Hz (PAL)	30 Hz (NTSC); 25 Hz (PAL)	30 Hz (NTSC); 25 Hz (PAL)	30 Hz (NTSC); 25 Hz (PAL)
Pixel size	17 μ	17 μ	17 μ	17 μ
Operating wavelength	7.5 - 13.5 μm	7.5 - 13.5 μm	7.5 - 13.5 μm	7.5 - 13.5 μm
Sensitivity (milikelvin)	<50mK	<50mK	<50mK	<50mK
DRI range (meters)*	2,000 / 510 / 190	2,500 / 650 / 330	2,000 / 510 / 255	2,500 / 650 / 330
<b>Optics</b>				
Objective lens diameter	60 mm	75 mm	60 mm	75 mm
Objective F number	1.25	1.0	1.25	1.0
Field of view	5.5°x4.2°	8.2°x6.5°	10.4°x8.3°	9.5°x7.5°
Eye relief	30 mm	30 mm	30 mm	30 mm
Dioptric correction	-6 ... +2	-6 ... +2	-6 ... +2	-6 ... +2
<b>Electronics</b>				
Video output	PAL and NTSC	PAL and NTSC	PAL and NTSC	PAL and NTSC
Display (pixels)	MOLED, 800x600	MOLED, 800x600	MOLED, 800x600	MOLED, 800x600
Video interface	RCA	RCA	RCA	RCA
Stored reticles	6 options	6 options	6 options	6 options
Stored ballistic profiles	≤10	≤10	≤10	≤10
<b>Mechanical</b>				
Operating temperature range	-40 to +50 °C	-40 to +50 °C	-40 to +50 °C	-40 to +50 °C
Shock resistance	300g	300g	300g	300g
Battery type	6 x AA	8 hours 6 x AA	6 x AA	6 x AA
Continuous battery life	8 hours	8 hours	8 hours	8 hours
Dimensions	280x68x78 mm	380x90x90 mm	280x68x78 mm	380x90x90 mm
Weight with batteries	0.950kg	1.45kg	0.950kg	1.45kg

\* Detection, Recognition, Identification range to a human sized target



TVS 7N (640-35)



TVS 7N (640-35) - Shown on helmet

**FEATURES:**

- Start-up in less than 3 seconds
- Handheld or helmet/head mountable
- Video output
- White hot, black hot, sepia, amber image polarity

**TVS 7N**

The TVS 7N thermal goggle is designed for surveillance and observation in any light level, even with limited visibility (smoke, fog, vegetation or camouflage). These binoculars can be used for search and rescue operations, energy audits, monitoring industrial equipment and power transmission lines.

The TVS 7N is housed in a shock-resistant, waterproof housing. The controls are user-friendly and situated comfortably on the outer housing. It is equipped with a video output and can be powered using four AA internal batteries or an external power supply. Outfitted with 2x and 4x digital zoom, it also features manual focus, brightness and contrast adjustments. All values are programmable and will be suspended in "off" mode and automatically re-activate after the unit is turned "on" again. Available in 320 or 640 resolution.



TVS 7N - Display

**Detector**

	336-35	640-35
Model	336-35	640-35
Resolution (pixels)	336 x 256	640 x 512
Full frame rates	30 Hz (NTSC); 25 Hz (PAL)	30 Hz (NTSC); 25 Hz (PAL)
Pixel size	17 $\mu$	17 $\mu$
Operating wavelength	7.5 - 13.5 $\mu$ m	7.5 - 13.5 $\mu$ m
Sensitivity (milikelvin)	<50 mK	<50 mK
DRI range (meters)*	1280 / 320 / 160	1280 / 320 / 160

**Optics**

	336-35	640-35
Objective lens diameter	35 mm	35 mm
Objective F number	1.2	1.2
Field of view	9.3°x7.1°	18°x14°
Eye relief	25 mm	25 mm
Dioptric correction	-6 ... +2	-6 ... +2

**Electronics**

	336-35	640-35
Video output	PAL and NTSC	PAL and NTSC
Display (pixels)	MOLED, 800x600	MOLED, 800x600
Video interface	RCA	RCA

**Mechanical**

	336-35	640-35
Interpupillary distance	54 mm - 72 mm	54 mm - 72 mm
Operating temperature range	-40°C to +50°C	-40°C to +50°C
Shock resistance	300g	300g
Battery type	4 x AA	4 x AA
Continuous battery life	10 hours	10 hours
Dimensions	130x146x68 mm	130x146x68 mm
Weight with batteries	575g	575g

\* Detection, Recognition, Identification range to a human sized target

## TVS 11 / TVS 12C

The TVS 11 and TVS 12C are thermal monoculars designed for handheld use. Both devices are well suited to a variety of law enforcement, search and rescue and industrial applications. Both devices utilize passive infrared sensing technology allowing users to detect extremely small differences in the temperature of objects, people and other heat sources within the field of view.

Unlike traditional night vision devices, the TVS 11 and TVS 12C can be operated 24 hours a day, in daytime and at night, even in the total darkness of an enclosed space. Both devices can also see through smoke, fog and other obscurants. Both units feature “black hot” and “white hot” image polarity, while the TVS 12C has additional display colour options. Both units can also be connected to external display devices via external interface.

The TVS 11 is ideal for observational situations requiring a lightweight, compact unit. In situations requiring rugged design features, the TVS 12C is ideal. Both models are available in 320 and 640 resolution.



TVS 11 - In Action



TVS 11 (640-35)



TVS 12C (640-60)

Detector	TVS11		TVS 12C	
	336-35	640-35	336-60	640-60
Model	336-35	640-35	336-60	640-60
Resolution (pixels)	336 x 256	640 x 512	336 x 56	640 x 512
Full frame rate	30 Hz (NTSC) 25 Hz (PAL)	30 Hz (NTSC) 25 Hz (PAL)	30 Hz (NTSC) 25 Hz (PAL)	30 Hz (NTSC) 25 Hz (PAL)
Pixel size	17 µ	17 µ	17 µ	17 µ
Operating wavelength	7.5 - 13.5 µm	7.5 - 13.5 µm	7.5 - 13.5 µm	7.5 - 13.5 µm
Sensitivity (milikelvin)	<50 mK	<50 mK	<50 mK	<50 mK
DRI range (meters)*	280 / 320 / 160	1280 / 320 / 160	2,000 / 510 / 255	2,000 / 510 / 255
Optics				
Objective lens diameter	35 mm	35 mm	60 mm	60 mm
Objective F number	1.2	1.2	1.25	1.0
Field of view	13°x10°	18°x14°	7.6°x5.7°	9.5°x7.5°
Eye relief	25 mm	25 mm	30 mm	30 mm
Dioptric correction	-6 ... +2	-6 ... +2	-6 ... +2	-6 ... +2
Electronics				
Video output	PAL and NTSC	PAL and NTSC	PAL and NTSC	PAL and NTSC
Video Interface	RCA	RCA	RCA	RCA
Display (pixels)	MOLED, 800x600	MOLED, 800x600	MOLED, 800x600	MOLED, 800x600
Mechanical				
Operating temperature range	-40 to +80 °C	-40 to +80 °C	-40 to +80 °C	-40 to +80 °C
Shock resistance	300g	300g	300g	300g
Battery type	2 x CR123 Lithium	2 x CR123 Lithium	6 x AA	6 x AA
Continuous battery life	8 hours	8 hours	8 hours	8 hours
Dimensions	135x80x55 mm	135x80x55 mm	280x68x78 mm	280x68x78 mm
Weight with batteries	400g	400g	750g	750g

\* Detection, Recognition, Identification range to a human sized target



Sentinel Front View (640-60)



Sentinel Rear View

## SENTINEL

The Sentinel thermal imaging binocular is a technically advanced device for observation and perimeter security. The Sentinel utilizes a sensitive, high-resolution uncooled bolometer to perceive differences in the thermal signature of objects within the field of view.

The device is intended for detection and recognition of objects at remote distances around the clock day or night, through smoke, fog or camouflage. The Sentinel can detect objects at up to 8 km with an optional 115 mm lens.

The Sentinel thermal imaging binocular is a powerful tool for commercial and hunting applications as well as law enforcement, military and security professionals. Available in 320 or 640 resolution.



Sentinel - In Action

### Detector

Model	336-60	336-75	640-60	640-75
Resolution (pixels)	336 x 256	336 x 256	640 x 512	640 x 512
Full frame rates	30 Hz (NTSC); 25 Hz (PAL)	30 Hz (NTSC); 25 Hz (PAL)	30 Hz (NTSC); 25 Hz (PAL)	30 Hz (NTSC); 25 Hz (PAL)
Pixel size	17 $\mu$	17 $\mu$	17 $\mu$	17 $\mu$
Operating wavelength	7.5 - 13.5 $\mu$ m	7.5 - 13.5 $\mu$ m	7.5 - 13.5 $\mu$ m	7.5 - 13.5 $\mu$ m
Sensitivity (milikelvin)	<50mK	<50mK	<50mK	<50mK
DRI range (meters)*	2,000 / 510 / 255	2,500 / 650 / 330	2,000 / 510 / 255	2,500 / 650 / 330

### Optics

Objective lens diameter	60 mm	75 mm	60 mm	75 mm
Objective F number	1.25	1.0	1.25	1.0
Field of view	5.5°x4.2°	8.2°x6.5°	10.4°x8.3°	9.5°x7.5°
Eye relief	30mm	30mm	30mm	30mm
Dioptric correction	-6 ... +2	-6 ... +2	-6 ... +2	-6 ... +2

### Electronics

Video output	PAL and NTSC	PAL and NTSC	PAL and NTSC	PAL and NTSC
Display (pixels)	MOLED, 800x600	MOLED, 800x600	MOLED, 800x600	MOLED, 800x600
Video interface	RCA	RCA	RCA	RCA

### Mechanical

Operating temperature range	-40 to +50 °C	-40 to +50 °C	-40 to +50 °C	-40 to +50 °C
Shock resistance	300g	300g	300g	300g
Battery type	4 x AA	4 x AA	4 x AA	4 x AA
Continuous battery life	10 hours	10 hours	10 hours	10 hours
Dimensions	150x146x72 mm	181x146x90 mm	150x146x72 mm	181x146x90 mm
Weight with batteries	775g	970g	775g	970g

\* Detection, Recognition, Identification range to a human sized target

## NVS 14 SERIES

The battle-tested NVS 14 night vision monocular meets any military or law enforcement observational need under the darkest conditions. This model is in service with many militaries around the world. The device is manufactured with either a Gen.3 ANVIS-size image intensifier tube. Extreme durability and a crisp, clear image has earned the NVS 14 an impeccable reputation.

The NVS 14 is one of the smallest and lightest products of its kind, while being made of durable materials to meet military specifications. The NVS 14 can be handheld, mounted on a weapon, head or helmet. An optional afocal lens turns this monocular into a 3x night vision sight.

The head mount enables the user to flip the monocular from one eye to the other or to turn it upright for unobstructed vision. In "Auto" mode the NVS 14 automatically switches off when turned upright. When the unit is head/helmet mounted this feature reduces the chance of the user being detected and extends battery life. Two monoculars with a dual mount adapter form wide angle goggles.

The NVS 14-3XT is the first mass produced Gen. 3 night vision monocular with FOM>1400, that is not subject to US export restrictions.



Full Delivery Set Shown

MIL-STD-810  
CERTIFIED



NVS 14



### Optical

Magnification	1x
Field of view	40°
Objective F number	F1.17
Objective focal length	27.5 mm
Focus range	0.25 m - infinity
Exit pupil	21 mm
Eye relief	25 mm
Diopter range	+5 to - 6

### Environmental

Waterproof	MIL-STD-810
Operating temperature	-50°C ... +55°C
Storage temperature	-50°C ... +70°C

### Mechanical

Battery	1 AA or 1 CR123
Battery life	Over 40 hr without IR, over 20 hr with IR
Low battery indicator	V
IR ON indicator	V
Auto shut off	V
Dimensions	118x48x69 mm
Weight	300 g

### Image Intensifier Tube

Generation	3
IIT model	N3XT3631IC
IIT resolution (minimum)	64 lp/mm





MIL-STD-810  
CERTIFIED **NC**



NVS 14-3GCS



#### Optical

Magnification	1x
Field of view	40°
Objective F number	F1.17
Objective focal length	27.5 mm
Focus range	0.25 m - infinity
Exit pupil	21 mm
Eye relief	25 mm
Diopter adjustment range	+5 to - 6

#### Mechanical

Battery	1 AA or 1 CR123
Battery life	Over 40 hr without IR, over 20 hr with IR
Low battery indicator	V
IR ON indicator	V
Auto shut off	V
Dimensions	118x48x69 mm
Weight	320 g

#### Environmental

Waterproof	20m, 30 minutes
Operating humidity	98%
Operating temperature	-50°C ... +55°C
Storage temperature	-50°C ... +70°C

#### Image Intensifier Tube

Generation	3
IIT model	N3XT3631IC
IIT resolution (minimum)	64 lp/mm

## NVS 14-3GCS

The NVS 14-3GCS night vision monocular meets the most demanding needs of both military and law enforcement users. This model is manufactured with Gen. 3 ANVIS-size image intensifier tubes. It is waterproof up to 20 metres and features a manual gain control that allows extensive usage under changing light conditions from dusk to dawn. Extreme durability and extended operating time combined with a crisp, clear image make this model indispensable for every situation and type of operation encountered by Special Forces professionals.

Like all other models in the NVS 14 family, the NVS 14-3GCS can be used as a handheld unit or it can be mounted on a weapon, head or helmet. An optional afocal lens turns the monocular into a 3x night vision sight.

The head mount enables the user to flip the monocular from left to right eye and to turn it upright for unobstructed vision. In "Auto" mode, the NVS 14-3GCS automatically switches off when turned upright. When the unit is head/helmet-mounted, this feature extends battery life and eliminates the risk of user-detection. Two monoculars with a dual mount adapter form true stereoscopic night vision goggles. With optional add-on afocal lenses, the device is transformed into night vision binoculars. The product is video camera adaptable.

The NVS 14-3GCS is the first mass-produced 3rd generation night vision device with FOM>1600 that is not subject to any US export restrictions.



Full Delivey Set including optional accessories

## NVS 7 (NSN# 5855-20-000-8284)

These battle-tested NVS 7 goggles meet all military and law enforcement requirements for night observation. Currently in service in more than 40 militaries around the world, a variety of models are available to satisfy any user need. Waterproof, lightweight and compact, this advanced system is also the most affordable on the world market.

The NVS 7 is the first mass produced Gen. 3 night vision goggle with FOM>1250 that is not subject to US export restrictions. Optional 3x, 4x, 5x and 8x easy-to-attach lenses further extend viewing capability.



Optional Hard Case Shown

MIL-STD-810  
CERTIFIED



NVS 7



NVS 7 mounted on a helmet

### Optical

Magnification	1x
Field of view	40°
Objective F / T number	F1.2 / T 1.25
Objective focal length	27.5 mm
Focus range	0.25 m - infinity
Eye relief	25 mm
Diopter adjustment range	+5..-6
Interpupillary distance	57-73 mm

### Mechanical

Battery	2 AA
Battery life	Over 80 hr without IR; over 30 hr with IR
Low battery indicator	V
IR ON indicator	V
Auto shut off	No
Dimensions	150x120x55 mm
Weight	480 g

### Environmental

Waterproof	MIL-STD-810
Operating temperature	-50°C ... +55°C
Storage temperature	-50°C ... +70°C

### Image Intensifier Tube

Generation	3
IIT model	N3XT4322
IIT resolution (minimum)	64 lp/mm



MIL-STD-810  
CERTIFIED



NVS 7/4x



NVS 7/5x



NVS 7/8x

## NVS 7 BINOCULAR SERIES

The battle-tested NVS 7 binoculars, based on the popular NVS 7 goggles, are suitable for defence, marine and SAR operations under the darkest conditions.

They are available in 4x, 5x and 8x magnification configurations. NVS 7/4x is the smallest and lightest handheld night vision binocular in its class. The NVS 7/5x provides an excellent visibility range while remaining compact and functional.

The NVS 7/8x incorporates a unique catadioptric lens with a large aperture, which makes this device indispensable for long range observation at night. It is recommended to use the NVS 7/8x model with a tripod. It is equipped with a standard 1/4" tripod socket.



### Optical

	4x	5x	8x
Magnification	4x	5x	8x
Field of view	10°	8°	5°
Objective F number	1.5	2.3	2.0
Objective lens focal length	100 mm	130 mm	216.4 mm
Focus range	10 m - infinity	10 m - infinity	20 m - infinity
Eye relief	25 mm	25 mm	25 mm
Diopter correction	+5..-6	+5..-6	+5..-6
Interpupillary distance	57-73 mm	57-73 mm	57-73 mm

### Environmental

Waterproof	MIL-STD-810
Operating temperature	-50°C ... +55°C
Storage temperature	-50°C ... +70°C

### Mechanical

	4x	5x	8x
Battery	2 AA	2 AA	2 AA
Battery life	Over 80 hr without IR, over 30 hr with IR		
Low battery indicator	V	V	V
IR ON indicator	V	V	V
Auto shutoff	No	No	No
1/4" tripod socket	No	No	Yes
Dimensions	165x120x70 mm	230x136x82 mm	240x130x130 mm
Weight	0.690 kg	0.800 kg	1.470 kg

### Image Intensifier Tube

Generation	3
IIT model	N3XT4322
IIT resolution (minimum)	64 lp/mm

## NVS 6 AVIATOR GOGGLES

The NVS 6 aviator night vision goggles feature binocular viewing and were designed specifically for use by helicopter pilots during night flight missions. Whether the mission involves fixed or rotary wing aircraft, flight crews can now benefit from the NVS 6 aviator system, developed specifically for their needs. The goggles allow aviators to navigate at the nap of the earth, take off, land and perform other operations that are practically impossible or extremely dangerous at night without the use of a light source.

Improved situational awareness and system performance, in addition to ergonomic and technological enhancements, will benefit both law enforcement and civil aviators. Adjustable 25 mm eyepieces provide improved eye relief enabling excellent viewing regardless of the eyepiece positioning. Ergonomically designed interface controls including interpupillary adjustments and vertical, fore-aft, and tilt adjustments allow improved viewing of the entire system field of view (40 degrees). The lightweight goggles can be mounted to a variety of aviator helmets.



### FEATURES:

- Advanced Gen. 3 image intensifier tubes
- Stereo vision
- Flip up/Flip down button release
- Vertical and fore-and-aft adjustments
- Quick detachment
- Automatic brightness control
- Lightweight

### OPTIONAL ACCESSORIES:

- Class A/B (minus blue) and leaky green filters
- Head Mount Assembly

### Specifications

IIT type	Gen. 3
Resolution at optimal light level	1.1 cy/mr
Light gain	min 35,000
IIT resolution	57-64 lp/mm
ITT signal to noise ratio	20-24
Magnification	1x
Field of view	40°
Objective lens	27 mm, F 1.23
Focus range	0.25 m - infinity
Exit pupil/Eye relief	Full-field: 6 mm @ 25 mm distance
Diopter adjustment range	-5...+2
Interpupillary adjustment range	52 mm ... 72 mm
Vertical adjustment range	18 mm - standard (25 mm - optional)
Fore-and-aft adjustment range	27 mm
Tilt adjustment range	min 10°
Power supply	2xAA
Operational temperature range	-32°C ... +52°C
Dimensions, WxHxD, with mount	126 x 128 x 111 mm
Weight	550 g

### Image Intensifier Tube

Generation	3
IIT model	N3XT3631IC
Resolution	64 lp/mm



MIL-STD-810  
CERTIFIED



Night Witness M3



Night Witness M3 attached to HD Camcorder



Night Witness M3 with video being recorded

## NIGHT WITNESS M3

The Night Witness M3 is designed for conducting surveillance and intelligence gathering activities under the cover of night. This device is the ideal night vision system for law enforcement, private security, search and rescue and professional photography.

The Night Witness M3 can be mounted on a variety of optical systems allowing the user to capture high quality true night vision images in low light conditions. Based on Newcon Optik's popular NVS 14 night vision monocular, this device utilizes a Gen. 3 image intensifier tube.

Designed with modularity in mind, the objective lens interface on the Night Witness M3 is compatible with any C-mount lens.



Night Witness M3 Delivery Set

### Optical

Magnification	1x
Focal length / F number	25 mm/F1.4
Field of view	40°
Focus range	3 m - infinity

### Eyepiece

Focal length	20 mm
Eye relief	16 mm
Exit pupil	7 mm
Diopter adjustment range	-4 ... +4

### Environmental

Operational	-40°C ... +55°C
Storage temperature	-40°C ... +65°C
Relative humidity	Up to 98%

### Mechanical

Lens mount	C-mount, 1" - 32 TPI
Power supply	1xAA or external power supply 3.5-15 V, 50 mA
Battery life at 20°C	10 hours (5 hours with infrared illuminator)
Tripod socket	standard 1/4", 20 TPI
Dimensions	115x70x45 mm
Weight with battery	328 g

### Image Intensifier Tube

Generation	18 mm, Gen. 3
IIT model	N3XT3631IC
Resolution (minimum)	64 lp/mm

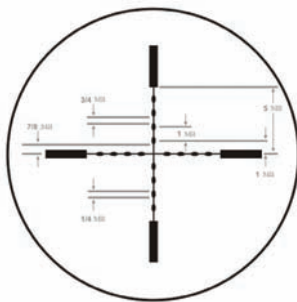
## DN 462 / DN 463 RIFLESCOPE SERIES

The DN 462 / DN 463 is designed to excel in modern warfare. Utilizing a military-style design and offering maximum functionality, the DN 462 / DN 463 is the right choice for anyone operating in dark environments.

This riflescope It is fully weatherproof, with a nitrogen filled optical channel rated to IP 66, and can be used virtually anywhere (arctic ice fields, desert sands, humid tropical forests).

The body design and high grade image intensifier tubes ("IIT") ensure the riflescope is shockproof to heavy calibers, including 9.3x62, 9.3x74 and 375 H&H. The Gen. 2+ / Gen.3 IIT has Automatic Brightness Control (ABC) and a high quality, wide-aperture lens, that provides a sharp and clear picture. The high light gain allows operation even in situations of critically low night illumination (down to  $10^{-4}$  lx – overcast starlight).

The DN 462 / DN 463 is equipped with a LED-lit Mil-Dot reticle. The voltage stabilization system eliminates reticle shift even with an almost discharged battery. All main controls are located on top of the unit allowing for ease of access.



### FEATURES:

- Fine image quality and resolution
- LED-lit Mil-Dot reticle
- Shock proof, built for use with heavy recoil weapons
- Stabilized power supply
- Low battery indicator
- Remote control with secure attachment
- Shock resistant lightweight armored carbon plastic body
- Powerful infrared illuminator
- Carrying case

### Optical

Model	DN 462 / DN 463
Objective F Number	F1.68
Magnification	4x
Field of view	11
Focus range	8 m - infinity
Objective lens diameter	60 mm
Eye relief distance	50 mm
Diopter correction	±3.5

### Mechanical

Adjustment mechanism, step	0.45 MOA
Adjustment mechanism, range	0.4435" @ 100 yards
Battery	1xAA / 1xCR123 Lithium
Voltage	1.5V / 3V
Dimensions	310x95x103 mm
Weight	1,000 g

### Environmental

Waterproof	MIL-STD-810
Operating temperature	-30°C ...+40°C

### Configuration

Generation	2+ / 3
Resolution	46-64 lp/mm



DN 483 - 4x



DN 483 - 6x



DN 483 on assault rifle

## DN 483 RIFLESCOPE

The DN 483 is a modern multi-purpose night vision riflescope built to accommodate the most demanding military specifications. Large quantities of DN 483 are in service with militaries around the world. This scope is easy to service and maintain.

The body of the scope is made of lightweight composite materials and is compatible with 4x and 6x objective lenses.

### FEATURES:

- Long observation range
- Various weapon mounts available (including European mount)
- Shockproof, built for use with heavy recoil weapons
- Automatic brightness control
- Illuminated Mil-dot reticle with adjustable brightness
- Reticle color (red or yellow) selectable
- Long eye relief
- Accurate windage/elevation adjustment with audible clicks
- Lightweight reinforced plastic body
- Powerful infrared illuminator (optional)
- Camera/video adapter (optional)



DN 483 on AR-15 type rifle

### Optical

Model	4X	6X
Objective focus length / F number	110mm / F 1.6	165 mm / F 2.0
Magnification	3.7x	6.1x
Field of view	10°	6.25°
Focus range	10 m to infinity	30 m to infinity
Eye relief	45 mm	45 mm
Diopter correction	-4 ... +3	-4 ... +3

### Mechanical

Adjustment windage/elevation, step	1 click = 10mm / 100m	
Battery	2xAA	
Voltage	1.5V	
Battery life (minimum)	60 hours	
Dimensions	280x85x75 mm	360x90x110 mm
Length without eye cup	220 mm	310 mm
Weight	0.870 kg	1.05 kg

### Environmental

Operating temperature	-40°C ... +55°C
Storage temperature	-45°C ... +65°C
Relative humidity	Up to 98 %

### Configurations

Generation	3
IIT model	N3XT36311C
Resolution	57-64 lp/mm

## DN 533 RIFLESCOPE

A unique Gen 3 universal day / night riflescope, featuring two interchangeable eyepieces for day and night use. Replace the daytime eyepiece with the night vision eyepiece and the scope is ready for action with no re-zeroing or tools required. The DN 533 is offered with either 7x or 11x magnification. Used with the optional IR illuminator the DN 533 enables shooting in total darkness.

The DN 533 night vision eyepiece can also be used as a stand alone 1x night vision monocular. With an add-on 3x NVS lens the monocular turns into a 3x observation device. Built-in windage and elevation adjustment mechanisms, matte-black body finish and water resistant design makes these scopes indispensable when 24/7 operability is required.



Night time eyepiece

### APPLICATIONS:

- Night surveillance / Hunting
- Police / Law Enforcement
- Patrol / Search and Rescue

### FEATURES:

- Interchangeable day / night eyepieces - keep rifle zeroed day and night
- Vision range is 400-1000 m in daytime and 100-250 m in total darkness (with optional IR illuminator)
- Night eyepiece also works as a stand alone 1x monocular (or 3x with optional lens)
- Unique high-quality day/night optics (100 mm / F1.5 or 166 mm / F2.0)
- Wide field of view
- Wide range of focus adjustment
- Accurate internal windage / elevation adjustment knobs with tactile audible clicks and true 1/4 MoA step
- Water resistant
- Optional powerful IR illuminator (75 or 200 mW)



### Optical

Magnification	7x	11x
Objective focus length / F number	100 / F1.5	166 / F2.0
Magnification (day / night)	7.0x / 3.7x	11.2x / 6.0x
Field of view (day / night)	3.7 / 7.4	2.3 / 4.6
Focus range (minimum)	20 m	
Objective lens diameter	66 mm	83 mm
Eye relief	60 mm	60 mm
Diopter correction	- 4 ... + 2	- 4 ... + 2

### Mechanical

Adjustment mechanism, step	1/4 MoA ( 7.27 mm / 100 m )	
Adjustment mechanism, range	120 MoA ( ±1.75 m / 100 m )	
Battery	1xCR123 Lithium	
Voltage	3 V	
Battery life (minimum)	40 hours	
Dimensions	340x82x82 mm	440x83x83 mm
Weight (day/night)	0.99kg / 1.05 kg	1.17 kg / 1.23 kg

### Environmental

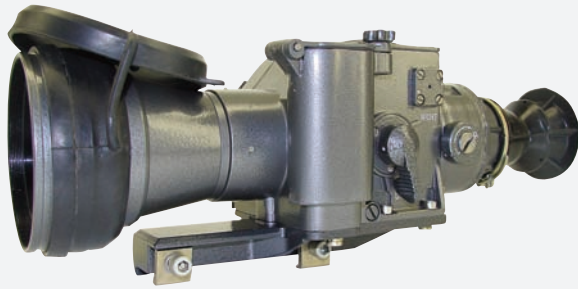
Operating temperature	-40°C ... +55°C
Storage temperature	-45°C ... +65°C
Relative humidity	Up to 98%

### Configurations

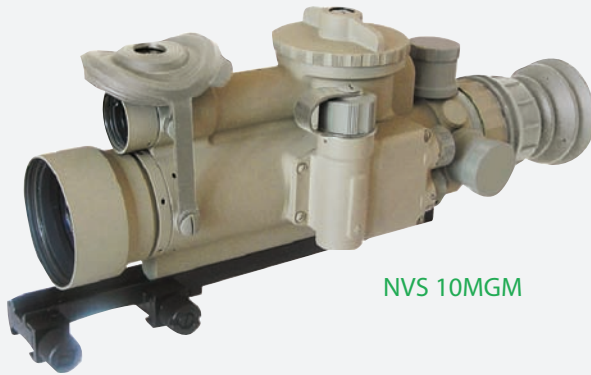
Generation	3
IIT model	N3XT36311C
Resolution	57-64 lp/mm







NVS 10MG



NVS 10MGM

## NVS 10MG / 10MGM RIFLESCOPE SERIES

The NVS 10MG and the NVS 10MGM are integrated day / night riflescopes. The user can easily switch between day and night modes, eliminating the need to carry separate night and day scopes. No re-zeroing is required when switching between day and night mode.

The scope fits various weapons, including machine guns, anti-tank guns, grenade launchers, etc. This scope features an adjustable illuminated tactical reticle. The reticle can be changed (at the factory) to match the particular weapon / ammunition combination.

### FEATURES:

- Fits a variety of weapons, including M16, AK-47, Carl Gustaf Grenade Launcher, RPG, various machine guns
- Can be supplied with Picatinny mount (MIL-STD-1913), side mount or a custom mount
- Accurate internal windage / elevation adjustment mechanism
- Lit tactical reticle with adjustable brightness
- Automatic brightness protection

### ACCESSORIES:

- Carrying case
- Manual
- Warranty card



	NVS 10MG	NVS 10MGM
<b>Optical</b>		
Magnification	4x	3x
Objective focal length / F number	108 mm / F1.5	80 mm/F3.8 (day) / 80 mm/F1.6 (night)
Field of view	9° (day) / 14° (night)	12°
Objective lens diameter	72 mm	21 mm (day) / 52 mm (night)
Focus range	50 m - infinity	50 m - infinity
Eye relief	40 mm	50 mm
Exit pupil diameter	6 mm	7 mm
Diopter correction	Fixed -0.5 ... -1	-4 ... +5
<b>Mechanical</b>		
Windage / Elevation adjustment range	±34 MoA	36 MoA
Windage / Elevation step	0.7 MoA	0.35 MoA
Battery	2xAA	1xAA
Battery life (minimum)	60 hours	16 hours, with IR 3.5 hours
Dimensions	255x88x80 mm	322x87x131 mm
Weight	1.6 kg	1.64 kg
<b>Environmental</b>		
Operating temperature	-55°C ...+55°C	-40°C ...+40°C
Storage temperature	-55°C ... +70°C	-50°C ...+50°C
Waterproof	MIL-STD-810 (506.5)	MIL-STD-810
Relative humidity	≤95%	≤95%
<b>Configurations</b>		
Generation		3
IIT model		N3XT4322
Resolution		64 lp/mm

## NVS 33 WEAPON SCOPE ATTACHMENT

The NVS 33 is a high-resolution night vision attachment that is designed to mount in front of virtually any daytime weapon scope. A variety of mounting options that include a Picatinny rail and a scope ring adaptor mount with different size inserts for various scope objectives are available. The NVS 33 can be used with daytime scopes with 1x to 20x magnifications (3x to 12x recommended), adding night vision capabilities to daytime target acquisition platforms. The NVS 33 utilizes a Gen. 3 image intensifier tube and fast f/1.6 optics for a brighter and sharper image.

The unit is installed, operated, and removed without tools and without affecting the alignment of the daytime scope. The unit can be mounted on a spotting scope for long range reconnaissance, used hand-held as a night observation device, or used in other night-time operations requiring night vision capabilities. The NVS 33 night sight attachment can be mounted to a variety of handheld weapons including medium-range sniper weapons and assault rifles.



### FEATURES:

- In-line with rifle sight attachment
- Three different methods of mounting:
  - Picatinny (MIL-STD-1913) mount
  - Compatible riflescope thread
  - Riflescope mount with several ring sizes
- Works in combination with any daytime scope with 1x to 20x magnification
- Works with reflex sights (ACOG, Aimpoint, Elcan, etc.)
- MIL-Spec design
- Powerful IR illuminator
- Optional attachment to convert into a night vision monocular

### Optical

Magnification	1x
Field of view	8.8°
Objective lens focal length / F number	78 mm / F1.5
Focus range	10 m to infinity
Magnification of day scope, recommended	3-12x
Magnification of day scope, maximum	1-20x

### Environmental

Operating temperature	-50°C ... +55°C
Storage temperature	-55°C ... +65°C
Relative humidity	Up to 98 %
Waterproof	MIL-STD-810

### Mechanical

Battery	1x CR123 Lithium or 1x AA
Battery life	40-60 hours
Dimensions	180x75x60 mm
Weight	615 g

### Configuration

Generation	3
IIT model	N3XT3631IC
Resolution (minimum)	64 lp/mm





**Export License  
NOT REQUIRED**



## NV207-G2 MONOCULAR

The NV207-G2 monocular provides the ability to observe terrain under the darkest conditions. The NV207-G2 uses the same approach to night vision as our popular battle-tested NVS 14 night vision monocular but places it within the financial reach of night vision enthusiasts. The unit is one of the smallest and lightest products in its category.

A large variety of available accessories allows the unit to be used as a night vision video/camera attachment, or as a 3x magnification night scope. The head mount enables the user to flip the monocular from left to right eye or turn upright for unobstructed vision. In "Auto" mode the unit automatically switches off when turned upright.



**NV207-G2 Binocular  
Configuration**



### Optical

Magnification	1x
Field of view	40°
Objective F number	F1.17
Objective focal length	27.5 mm
Focus range	0.25 m - infinity
Exit pupil	21 mm
Eye relief	25 mm
Diopter range	+5 to - 6

### Mechanical

Battery	1 AA or 1 CR123
Battery life (minimum)	Over 40 hr without IR, 20 hr with IR
Low battery indicator	V
IR ON indicator	V
Auto shut off	V
Dimensions	118x48x69 mm
Weight	300 g

### Environmental

Waterproof	1 m / 30 minutes
Operating temperature	-50°C ...+50°C
Storage temperature	-50°C ...+70°C

### Configurations

Model	NV207-G2
Generation	2 +
IIT model	EPM207-G2-11-13
IIT resolution range	43-51 lp/mm

## NV66-G2 GOGGLES

The NV66-G2 goggles provide the ability to observe terrain under the darkest conditions. This model uses the same approach to night vision as our popular battle-tested NVS 7 goggles, but places it within reach of night vision enthusiasts. Waterproof, lightweight and compact this is one of the most affordable systems on the market. An excellent choice for recreational or professional use.

Optional 3x or 5x easy-to-attach lenses further extend viewing capability.



**Export License  
NOT REQUIRED**



NV66-G2



NV66-G2 mounted  
on a helmet

### Optical

Magnification	1x
Field of view	40°
Objective F / T number	F1.2 / T 1.25
Objective focal length	27.5 mm
Focus range	0.25 m - infinity
Exit pupil	18.5 mm
Eye relief	25 mm
Diopter range	+5 ...-6
Interpupillary distance	57-73 mm

### Mechanical

Battery	2 AA
Battery life (minimum)	Over 80 hr without IR ; 30 hr with IR
Low battery indicator	V
IR ON indicator	V
Auto shut off	No
Dimensions	150x120x55 mm
Weight	480 g

### Environmental

Waterproof	1 m / 30 minutes
Operating temperature	-50°C ... +50°C
Storage temperature	-50°C ... +70°C

### Configurations

Model	NV66-G2
Generation	2+
IIT model	EPM66G-2
IIT resolution range	43-51 lp/mm



8x Lens

## NVS LENSES

These high performance 3x, 4x, 5x and 8x lenses easily mount to the objective lens of many night vision devices. The lenses can be threaded or snapped onto the objective lenses, depending on the lens magnification. Each unit includes a convenient flip-up objective lens cover, removable rear lens cap and carrying case. Each NVS lens is water resistant.

### ACCESSORIES:

- Soft carrying case
- Lens cover
- Cleaning cloth



5x Lens



3x Lens



4x Lens

### Specifications

	NVS 3X	NVS 4X	NVS 5X	NVS 8X
Model	NVS 3X	NVS 4X	NVS 5X	NVS 8X
Magnification	3x	4x	5x	8x
Field of view	13°	10°	8°	5°
Objective lens focal length	55 mm	100 mm	130 mm	216.4 mm
Focus range	5 m - infinity	10 m - infinity	10 m - infinity	20 m - infinity
Objective F number	1.5	1.5	2.3	2.0
Dimensions	70x68x88 mm	65x65x80 mm	84x84x95 mm	140x132x130 mm
Weight	228 g	240 g	385 g	1200 g
<b>Compatible with</b>	NVS 7 / NVS 14 PVS 7 / PVS 14	NVS 7	NVS 7 / NVS 14	NVS 7



IMAGE INTENSIFIER TUBES

Parameter	Model Name					
	NC107663IF	NCXT4331SC	N3XT4322	N3XT4329IC	N3XT4331SC	N3XT3631IC
Generation	2	2+	3	3	3	3
Resolution (min, lp/mm)	32	57	64	64	64	64
Signal to noise (min)	3.2	24	24	24	24	24
Modulation transfer function (%)						
2.5 lp/mm	90%	92%	92%	92%	92%	92%
7.5 lp/mm	60%	80%	80%	80%	80%	80%
15.0 lp/mm	25%	61%	61%	61%	61%	61%
Input Voltage (V)	2.8 ± 0.8	2.8 ± 0.8	2.8 ± 0.8	2.8 ± 0.8	2.8 ± 0.8	2.8 ± 0.8
Input current (max, mA)	32	20	20	20	20	20
MTTF (hours)	2,500	10,000	10,000	10,000	10,000	10,000
Luminous Gain						
@2x10 <sup>-6</sup> fc	50,000	40,000 – 70,000	40,000 – 70,000	40,000 – 70,000	40,000 – 70,000	40,000 – 70,000
E.B.I. (max, µlx)	2	0.25	0.25	0.25	0.25	0.25
Photocathode sensitivity (µA/lm)						
@2856K (min)	300	660	1,800	1,800	1,800	1,800
@830nm (min)	20	50	190	190	190	190
Weight (g)	326	90	60	100	100	80
Photocathode diameter (mm)	25	17.5	17.5	17.5	17.5	17.5
Compatible with	PVS 4, PVS 5	PVS 7	NVS 7-3	PVS 5	PVS 7	PVS 14, NVS 14-3, NVS 6, AVS 6, AVS 9
Image						



LRB 12K



LRB 12K - Display

## LRB 12K

This long range laser rangefinder binocular is an essential tool on the battlefield, at sea and on the worksite. This fully MIL-SPEC device not only ranges out to 12 kilometers, certified to a NATO-standard target) but also measures:

- Azimuth and inclination
- Horizontal and vertical distance from target
- Speed of target
- GPS coordinates of the user
- GPS coordinates of the target
- Distance between two targets
- Azimuth and inclination differential of two targets
- Horizontal and vertical distance between two targets
- And more...

The LRB 12K utilizes an eye-safe laser to deliver the most accurate range measurements in the market. With a built-in GPS receiver, 3-axis compass and crystal clear 7x42 binocular optics all in a 1.5 kg package, the LRB 12K can replace several pieces of kit, reducing overall weight load for users in the field.

The LRB 12K – NITE configuration is the only Gen 3 night vision laser rangefinder binocular available for export.

### Optics

Magnification (x)	7
Objective lens diameter (mm)	42
Exit pupil diameter (mm)	6
Eye relief (mm)	2
Field of view (degrees)	6
Interpupillary distance (mm)	58 to 72
Diopter adjustment range (dpt)	>±5
Reticle type	Glass Reticle (optional) plus OLED
Display type	Matrix OLED

### Rangefinder

Laser type	Pulse
Wavelength (nm)	1550 ± 20
Laser beam divergence (mrad)	0.51
Maximum range (Km)	12
Minimum range (m)	20
Range accuracy (m)	+/- 1.0
Acquisition time (sec)	0.5
Automatic adaptation for different weather conditions (rain, snow, fog, etc)	Yes

### Mechanical

Power supply	6V lithium battery 2CR5. 4-6V external
Measurement quantity with one battery (shots)	5,000
Built-in compass type	3 axes
Built-in GPS module	Yes
PC communication	RS232 and USB
Dimensions (mm)	210x160x85 mm
Weight with battery (kg)	1.65 kg
Operational temperature	-40°C ... +60°C
Storage temperature	-50°C ... +55°C

\*Target: NATO target, 2.3m x 2.3m, albedo 0.3, visibility over 20km.

## LRM 1500M/1800S/2200SI

The LRM 1500M, 1800S and 2200SI are Newcon Optik's newest laser rangefinder monoculars. Each device is the result of many years of research and development and is designed to address the requirements of thousands of LRM users around the world.

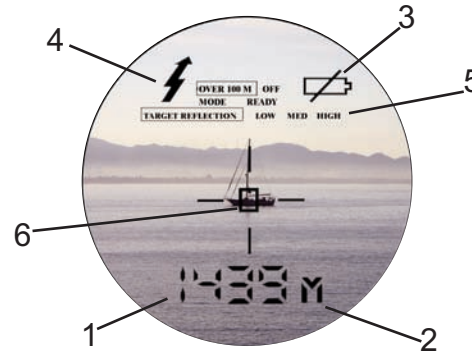
The LRM 1500M is for users requiring basic functionality and high reliability. It features a true measurement range of 1,500m (NATO target) and can recall 10 measurements from device memory.

The LRM 1800S features a true measurement range of 1,800m (NATO standard target) and performs accurate speed measurement. For border patrol, law enforcement and other professionals tasked with perimeter control, the LRM 1800S is an invaluable tool.

The LRM 2200SI features a true measurement range of 2,200m (NATO standard target) and is reliable in practically all weather conditions. A built-in high quality compass and inclinometer enable speed, elevation and azimuth measurements.



Delivered Set



### Specifications

Model	LRM 1500M	LRM 1800S	LRM 2200SI
Magnification	7x	7x	7x
Beam divergence	2.0 mrad	2.0 mrad	2.0 mrad
Objective lens diameter	25 mm	25 mm	25 mm
Field of view	8°	8°	8°
Laser type	Eye-safe 905 nm	Eye-safe 905 nm	Eye-safe 905 nm
Diopter adjustment range	±4	±4	±4

### Rangefinder

	LRM 1500M	LRM 1800S	LRM 2200SI
Distance measurement range*	10-1,500 m	10-1,800 m	10-2,200 m
Azimuth measurement range	-	-	6,400 mils / 360°
Elevation measurement range	-	-	±80°
Distance accuracy	±1 m	±1 m	±1 m
Azimuth accuracy	-	-	±2°
Elevation accuracy	-	-	±1°
Distance resolution	1 m	1 m	1 m
Measuring time (seconds)	0.5 sec	0.5 sec	0.5 sec
First/Last logic	-	-	V
Gating capability/Step	-	-	V
Metres/Yards display	V	V	V
Computer output	-	-	-
Last 10 readings recall	V	V	V
Reticle shape selection (+ or [])	V	V	V
Target quality indicator	V	V	V
Scan mode	V	V	V
Speed detector	-	V	V

### Environmental

	LRM 1500M	LRM 1800S	LRM 2200SI
Operational temperature	-25°C ... +50°C	-25°C ... +50°C	-25°C ... +50°C
Storage temperature	-45°C ... +65°C	-45°C ... +65°C	-45°C ... +65°C

### Miscellaneous

	LRM 1500M	LRM 1800S	LRM 2200SI
Battery	9V Lithium non-magnetic	9V Lithium non-magnetic	9V Lithium non-magnetic
Tripod socket	V	V	V
Weight without battery	445 g	445 g	450 g
Dimensions	127x125x60 mm	127x125x60 mm	127x125x60 mm

\*Target: NATO target, 2.3m x 2.3m, albedo 0.3, visibility over 20km.







MIL-STD-810  
CERTIFIED **NC**



## LRM 3500CI

The LRM 3500CI combines excellent optics with the latest advanced range finding technology. Revised approaches in optical and electronic engineering that incorporate many years in development of laser range finding technology allow target acquisition at longer distances with better reliability under a wide range of weather conditions.

The LRM 3500CI allows users to observe distant objects with excellent image quality while measuring distance to the object (up to 3.5 kilometres), its elevation, azimuth and speed simultaneously.

The LRM 3500CI is equipped with a computer output that allows immediate data acquisition by any system with a standard RS-232 interface, including various GPS models. The device has gating capability and a variable logic of target selection.

### FEATURES:

The customer has a choice of several factory preset menus. The unit will operate in accordance with expressed preferences.

Main features are:

**Angular measurements:** mils, degrees

**Distance measurements:** metres, yards

**Speed measurements:** KM/H, MPH

**Digital output:** RS-232

**GPS compatibility:** Protocol level

**Gating capability:** 100 metres step

First, last and automatic target acquisition

### Specifications

Magnification	7x
Objective lens	25 mm
Field of view	8°
Diopter adjustment range	±4

### Rangefinder

Laser type	905 nm class 1 eye-safe
Measuring distance range*	1-3,500 m
Beam divergence	2.0 mrad
Measuring azimuth range	6,400 mils / 360°
Measuring elevation range	±60°
Distance accuracy (meters)	±1
Azimuth and elevation accuracy	±1°
Distance resolution	1
Measurement time (seconds)	0.5
First/Last/Auto logic	✓
Gating capability (meters)	100 - 3500
Gating step (meters)	100 m
Meters/Yards display	✓
Computer output	RS232
Last 10 readings recall	✓
Reticle shape selection ( + or [] )	✓
GPS (optional)	✓
Scan mode	✓
Speed detector	✓

### Miscellaneous

Power supply	9V lithium non-magnetic
Battery life	>5,000 measurements
Low battery indicator	✓
Rubber armour	✓
Water resistant design	✓
Tripod socket	1/4"
Dimensions	127x125x60 mm
Weight	460 g

\*Target: NATO target, 2.3m x 2.3m, albedo 0.3, visibility over 20km.



Delivered Set

**LRB 3000PRO**  
**LRB 4000CI (NSN# 1240-20-001-9644)**

The LRB 3000PRO and LRB 4000CI medium range laser rangefinder binoculars incorporate the latest achievements in optronics, laser technology and electronics in their design. These binoculars combine uncompromised optics with advanced data processing algorithms. Both models instantly measure distance and speed using the highly accurate time-of-flight delay method. The LRB 3000PRO measures azimuth with a built-in digital compass. An advanced digital compass with inclinometer built into LRB 4000CI enables accurate height, azimuth and elevation measurement.

The LRB 4000CI also features the RS-232 interface, which enables immediate data acquisition by computers and various GPS receivers. The adaptive algorithm implemented in LRB 4000CI dramatically improves reliability of measurement in unfavourable measurement conditions (rain, snow, bushes, wires, etc). Low power consumption (one battery for over 5000 measurements), ergonomic rubber-armoured body, long eye relief, simple two-button operation and wide objective lens make observation and distance measurement with these binoculars accurate and comfortable.



LRB 3000PRO



LRB 4000CI

**Specifications**

Model	LRB 3000PRO	LRB 4000CI
Magnification	7x	7x
Beam divergence	1.2 mrad	1.0 mrad
Objective lens	40 mm	50 mm
Exit pupil diameter	5.7 mm	7.1 mm
Eye relief	20 mm	25 mm
Field of view	6°	5°
Interpupillary distance	60-70 mm	58-72 mm
Diopter adjustment range	±4	±4

**Rangefinder**

	LRB 3000PRO	LRB 4000CI
Laser type	Eye safe 905 nm	Eye safe 905 nm
Distance measurement range*	10-3,000 m	10-4,000 m
Azimuth measurement range	6,400 mils / 360°	6,400 mils / 360°
Elevation measurement range	-	±60°
Distance measurement accuracy	±1 m	±1 m
Azimuth measurement accuracy	±2°	±1°
Elevation measurement accuracy	-	±1°
Range measurement time	0.5 sec	0.5 sec
First / Last logic	V	V
Gating capability / step	-	100-3900 m / 100 m
Metres / Yards display	V	V
Computer output	-	RS232
Last 10 readings recall	V	V
Reticle shape selection ( + or [ ] )	V	V
Scan mode	V	V
Speed detector	V	V

**Environmental**

	LRB 3000PRO	LRB 4000CI
Operating temperature range	-25°C ... +50°C	-25°C ... +50°C
Storage temperature range	-25°C ... +65°C	-25°C ... +65°C
Water resistant	V	V

**Mechanical**

	LRB 3000PRO	LRB 4000CI
Power supply	9V Lithium non-magnetic	9V Lithium non-magnetic
Battery life	>5,000 measurements	>5,000 measurements
Low battery indicator	V	V
Tripod socket	1/4"	1/4"
Dimensions	158x145x69 mm	210x150x80 mm
Weight	970 g	1.3 kg

\*Target: NATO target, 2.3m x 2.3m, albedo 0.3, visibility over 20km.





MIL-STD-810  
CERTIFIED **NC**



LRB 6000CI

## LRB 6000CI

The LRB 6000CI combines excellent optics with the latest advanced optronics and laser technology. Revised approaches in optical and electronic engineering that incorporate many years of development in laser range finding technology allows for target acquisition at longer distances with better reliability under a wider range of weather conditions. This model allows users to observe distant objects with excellent image quality while measuring the distance to the object (up to 6 kilometres), its elevation, azimuth and speed simultaneously.

The LRB 6000CI is equipped with a computer output that allows immediate data acquisition by any system with a standard RS-232 interface, including various GPS models. The device also has gating capability and variable logic of target selection.

### FEATURES:

**Angular measurements:** mils, degrees

**Distance measurements:** metres, yards

**Speed measurements:** KM/H, MPH

**Digital output:** RS-232

**GPS compatibility:** Protocol level

**Gating capability:** 100 metres step

First, last and automatic target acquisition

**Other features include:** rubberized finish, aluminum frame, foldable eyepieces, shockproof, water resistant, wide operational range of climatic and atmospheric conditions.



Delivered Set

### Specifications

Magnification	7x
Objective lens	50 mm
Exit pupil diameter	7.1 mm
Eye relief	25 mm
Field of view	5°
Interpupillary distance	58-72 mm
Diopter adjustment range	±4

### Rangefinder

Laser type	905 nm class 1 eye-safe
Measuring distance range*	1-6,500
Measuring azimuth range	6,400 mils / 360°
Measuring elevation range	±60°
Distance measurement accuracy	±1 m
Azimuth and elevation accuracy	±1°
Distance resolution (metres)	1
Measurement time (seconds)	0.5
First / Last / Auto logic	V
Gating capability (metres)	100 - 4000
Gating step (metres)	100 m
Meters / Yards display	V
Computer output	RS232
Last 10 readings recall	V
Reticle shape selection ( + or [ ] )	V
GPS (optional)	V
Scan mode	V
Speed detector	V

### Environmental

Operational temperature	-25°C ... +50°C
Storage temperature	-25°C ... +65°C
Water resistant design	V

### Mechanical

Power supply	9V Lithium non-magnetic
Battery life	>5,000 measurements
Low battery indicator	V
Rubber armour	V
Tripod socket	1/4"
Dimensions	210x150x80 mm
Weight	1.3 kg

\*Target: NATO target, 2.3m x 2.3m, albedo 0.3, visibility over 20km.

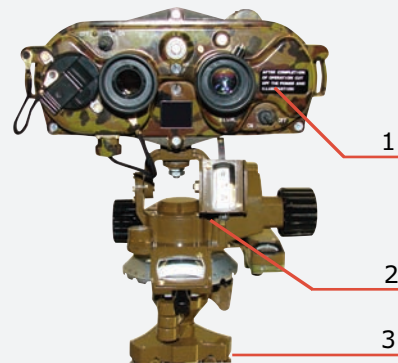
## LRB 20000C

The LRB 20000C Long Range LRF is a professional bi-ocular laser rangefinder designed for ground surveillance, target observation and distance measurement up to 20 km. This rangefinder employs a proven time-of-flight delay algorithm to ensure accuracy and a single strong impulse to minimize exposure time. With an optional angular mount it can also measure horizontal angles and magnetic azimuth as well as vertical angles. The result of distance measurements is displayed through the eyepiece and can be transferred for processing via computer output. The unit can be remotely triggered via RS-232.

This robust rangefinder can be used in geological and engineering surveying, construction and repair works, maritime navigation, meteorology and other activities that require accurate long range distance measuring.



LRB 20000C



- 1 - Rangefinder
- 2 - Angular mount
- 3 - Tripod

### ACCESSORIES:

- Framed lens
- Eye shield
- Coordinate converter
- Cables
- Rechargeable battery
- Software
- Battery charger
- Tripod (optional)
- Angular mount (optional)
- Hard case (optional)

### Specifications

Magnification	7x
Field of view	6.7°
Laser wavelength	1060 nm

### Rangefinder

Distance measurement range	100-20,000 m
Range measurement accuracy	±5 m
Diopter correction, visual channel	± 5
Diopter correction, LED display	-0.6 ... -1.5
Pulse power	15 mJ
Minimum eye-safe distance	2,000 m
Pulse width	6 ns
Beam divergence	0.6 mrad
Bidirectional RS-232 communication	V

### Environmental

Operating temperature range	-40°C ...+55°C
Storage temperature range	-40°C ...+55°C
Water resistant	MIL-STD-810G, Method 506.5
Shock resistant	V

### Mechanical

Power supply	12-14.5V DC or 22-29V DC
Battery life	200 - 250 measurements
Rechargeable battery	V
Angular mount (optional)	Azimuth/Elevation accuracy not more than 1°
Dimensions	225x215x110 mm
Weight, rangefinder only	2.1 kg
Weight with case and accessories	17 kg





LRB 21K



LRB 25000

**FEATURES:**

- First/Last target selection
- High fog/smoke penetration
- Invisible to night vision devices

**LRB 21K / LRB 25000**

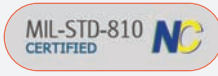
The LRB 21K is a new long range bi-ocular rangefinder encased in a fully waterproof modern housing with a bright-lit multi-line display. This model has additional capabilities when compared to the LRB 25000. It delivers an impressive set of add-on features that include a precise 3-axis compass and/or embedded GPS receiver. The GPS receiver component allows instant calculations of target coordinates.

The LRB 25000 is a long range laser rangefinder capable of measuring distance up to 25 kilometres utilizing a time-of-flight delay algorithm and single-pulse laser technology. The LRB 25000 features a 1540 nanometre laser and is Class 1 eye-safe.

The measurement result is displayed through the eyepiece and can be transferred for processing through a computer port (RS-232). The LRB 25000 can be remotely activated and operated. This instrument has a comprehensive digital display and variable range settings. Compact and lightweight and designed to withstand a wide range of environmental conditions, this binocular is well suited for topography, geodesy, marine navigation, highway and power line construction, airborne altimetry and location, meteorology and other professional activities.



Specifications	LRB 21K	LRB 25000
Magnification	8x	7.5x
Field of view	7°	5.5°
Laser wavelength	1540 nm	1540 nm
Laser type	Erbium Glass	Erbium Glass
<b>Rangefinder</b>		
Photo detector type	APD	APD
Measuring range	50-21,000 m	60-25,000 m
Accuracy	± 5 m	± 5 m
Gating range	100-6,000 m	60-4,500 m
Gating accuracy	100 m	20 m
Laser beam divergence (at 80% of power level)	1.0 mrad	1.0 mrad
Pulse repetition rate	0.2 Hz	0.15 Hz
Diopter adjustment	± 4	± 4
Visual channel objective lens aperture	43 mm	43 mm
Bidirectional interface	RS232	RS232
GPS target coordinate	V	-
3-axis digital compass	V	-
<b>Environmental</b>		
Operating humidity	≤98%	≤98%
Operating temperature range	-35°C ... +50°C	-20°C ... +50°C
Storage temperature range	-30°C ... +60°C	-30°C ... +60°C
<b>Miscellaneous</b>		
Power supply	Non-magnetic 6V	DC 12V / NiCd battery
External power supply	V	-
Protective filter against non eye-safe lasers	Optional	Optional
Tripod socket ¼"	Optional	Optional
Dimensions	225x220x110 mm	220x200x90 mm
Weight	2.2 kg	1.9 kg



### LRF MOD 2/2CI / LRF MOD 3/3CI

Newcon Optik's LRF modules use the same electronics and optics as our rangefinder monoculars. These modules can add various range finding capabilities to bigger systems: distance and speed measurement (all modules) as well as azimuth, elevation and height measurement (CI modification).

All modules support the RS-232 interface. The modules have a built-in computer interface, which enables immediate data acquisition by any system with a standard serial interface as well as remote operation.

Other features include gating capability, fast scan mode, speed measurement, object selection and more.

Typical uses of rangefinder modules:

- Thermal imagers
- Day/night surveillance systems
- Airborne optical systems



Typical use of Laser Rangefinder Module

\* Image courtesy of IEC infrared systems

#### Specifications

	LRF MOD 2 / MOD 3	LRF MOD 2CI / MOD 3CI
Model	LRF MOD 2 / MOD 3	LRF MOD 2CI / MOD 3CI
Laser type	Eye-safe 905 nm	Eye-safe 905 nm
Measuring range (metres)*	10 - 2,000 / 1-3,000	10 - 2,000 / 1-3,000
Distance measurement accuracy	±1 m	±1 m
Azimuth measurement range	-	6,400 mils / 360°
Elevation measurement range	-	±60°
Azimuth measurement accuracy	-	±1°
Elevation measurement accuracy	-	±1°
Distance resolution	1 m (Optional 0.1 MOD 3 only)**	1 m (Optional 0.1 MOD 3CI only)**
Measurement time	0.5 s	0.5 s
Beam divergence	2.0 mrad	2.0 mrad
First/Last target logic	V	V
Gating capability	V	V
Interface	RS232	RS232

#### Environmental

Operating temperature range	-40°C ... +50°C	-40°C ... +50°C
Storage temperature range	-45°C ... 65°C	-45°C ... +65°C

#### Mechanical

Power source	9V DC	9V DC
Alignment	Mechanical	Mechanical
Dimensions	98x88x48 mm	98x88x50 mm
Weight	180 g	185 g

\*Target: NATO target, 2.3m x 2.3m, albedo 0.3, visibility over 20km.

\*\* Optional PC output only



Front View



Typical use of LRF MOD 6EC

## LRF MOD 4EC / LRF MOD 6EC

The new MOD 4EC and MOD 6EC were designed specifically for remotely operated small platforms. In addition to their outstanding functionality, these new modules can be attached to Mini-Typhoon, CLAWS and other systems with a quick release mount. The unit is designed to endure the harsh operating conditions of the real world.

The unit can withstand high vibration, a wide temperature range, dust, rain and RF jammers. MOD 4EC/6EC provides distance, speed, azimuth and elevation measurements. Other features include gating, fast scan and target selection.

Both units can be integrated with other systems and communicate via RS-232. In designing the LRF Modules for precision target acquisition, special attention was given to the ability to boresight the unit with an existing system. A removable visual eyepiece and a video camera attachment are provided to enable quick boresight and visual integration with other observation systems.



Delivery Set

### Specifications

	MOD 4EC	MOD 6EC
Model	MOD 4EC	MOD 6EC
Laser type	905 nm, eye-safe	905 nm, eye-safe
Beam divergence	1.0 mrad	1.0 mrad
Measurement range*	10 - 4,000 m	1- 6,000 m
Distance measurement accuracy	±1 m	±1 m
Azimuth measurement range	6,400 mils / 360°	6,400 mils / 360°
Elevation measurement range	±60°	±60°
Azimuth measurement accuracy	±1°	±1°
Elevation measurement accuracy	±1°	±1°
Distance resolution	1 m / (0.1)**	1 m / (0.1)**
Measurement time	0.5 s	0.5 s
Beam divergence	1 mrad	1 mrad

### Environmental

Operating temperature range	-40°C ... +50°C	-40°C ... +50°C
Storage temperature range	-45°C ... +65°C	-45°C ... +65°C
Environmental protection	Shockproof	Shockproof
Waterproof	IP 66 / IP 67 (optional)	IP 66 / IP 67 (optional)

### Mechanical

Power source	9V DC	9V DC
Dimensions	230x210x95 mm	230x210x95 mm
Weight	2.6 kg	2.6 kg

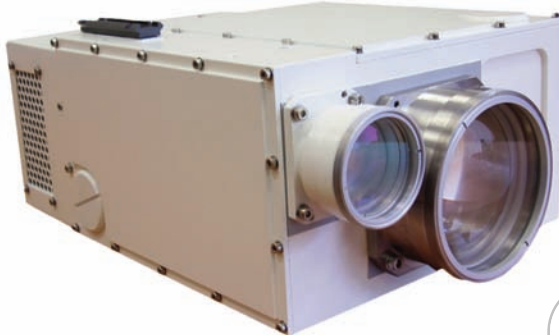
\*Target: NATO target, 2.3m x 2.3m, albedo 0.3, visibility over 20km.

\*\* Optional PC output only

## LRF MOD 15HF / 25HF / 25HFLC

These high frequency laser rangefinder modules enable highly accurate range acquisition of low reflection targets at ranges of up to 25 kilometres.

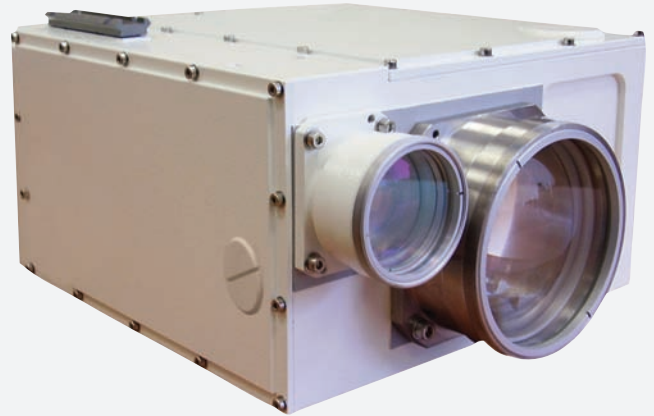
The modules can be effectively used in marine navigation, long-range reconnaissance, naval and coast guard patrol and other similar navigational tasks. A liquid cooling system, built into the 25HFLC model enables higher frequency data acquisition. The 25HF model utilizes air cooling only.



MOD 25HFLC



MOD 15HF



MOD 25HF

### Specifications

Model	MOD 15HF
Laser Type and Class	YAG, Class 1M
Wavelength	1576 nm
Pulse repetition rate	1 Hz
Pulse radiation energy per pulse	12±2 mJ
Range (maximum)	30,000 m
Accuracy	±1
Target discrimination range	15 m
Number of simultaneously detected targets	3
Gating capability	V
Interface	RS 422
Receiving objective lens diameter	55 mm
Laser beam divergence	1.7 mrad
Alignment	Mechanical
Power source	22...30V DC
Dimensions	100x110x250 mm
Weight	3 kg

### Specifications

	MOD 25HF	MOD 25HFLC
Model	MOD 25HF	MOD 25HFLC
Beam divergence	0.8±0.1 mrad	0.8±0.1 mrad
NOHD (meters)	100 m	100 m
Laser type and class	YAG, Class 3B	YAG, Class 3B
Wavelength	1570 nm	1570 nm
Pulse repetition rate	up to 5 Hz	up to 12.5 Hz (15 Hz optional)
Pulse energy (@1570 nm)	15...25 mJ	20...35 mJ
Range	200 - 25,000 m	200 - 25,000 m
Accuracy	±1	±1
Target discrimination range	15 m	15 m
Number of simultaneously detected targets	3	3
Gating capability	V	V
Interface	RS 422, RS 232	RS 422, RS 232
Receiving objective lens diameter	90 mm	90 mm
Laser beam divergence	0.7 mrad	0.7 mrad
Shock	10 g	10 g
Alignment	Mechanical (removable scope)	Mechanical (removable scope)
Operating temperature range	-32...+55C	-32...+55C
Power source	22...30V DC	22...30V DC
Dimensions	145x200x290 mm	145x250x390 mm
Weight	8.6 kg	16 kg





LAM 3 IR

**FEATURES:**

- Three independent laser channels
- Variable size of illumination spot
- Long-range pointer
- Full mil-spec, waterproof and shockproof
- Compact size, lightweight
- Two channel windage / elevation adjustment
- Remote control (membrane type switch)

**ACCESSORIES:**

- Case
- Quick release weapon mount (MIL-STD-1913)
- Velcro tape
- Battery
- Warranty card
- Manual

**LAM 3 IR**

This infrared instrument provides an instant visible or invisible (infrared) dot for firing without eyesight strain, and can be simultaneously used as an infrared illuminator. The unit is designed for precise aiming when shooting from a weapon equipped with a Picatinny rail in conditions of night illumination. Infrared channels are invisible to the naked eye and can be used only in conjunction with night vision devices. Fire adjustments (windage/elevation) are performed with a simple and reliable mechanism separately for visible and invisible channels. The unit meets full military specifications and can be mounted on practically any hand-held weapon.

The unit can be controlled from the mode selector switch and the remote membrane switch, which is fixed on the rifle in a manner that is convenient for the shooter. The membrane type button allows momentary operation so that the operator can utilize this function only when needed. This mode saves battery life and decreases the probability that the shooter will be discovered by enemies using night vision devices. When the LAM 3 IR is controlled from the mode switch only the shooter keeps both hands free. This is critical in real combat operations. The illuminator beam can be adjusted in a wide variety of angles. The small aimer spot is located inside the larger illuminator spot.

**Specifications**

	<b>IR Illuminator</b>	<b>IR Aimer</b>	<b>Red Aimer</b>
Output power, mW, H mode	25	20	4
Output power, mW, L mode (maximum)	2	1	-
Beam divergence	3-105 mrad	0.5 mrad	0.5 mrad
Wavelength	810-850 nm	810-850 nm	625-645 nm
Laser class	III b	III b	III b
Windage / Elevation adjustment range		± 20 mrad	
Step of adjustment, mm / 100m		50 (0.5 ± 0.05 mrad)	
Adjustment accuracy after 1000 shots		0.5 mrad	
Adjustment accuracy after 100 'install/remove' operations		1 mrad	
Battery		3V (CR123 Lithium)	
Current consumption		70-330 mA	

**Environmental**

Operating temperature range	-40°C ...+60°C
Storage temperature range	-45°C ...+65°C
Waterproof	Submersion in 2 m (13 feet) for 7 hours or 10 m (33 feet) for 2 hours

**Mechanical**

Weight	380g
Dimensions	105x75x55mm
Shockproof, up to 0.5 mrad of adjustment accuracy	500 g x 0.4 ms
Drop rating	1 m onto solid surface
MTBF	5000 hrs

## LAM 2 IR/LAM 10M/LAM 10M 3A

The unique infrared or visible laser light instruments of the LAM series provide an instant aiming dot for accurate firing. A sturdy, waterproof metal body houses powerful long-range lasers. The LAM 10M is an eye-safe aimer that reaches targets 200 metres away. The LAM 10M 3A and LAM 2 IR use a more powerful non eye-safe laser that reaches targets as far as 2 kilometres away.

Both LAMs can be momentarily turned on or off with a remote membrane switch, which can be attached to a convenient place on a weapon with velcro tape. Using the momentary switch saves battery life and decreases the time the shooter can be seen through night vision devices.

A simple reliable mechanism enables precise windage and elevation beam adjustment. Both Picatinny and barrel mounts are available. LAM 2 IR provides the utility and operational effectiveness of the aimer and variable spot scene illuminator combined in one compact device, that can be quickly mounted on a weapon. The short range mode of the LAM 2 IR is designed for force on force training. A mechanical safety block protects the user from an unintended switch into non-eye-safe long range mode. All models meet full military specifications. Compact but robust, precise and lightweight these aimers are the best choice for night missions.

### FEATURES:

- Full military specifications
- Compact, lightweight
- Quick release mount (LAM 2 only)
- Windage / Elevation adjustment mechanism
- Remote control (membrane type switch)
- 'Laser On' warning indicator

### ACCESSORIES:

- Case
- Weapon mount (MIL-STD-1913)
- Allen wrench



LAM 2 IR



LAM 10M

### Specifications

	LAM 2 IR		LAM 10M	LAM 10M 3A
Model				
Type	Illuminator	Aimer	Aimer	Aimer
Visibility distance	2,000 m	2,000 m	>200 m	>1,000 m
Beam divergence (mrad)	3-105	0.3	0.5	0.5
Wavelength	850 nm	830-850 nm	830-850(IR) or 650 (visible)	
Spot size at 100 m	>10.5 m	30 mm	50 mm	50 mm
Eye-safety	Short range mode – eye-safe		Eye-safe	Non eye-safe
	Long range mode – not eye-safe			
Windage/Elevation adjustment range	±20 mrad	±20 mrad	±20 mrad	±20 mrad
Adjustment step	50 mm/100 m (0.5 mrad)		50 mm/100 m (0.5 mrad)	
Adjustment accuracy after 1000 measurements	0.5 mrad	0.5 mrad	0.1 mrad	0.1 mrad
Adjustment accuracy after 100 install/remove operations	0.25 mrad	0.25 mrad	1.0 mrad	1.0 mrad

### Environmental

Operating temperature range	-40°C ...+60°C
Storage temperature range	-45°C ...+65°C

### Mechanical

Battery type	CR123 Lithium	CR123 Lithium	CR123 Lithium or AA	
Battery life (hours of continuous operation)	>10 hrs	>10 hrs	>30 hrs	>10 hrs
Dimensions	122x81x41 mm	122x81x41 mm	113x45x32 mm	113x45x32 mm
Weight	300 g	300 g	150 g	150 g





RLS



HDS 3

## RLS / HDS 3 - RED DOT SIGHTS

The RLS and HDS 3 red dot sights were designed and built for tactical law enforcement and military applications. Both sights allow rapid, accurate target acquisition for close-quarters combat. Both the RLS and HDS 3 are built with rugged, durable single-piece frames.

The RLS features two integrated laser channels—1 visible laser pointer for normal use and 1 infrared laser pointer for use with image intensified night vision devices.

The HDS 3 is ideal for the severe environmental conditions present in desert and mountainous regions.

### FEATURES:

- Unlimited Field of View
- Mechanical switch for speed and reliability
- Reduces training time and saves ammunition
- Waterproof and fog proof



HDS 3 with NVS 14  
Mounted on Assault Rifle

Specifications	RLS	HDS 3	
System	Parallax Free, Reflex, Collimator System		
Magnification	No Magnification (1X)		
Eye relief	Unlimited, No centering required		
Red dot size	3 MOA, 5 MOA, 6 MOA, Circle Dot	2 MOA, 3 MOA, 5 MOA	
Field of view (FOV)	23.3 m @ 100 m		
Objective lens	28.3 mm	32 mm	
Optical coating	Anti-Reflex Coating All Surfaces, Multi-Layer Coating for Reflection of Red Light		
<b>Electronic Data</b>			
Battery	One CR 123A 3V Lithium Battery		
Battery life	700 hours		
Dot brightness adjustment	12 Settings : 1 off, 5 daylight, 3 twilight, 3 nightvision		
<b>Mechanical Data</b>			
Housing material	High Strength Aluminum		
Surface finish	Hard Anodized, Matte		
Mountings	For MIL-STD-1913 Picatinny Rail		
Click adjustment	1 click = 3 mm at 100 m (For red dot only)	1 click = 8 mm at 100 m (For red dot only)	
Dimensions	130x65x62 mm	134x75x75 mm	
Weight	360 g (with Mount)		
<b>Environmental</b>			
Operating temperature range	-41°C ... +71°C	-51°C ... +71°C	
Storage temperature range	-45°C ... +75°C	-55°C ... +75°C	
<b>Laser Data</b>			
	Visible pointer	IR pointer	-
Power output	30 mW	30 mW	-
Wavelength	650 nm	850 nm	-
Range / Visibility	300 metres / 25 metres	Over 2 km	-
Laser class	IIIb	IIIb	-
Beam diameter	8 mm @ 25 m	8 mm @ 25 m	-

## LAS - 1000 SNIPER DETECTOR

The LAS-1000 sniper detector is capable of detecting various passive optical and electro-optical devices including binoculars, night vision devices, weapon sights, range poles, datum optical markers and levelling rods equipped with optical reflectors. Utilizing an eye-safe laser scanner, the LAS-1000 detects lenses and reflectors in its line of site even if these objects are covered behind bushes, windows or windshields. The detector can be handheld or mounted on a tripod. When an optical reflector of any kind is detected, its position is marked with a red dot visible through the viewfinder of the LAS-1000. For added convenience, an audio signal can be activated. The detected object's distance from the detector is then measured, displayed and can be verbally dictated to the operator. Equipped with an IR as well as a green laser illuminator, the LAS-1000 can reliably detect snipers and other optical equipment in a variety of tactical situations.

The LAS-1000 has two modes of operation: long range field mode and detailed city mode. Additional viewfinder lighting can be activated at low light. Through a Picatinny mount the detector can be combined with night vision, thermal and other observational devices. The LAS-1000 may be effectively used to provide security to various objects and VIPs.

### FEATURES:

- IR Illuminator
- Green laser illuminator
- Two modes of operation



LAS 1000



LAS 1000 Tripod-mounted

### Specifications

Laser type	910 nm
Optical object detection range	60 - 1,000 m
Angular field of view	6°h x 3.7°v
Exit pupil	5.7 mm
Eye relief	22 mm
Distance measurement accuracy	±10 m
Target position measurement accuracy	0.1°x0.1°
Detection zone (horizontal x vertical)	0.1°x1.8°
Scanning speed	up to 45° per second
Optical magnification	7x
Diopter adjustment	±4
Video output	NTSC or PAL

### Mechanical

Power source	6xAA
Battery life	5 hours at 20±5°C
Dimensions	177x177x89 mm
Weight	1.8 kg

### Environmental

Operating temperature range	-20...+50°C
Storage temperature range	-40...+65°C
Environmental protection	Shockproof, waterproof



SIB 16x40 WP Front View



SIB 16x40 WP Rear View



SIB 16x40 WP Delivery Set

## SIB 16x40 WP GYRO BINOCULARS

The SIB16x40 WP gyro stabilized binoculars incorporate gyroscopic image stabilization technology that enables the user to observe distant objects from moving platforms without image resolution degradation caused by mechanical vibration or natural hand tremor. Combining fully coated optics with a high-speed gyro stabilizing system, the SIB 16x40 WP binoculars are the ultimate instrument for long-range observation, tracking and surveillance.

### FEATURES:

- Stabilized image
- Rigid construction
- Weather proof
- Surveillance under any motion condition
- Wide angle image

### ACCESSORIES:

- Carrying case
- Strap
- DC power regulator
- Night vision eyepiece (optional)
- Warranty card
- Manual



### Specifications

Model	SIB 16x40 WP
Magnification	16x
Field of view	3.4°
Minimum focus	30 m
Compensation angle	±5°
Stabilization system	gyroscope
Centre resolution	10"

### Environmental

Operating temperature range	-30°C ... +55°C
Storage temperature range	-35°C ... +60°C
Relative humidity (at +25°C)	up to 98%

### Mechanical

Battery	6xAA or 12V DC
Dimensions	230x190x120 mm
Weight	2.205 kg

## AN 8X30 M22 / AN 7X50 MC SERIES

The AN series of binoculars incorporates BAK-4 roof prisms and multi-coated lenses, delivering impressive light transmission and resolution for brilliantly clear vision.

Non-slip UV-resistant rubber armoring makes these binoculars comfortable to operate even in cold weather.

They are waterproof and shockproof, feature a military reticle and compass (AN 7x50 MC only) and adhere to the latest military standards while remaining light and compact.

### FEATURES:

- Lightweight
- Nitrogen-filled
- Long eye relief and large eyepiece
- Rangefinder reticle
- Individual focusing or centre focusing
- Illuminated compass (AN 7x50 MC only)

### ACCESSORIES:

- Case
- Straps
- Manual
- Warranty card
- Lens cleaning cloth



AN 8x30 M22  
Display



AN 7x50 MC Display  
with Compass



AN 8x30 M22



AN 7x50 MC  
with Compass

### Specifications

Model	AN 8x30 M22	AN 7x50 MC
Magnification	8x	7x
Objective lens diameter	30 mm	50 mm
Field of view	8°	7.5°
Field of view @1000 meters	141 m	132 m
Field of view @1000 yards	423 ft	396 ft
Apparent field of view	64°	52.5°
Prisms	BAK-4	BAK-4
Coating	FMC	FMC
Dioptric correction	± 5	± 5
Exit pupil diameter	3.8 mm	7.14 mm
Brightness index	14	51
Interpupillary adjustment distance	56-74 mm	56-74 mm
Eye relief	17 mm	23 mm
Focus	3 m - infinity	5 m - infinity
Illuminated compass	-	V
M22 reticle	Yes	Yes

### Environmental

Operating temperature range	-40°C ... +70°C	-40°C ... +70°C
Storage temperature range	-45°C ... +75°C	-45°C ... +75°C
Drop test (height)	1.6 m	1.6 m
Waterproof	MIL-STD-810	MIL-STD-810
Shockproof	MIL-STD-810	MIL-STD-810

### Mechanical

Dimensions	110x156x55 mm	209x157x85 mm
Weight	545 g	1.150 kg



AN 7x50 M22



AN 10x50 M22

## AN 7X50 M22/AN 10X50 M22 SERIES

The AN series of binoculars incorporates BAK-4 roof prisms and multi-coated lenses, delivering impressive light transmission and resolution for brilliantly clear vision.

Non-slip UV-resistant rubber armouring makes these binoculars comfortable to operate even in cold weather.

They are waterproof and shockproof and adhere to the latest military standards while remaining light and compact.



### FEATURES:

- Lightweight metal body with rubber armour for sure grip and durability
- Specially designed shockproof prism system
- Fully broadband multi-layer coating optics
- The image is flat fielded, distortion free, and equally sharp from center to edge
- Long eye relief
- Nitrogen-filled
- Anti-laser protection

### ACCESSORIES:

- Case
- Straps
- Manual
- Warranty card
- Lens cleaning cloth

### Specifications

	AN 7X50 M22	AN 10X50 M22
Model	AN 7X50 M22	AN 10X50 M22
Magnification	7x	10x
Objective lens diameter	50 mm	50 mm
Prisms	BAK-4	BAK-4
Optics coating	FMC	FMC
Field of view	7.5°	6.5°
Apparent field of view	53°	65°
Field of view @1000 m	131 m	114 m
Field of view @1000 yd	393 ft	341 ft
Exit pupil diameter	7.14 mm	5 mm
Brightness index	51	25
Interpupillary adjustment distance	56-74 mm	56-74 mm
Eye relief	23 mm	18.5 mm
Focus	5 m - infinity	6 m - infinity
M22 reticle	V	V
Anti-laser protection with OD ≥ 5 at 1064nm	optional	optional
Dioptric correction	± 5	± 5

### Environmental

Waterproof	MIL-STD-810	MIL-STD-810
Shockproof	MIL-STD-810	MIL-STD-810
Drop rating	1.6 m	1.6 m
Operating temperature range	-40°C ... +70°C	-40°C ... +70°C
Storage temperature range	-45°C ... +75°C	-45°C ... +75°C

### Mechanical

Dimensions	200x195x70 mm	195x180x70 mm
Weight	1.55 kg	1.55 kg

## NC 3-12x50 / NC 5-20x56 RIFLESCOPES

The NC 3-12x50 and NC 5-20x56 are daytime riflescopes, both of which feature variable magnification and are designed for use on various weapons. Both riflescopes feature a Mil-dot reticle positioned in the focal plane of the eyepiece (second focal plane), which ensures permanent sizing of the reticle regardless of variable magnification setting being utilized. The reticle is LED-lit with 7 brightness levels available.

Ideal for acquiring small targets at long distances, the riflescope is equipped with a central system parallax adjustment, effective for ranges of 50 metres to infinity.

Both riflescopes incorporate windage adjustment (the multi-revolving scheme) and elevation adjustment (single-revolving scheme), allowing users to adjust shooting.

### ACCESSORIES:

- Case
- Scope rings (optional)
- Batteries
- Manual
- Cleaning cloth



LED-lit Mil-Dot reticle  
with adjustable brightness



NC 5-20x56 General View



NC 3-12x50 shown on  
L96 Magnum rifle



NC 3-12x50 shown in conjunction with  
NVS 33 Night Vision Attachment

### Specifications

Magnification (variable)	3-12x	5-20x
Effective objective lens	50 mm	56 mm
Field of view	6.8-1.7°	4.0-0.9°
Diopter setting	+3 ... -3	+3 ... -3
Eye relief distance	100 mm	90-110 mm
Tactical windage / elevation adjustment per click	10 mm / 100 m	10 mm / 100 m
Elevation / windage adjustment range	3.4 / 100 m / 1.2 m / 100 m	3.3m/100m / 1.8m/100m

### Environmental Data

Waterproof	MIL-STD-810	MIL-STD-810
Operating temperature	-50 to +50 °C	-50 to +50 °C
Relative humidity	up to 98 %	up to 98 %

### Mechanical

Dimensions (w/o mount)	347x77x77 mm	386x85x83 mm
Weight (w/o mount)	0.78 kg	0.90 kg





Spotter NC with straight eyepiece

Spotter NC  
with Camera Attachment

## SPOTTER NC SPOTTING SCOPE

Spotting scope users demand top quality optics that perform flawlessly under all weather conditions. Whether at the range or in the field, the NC 20-60 x 80 brings your target into clear, consistently-sharp, high-contrast focus, especially at the kind of distances that overwhelm lesser optics.

The angled eyepiece position permits a lower scope mounting height, which allows better stability and user comfort. Scopes are nitrogen-filled, waterproof and shock-resistant.

All Newcon Optik spotting scopes feature powerful lenses, and come standard with a durable, padded field carrying case.

### FEATURES:

- ED Glass in polycarbonate rubber armoured body
- BAK-4 prisms
- Long eye relief
- Objective lens and eyepiece protective caps
- Sliding dew shield reduces glare
- Waterproof and nitrogen-filled
- Fogproof
- Lightweight and shock resistant

### ACCESSORIES:

- Case
- Lens cleaning cloth
- Manual
- Warranty card

### OPTIONAL:

- Universal Digital Adapter
- NVG Adapter
- Tripod

Spotter NC with NVS 14  
Night Vision Monocular

### Specifications

Model	Spotter NC
Magnification	20x - 60x
Objective lens diameter	80 mm
Field of view (@1000 yards)	89 - 44 ft
Eye relief	18 - 15 mm
Twilight factor	16.5 (20x), 1.8 (60x)
Brightness	39.7 (20x), 69.3 (60x)
Dioptic adjustment	± 7
Pressure resistance (minimum)	0.5 Bar

### Environmental

Operating temperature range	-30°C ... +60°C
Storage temperature range	-30°C ... +60°C

### Mechanical

Dimensions	335 x 170 x 95 mm
Tripod mount, height	¼ inch , 250 mm / 10"
Tripod pan, tilt	360°, - 60° / +90°
Weight	1.3 kg

## BIG EYE 20x40x100 BINOCULARS

The Big Eye 20x40x100 Binoculars are designed to meet the most demanding specifications and are capable of withstanding maritime weather. They are useful as marine binoculars, a border guarding instrument, or with other applications where long-range viewing is required.

The 20x and 40x Big Eye binoculars have massive objective lenses, BAK-6 prisms and precision ground, multi-coated optics. One can note the incredible optical quality with extraordinary edge-to-edge image clarity. Oversized, individually focusing ocular lenses are set at an angle for comfortable viewing, and have foldable eyecups. The mounted device swivels a full 360° horizontally and 135° vertically. The instrument is nitrogen-filled to prevent fogging. A convenient holder is attached to a tripod to keep spare eyepieces. Binoculars are supplied in a hard case equipped with a lock.



BIG EYE 20x40x100  
with NVS 14 Attached



Front View



Rear View

### Specifications

	20x Eyepiece	40x Eyepiece
Configuration	20x	40x
Magnification	20x	40x
Near Focus	25 m	25 m
Objective lens diameter	100 mm	100 mm
Field of view	2.5°±15'	1.5°±15'
Field of view (@1000 yards)	131 ft	79 ft
Field of view (@1000 meters)	44 m	26 m
Eye relief	20.5±2 mm	14.5±2 mm
Interpupillary distance	55-72 mm	55-72 mm
Angle of eyepiece disposition	60°	60°
Prisms	BAK-6	BAK-6
Coating	FMC	FMC
Horizontal swivel	360°	360°
Vertical swivel	90° up, 45° down	90° up, 45° down

### Environmental

Operating temperature range	+25°C ... -35°C	+25°C ... -35°C
Storage temperature range	+25°C ... -35°C	+25°C ... -35°C

### Mechanical

Dimensions	420x257x125 mm	420x257x125 mm
Weight (without tripod)	7 kg	7 kg



For the latest product updates and specifications visit our website: [www.newcon-optik.com](http://www.newcon-optik.com)





**NC** NEWCON<sup>TM</sup>  
OPTIK

## **VISION IS OUR MISSION!**

105 Sparks Avenue Toronto, Ontario M2H 2S5 Canada  
newconsales@newcon-optik.com <http://www.newcon-optik.com>  
Tel: (416) 663-6963 Fax: (416) 663-9065

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