





Newcon Optik Ltd. was established in 1991 for the purposes of manufacturing state-of-the-art optical systems and consecutive distribution worldwide. Since then Newcon Optik has been successfully developing its market strategy and distribution policy for this specific business niche. Newcon's bestsellers are efficient in the day- and night-time for military and law enforcement, search and rescue, surveillance, hunting and camping, marine (professional and recreational) etc.

As of today Newcon Optik is one of the largest manufacturers and exporters of electro-optical products in the world. Up to 90% of our products are exported to 44 countries. We have supplied many world armies and law enforcement divisions including but not limited to

- US Army
- British Army
- Japanese Self-Defence Forces
- UN Peacekeepers
- And many more.

We manufacture the following product lines:

#### **Night Vision Systems:**

- Night Vision Image Intensifier tubes (Gen 2+, Gen 3). We are one of the 5 main manufacturers in the world
- Night Vision goggles (both pilot and ground troops)
- Night Vision binoculars, monoculars, panoramic viewers
- Night Vision weapon scopes

#### **Laser Range Finders and Speed Detectors:**

- Binoculars, monoculars, weapon scopes and OEM Modules
- 905, 1060 and 1540 wave lengths
- With optional compass and azimuth

#### **Image Stabilized Binoculars**

Laser aimers and illuminators, both visible and Infrared

#### Other specialty optics

Newcon Optik strength is based on the following key factors:

Quality: Our factory has been certified for ISO 9001 standard. All our products undergo a triple quality assurance inspection.

Warranty: A comprehensive 1-year warranty covers all products. Extended warranty is available.

Service: Full service is available from our factory-trained technicians. We stock in Toronto, Canada all necessary spare parts.

Inventory: At any time, we stock 1-2 million \$ worth of merchandise, to ensure prompt delivery from in-house inventory

**Price:** Once you'll see our pricing, you'll be pleasantly surprised to discover that our products are usually 30-80% less than comparable models on the market.

Our major R&D, manufacturing and assembly capabilities are in Canada and Europe. Newcon Optik also benefits from globalization, which allows to source high quality, competitively priced components internationally, predominantly from acknowledged leaders of optical instrument engineering in Europe and Eastern Asia. This enables Newcon to produce sophisticated systems that meet and exceed all applicable international standards, military inclusive. The products are so good and competitive that Newcon's sales have virtually 'exploded' in the last five years. Newcon Optik is the recent ninth spot nominee in the anual PROFIT 100 ranking of Canada's Fastest Growing Companies.

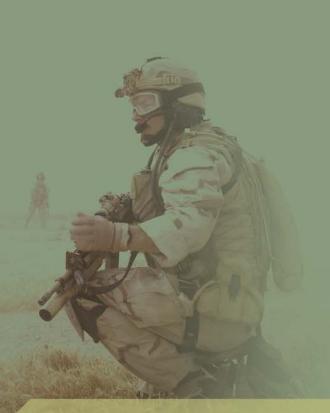
Our R&D team is focused on new lines of night vision products based on Gen. 2+ and 3 technology incorporated, day/night-vision combined systems, laser range finders with advanced additional features and stabilized binoculars. The manufacturing process is provided by modern technologies concentrated on such specialties as optics, machinery, stamping, testing, casting, woodworking, etc. The factories are equipped with precise and productive machines made by such well-known firms as BUHLER, ITALPRESS, ENGEL, KUACY, ARBURG, IDRA, OVERBECK, MAHO, AGIE, STUDER and many more.

The up-to-date technologies and unique modern hardware, testing control equipment enable Newcon to produce the most complex optical, mechanical, plastic parts of high precision and various dimensions, designed to operate in extreme conditions. Immanent commitment to the highest standards of quality, customer satisfaction guarantee, impeccable following to the announced delivery schedule, competitive pricing and other corresponding market advantages promoted Newcon Optik to internationally recognized market leader in its niche.





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# MAGE INTENSIFIER TUBES

#### Image Intensifier Tubes summary table, Generation 2+, 3













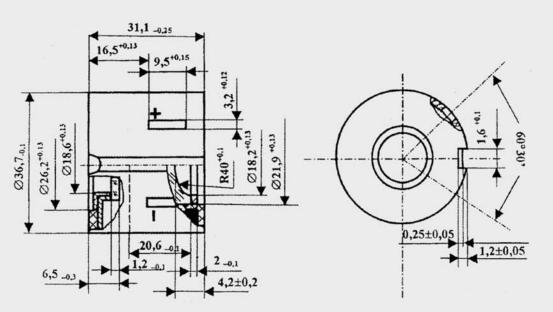
		Generation 2+				Generation 3							
Technical Characteristics	NC107663IF	NC064322	NC064329IC	NC064329IF	NC064329SC	NC064331SC	NC0636311C	NC063631IF	NC064331_25	N3064322	N3064329IC	N3064331SC	N3063631IC
1.Photocathode sensitivity, min: -integral μA/lm -with filter KS-17, μA/lm -spectral at λ=850mm, mA/mW	300 150 20		500-750 220 35				1200-2100 600-1100 84-154						
2.Resolution, min, lines/mm	30-36				45-50	(51-64)*					45-50	(51-64)*	
3.Signal-to-noise ratio	3.2		_		10	6-20					18	3-24	
4.Conversion coefficient (Light gain)	5×10 <sup>4</sup>	2×10 <sup>4</sup>				2.5×10 <sup>4</sup>					2.5	×10 <sup>4</sup>	
5.Dark background brightness, max, cd/m <sup>2</sup>		1.2×10 <sup>-3</sup>	1×1	10-3			1.5×10 <sup>-3</sup>				0.5	×10 <sup>-3</sup>	
6. Contrast transfer coefficient at spatial frequency, lines/mm:  2.5  7.5  15	0.9 0.6 0.25	0.83 0.56 0.26	0.56 0.58 0.5										
7. DC voltage, V							2.8±0	),8					
8. DC Current consumption, max, mA	35	20				16						25	
9. Dimensions, mm	Ø76×63	Ø43×22.5		Ø43×29.4		Ø43×31.1	Ø36.	7×31.1	Ø43×31.1	Ø43×22.5	Ø43×29.4	Ø43×31.1	Ø36.7×31.1
10. Weight, g	326	55		10	00		8	35	75	55	1	00	85
11. Mean time before failure, hours		•					10,00	00	•		•		•
12. Keep time, years	12					15						10	
13. Photocathode type		•			S-25						$A_3B_5$	(GaAs)	
14. Photocathode operating diameter, mm	25				18				25			18	
15. Image magnification		•					1		•				
16. Material of input window	FOE**	FOE** Glass C95 -2 Glass A54 -1											
17Material of output window	FOE** direct flat	Glass C95-2	FOE** inverting concave	FOE** inverting flat	FOE** direct concave	FOE** direct concave	FOE** inverting concave	FOE** inverting flat	Glass C95-2	Glass C95-2	FOE** inverting concave	FOE** direct concave	FOE** inverting concave
18. Contacts ty pe	Plats					Flexible contacts	Flexible	contacts	P	lats			
19. Typical equipment using this type of tubes	AN/PVS4 AN/TVS5	NVS7 NVS7/HD NVS4 DN510	AN/PVS5			PVS7B	PVS14 PVS6 PVS9 NVS14		NVS7/WA	NVS7/HD	PVS5	PVS7B PVS7D	PVS14 PVS6 PVS9 NVS14

<sup>\*</sup> The Buropean methodology for resolution measurements is more conservative than USA. In brackets shown the measurements using USA methodology \*\* RE - Fiber Optics Element



#### IMAGE INTENSIFIER TUBE NC063631IC/N3063631IC (GEN. 2+/3)

Small size Generation 2+/3 image intensifier with inverse image transfer. It has micro channel plate, multi-alkaline metal (gen. 2+) or GaAs (gen.3) photocathode, yellow-green color screen, built-in power supply, input window made of flat surface glass and output window made of concave 180° rotation fiber optic element. The tube complies with all relevant USA and International mil specs (environmental, operational etc.)





'Slim' ANVIS inverting tube compatible with AN/PVS 6,9,14 and many other devices.

Main parameters:					
Technical data	NC063631IC	N3063631IC			
Photocathode type	Gen 2+ S-25	Gen 3 GaAs			
Photocathode operating diameter, mm	18	18			
Resolution, min, lines/mm	45-50 (51-64)*	45-50 (51-64)*			
Photocathode sensitivity, min.:	500-750	1200-2100			
Conversion coefficient, minimum	25 000	25 000			
Image magnification	1	1			
Dark background brightness, max, cd/m²	1,5 10 <sup>-3</sup>	1,5 10⁻³			
Signal-to-noise ratio, min	16-20	18-24			
Current consumption, max, mA	16	25			
Voltage, V	2,8 ± 0,8	2,8 ± 0,8			
Weight, g	85	85			
Mean time before failure, hours	10,000	10,000			
Keep time, years	15	15			

Spatial frequency-contrast characteristic:			
Contrast transfer coefficient			
0,83			
0,58			
15,0 0,28			

Resistance to external affecting factors:			
Sinusoidal vibration (vibration strength):			
- Frequency range, Hz	1-500		
- Acceleration amplitude, m/s <sup>2</sup> (g)	50 (5)		
Mechanical shocks:			
- Multiple peak shock acceleration, m/s <sup>2</sup> (g)	3000 (300)		
- Single peak shock acceleration, m/s <sup>2</sup> (g)	-		
Ambient temperature range, °C	-40 : +55		

<sup>\*</sup> The European methodology for resolution measurements is more conservative than USA.

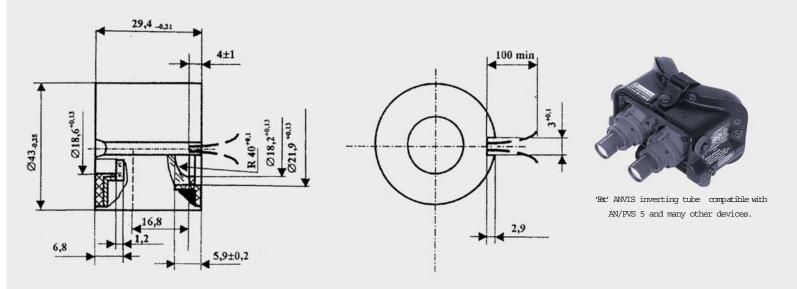
In brackets shown the measurements using USA methodology

Field of view clearness:					
Zone	Circular zone		Maximum diameter of defects Ad		
Number	Dimensions, mm	Neglected	Neglected Admitted Area of defects,		
			Diameter, mm	Quantity	
1	0 - 9,0	0,06	0,15	1	0,12
2	9,0 - 14,5	0,08	0,25	2	0,27
3	14,5 - 18	0,1	0,35	2	0,45

# IMAGE INTENSIFIER TUBES

#### IMAGE INTENSIFIER TUBE NC064329IC / N3064329IC (GEN. 2+/3)

Small size Generation 2+/3 image intensifier with inverse image transfer. It has micro channel plate, multi-alkaline metal (gen. 2+) or GaAs (gen.3) photocathode, yellow-green color screen, built-in power supply, input window made of flat surface glass and output window made of concave 180° rotation fiber optic element. The tube complies with all relevant USA and International mil specs (environmental, operational etc.)



Main parameters:					
Technical data	NC0643291C	N30643291C			
Photocathode type	Gen 2+ S-25	Gen 3 GaAs			
Photocathode operating diameter, mm	18	18			
Resolution, min, lines/mm	45-50 (51-64)*	45-50 (51-64)*			
Photocathode sensitivity, min.:	500-750	1200-2100			
Conversion coefficient, minimum	25 000	25 000			
Image magnification	1	1			
Dark background brightness, max, cd/m²	1,5 10 <sup>-3</sup>	1,5 10 <sup>-3</sup>			
Signal-to-noise ratio, min	16-20	18-24			
Current consumption, max, mA	16	25			
Voltage, V	$2.8 \pm 0.8$	$2.8 \pm 0.8$			
Weight, g	100	100			
Mean time before failure, hours	10,000	10,000			
Keep time, years	15	15			

Spatial frequency-contrast characteristic:				
Frequency, lines/mm	Contrast transfer coefficient			
2,5	0,83			
7,5	0,58			
15,0	0,28			

Resistance to external affecting factors:				
Sinusoidal vibration (vibration strength):				
- Frequency range, Hz	1-500			
- Acceleration amplitude, m/s <sup>2</sup> (g)	50 (5)			
Mechanical shocks:				
- Multiple peak shock acceleration, m/s <sup>2</sup> (g)	3000 (300)			
- Single peak shock acceleration, m/s <sup>2</sup> (g)	-			
Ambient temperature range, °C	-40 : +55			

\* The European methodology for resolution measurements is more conservative than USA.

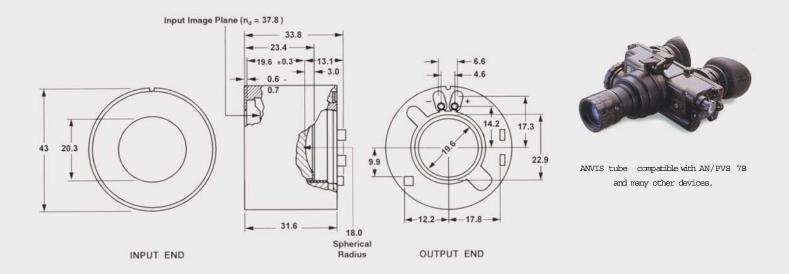
In brackets shown the measurements using USA methodology

	Field of view clearness:				
Zone	Circular zone		Maximum diameter of defects		
Number	Dimensions, mm	Neglected	Neglected Admitted		
	0 - 9,0		Diameter, mm	Quantity	
1	9,0 -14,5	0,06	0,15	1	0,12
2	14,5 - 18	0,08	0,25	2	0,27
3		0,1	0,35	2	0,45



#### IMAGE INTENSIFIER TUBE NC064331SC / N3064331SC (GEN. 2+/3)

Small size Generation 2+/3 image intensifier with direct image transfer. It has micro channel plate, multi-alkaline metal (gen. 2+) or GaAs (gen. 3) photocathode, yellow-green color screen, built-in power supply, input window made of flat surface glass and output window made of concave fiber optic element with straight image transfer. The tube complies with all relevant USA and International mil specs (environmental, operational etc.)



Main param		
Technical data	NC064331SC	N3064331SC
Photocathode type	Gen2+ S-25	Gen3 GaAs
Photocathode operating diameter, mm	18	18
Resolution, min, lines/mm	45-50 (51-64)*	45-50 (51-64)*
Photocathode sensitivity, min.:	500-750	1200-2100
Conversion coefficient, minimum	25 000	25 000
Image magnification	1	1
Dark background brightness, max, cd/m²	1,5 10 <sup>-3</sup>	1,5 10 <sup>-3</sup>
Signal-to-noise ratio, min	16-20	18-24
Current consumption, max, mA	16	25
Voltage, V	2,8 ± 0,8	2,8 ± 0,8
Weight, g	100	100
Mean time before failure, hours	10,000	10,000
Keep time, years	15	15

Spatial frequency-contrast characteristic:				
Frequency, lines/mm	Contrast transfer coefficient			
2,5	0,83			
7,5	0,58			
15,0	0,28			

Resistance to external affecting factors:				
Sinusoidal vibration (vibration strength):				
- Frequency range, Hz	1-500			
- Acceleration amplitude, m/s <sup>2</sup> (g)	50 (5)			
Mechanical shocks:				
- Multiple peak shock acceleration, m/s <sup>2</sup> (g)	3000 (300)			
- Single peak shock acceleration, m/s <sup>2</sup> (g)	-			
Ambient temperature range, °C	-40 : +55			

\* The European methodology for resolution measurements is more conservative than USA. In brackets shown the measurements using USA methodology

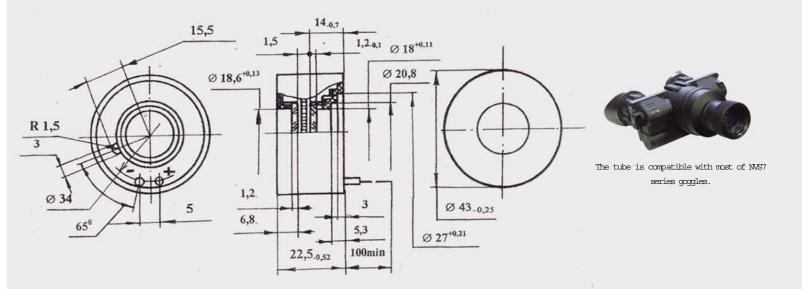
Field of view cleanness:						
Zone	Circular zone		Maximum diameter of defects			
Number	Dimensions,	Neglected	Neglected Admitted			
	Mm		Diameter, mm	Quantity		
1	0 - 9,0	0,06	0,15	1	0,12	
2	9,0 - 14,5	0,08	0,25	2	0,27	
3	14,5 - 18	0,1	0,35	2	0,45	



### IMAGE INTENSIFIER TUBES

#### IMAGE INTENSIFIER TUBE NC064322 / N3064322 (GEN. 2+/3)

Small size Generation 2+/3 image intensifier tube with direct image transfer. It has micro channel plate, multi-alkaline metal (gen. 2+) or GaAs (gen.3) photocathode, yellow-green color screen, built in wrap around power supply, and flat surface glass input-output windows. The tube complies with all relevant USA and International mil specs (environmental, operational etc.)



Main parameters:					
Technical data	NC064322	N3064322			
Generation	2+	3			
Photocathode type	Gen2+ S-25	Gen3 GaAs			
Photocathode operating diameter, mm	18	17.5			
Resolution, min, lines/mm	45-50 (51-64)*	45-50 (51-64)*			
Photocathode sensitivity, min.:	500-750	1200-2100			
Conversion coefficient, minimum	25 000	25 000			
I mage magnification	1	1			
Dark background brightness, max, cd/m <sup>2</sup>	1,2 10 <sup>-3</sup>	1,2 10 <sup>-3</sup>			
Signal-to-noise ratio, min	16-20	18-24			
Current consumption, max, mA	20	25			
Voltage, V	2,8 ± 0,8	2,8 ± 0,8			
Weight, g	55	55			
Mean time before failure, hours	10,000	10,000			
Keep time, years	12	12			

Spatial frequency-contrast characteristic:			
Frequency, lines/mm Contrast transfer coefficient			
2,5	0,83		
7,5	0,56		
15,0 0,26			

Resistance to external affecting factors:				
Sinusoidal vibration (vibration strength):				
- Frequency range, Hz	1-500			
- Acceleration amplitude, m/s <sup>2</sup> (g)	50 (5)			
Mechanical shocks:				
- Multiple peak shock acceleration, m/s <sup>2</sup> (g)	3000 (300)			
- Single peak shock acceleration, m/s <sup>2</sup> (g)	-			
Ambient temperature range, °C	-40 : +55			

<sup>\*</sup> The European methodology for resolution measurements is more conservative than USA.

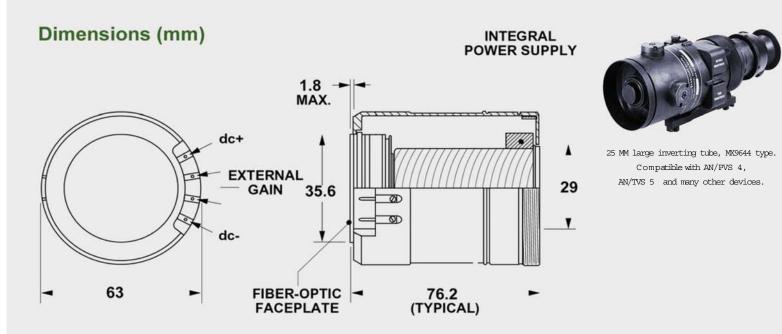
In brackets shown the measurements using USA methodology

Field of view clearness:						
Zone	Circular zone		Admitted total			
Number	Dimensions, mm	Neglected Admitted			Area of defects, mm <sup>2</sup>	
			Diameter, mm	Quantity		
1	0 - 9,0	0,01	0,15	2	0,15	
2	9,0 - 14,4	0,12	0,25	3	0,3	
3	14,4 - 18.0	0,15	0,35	3	05	



#### IMAGE INTENSIFIER TUBE NC107663IF

The NC107663IF 25mm Gen 2 enhanced Image Intensifier Tube provides optimal Night Vision performance. The NC107663IF tube boosts systems with older 25mm tubes to the new performance levels. This includes AN/PVS-4 weapon sight, M-32/M36 passive night vision elbow, AN/TVS-5 weapon sight, and other systems. Easy to change - this tube can be installed by regular maintenance personnel using the standard procedures of tubes replacement. Drop in custom fit, it replaces the original MX 9644 type tube, and is fully compatible with the optics in the equipment. No modifications or replacement of lenses are necessary. This substitution will substantially increase the operational life of your unit, as well as the performance level to that of the contemporary systems now being procured for the infantry use. The tube comprises a special fiber optic faceplate, microchannel plate (MCP) current amplifier, and phosphor screen. This tube functions under extremely low light conditions. The improved electronics includes an advanced automatic brightness control, which covers over five orders of magnitude of input illumination providing constant output image brightness. It also allows manual adjustment to a desired brightness level. The sophisticated power supply has a built-in photocathode protection against high light level exposure.



Main parameters:				
Photocathode operating diameter, mm	24.5 min			
Resolution, min, lp/mm	30-36			
Photocathode sensitivity, µA/Im	300			
Signal-to-noise ratio	3.5			
EBI, Im/cm <sup>2</sup>	2.5 x 10-11 Max.			
Luminous Gain,fL/fc @2 x10-6 fc	50 000-90 000			
Tube life, hours	10,000			
Input Current, mA	35			

Benefits				
* Improves Range Performance				
* Higher Photo Response, Resolution and S/N Ratio				
* Long Operational Life				
* Instantaneous Flash Response recovery				
* Auto Brightness Control				
* Bright Source Protection				



#### NVS 14 NIGHT VISION MONOCULAR / GOGGLES

Battle tested NVS 14 goggles can address any Military or Law Enforcement ability to observe the terrain under the darkest conditions. The goggles of this model are in service with many militaries throughout the world. Extreme endurance combined with unprecedented image quality support its impeccable reputation. Two monoculars can be easily attached together. This quick installation transforms the system into fully operational dual

channel goggles / binocular with true stereoscopic vision. Two possible types of standard batteries add flexibility to the device usage in field environment. Large variety of available accessories allows the device use with helmet, as a night vision video / camera recorder, as a riflescope or as a 4x magnification night scope. The device is produced with either Gen. 2+ or Gen.3 Image Intensifier Tubes. It utilizes standard ANVIS size tubes, thus allowing to source the tubes from several competing manufacturers. The newest NVS 14-3 is the first mass production 3rd generation goggles without USA components. Therefore, both Gen2+ and 3 do not require USA export permits.







NVS 14 BINOCULAR

specifications				
Model	NVS 14	NVS 14/4x		
Image Intensifier Tube (IIT)	18 mm Gen. 2	+ or Gen. 3		
IIT model	NC063631IC or	N3063631IC		
IIT resolution, lp/mm	45-6	4		
Magnification, x	1	4		
Field of view, °	40	10		
Objective F number	F1.17	F 1.5		
Objective focal length, mm	27.5	110		
Focus range, m	0.25 - ω 10 - ω			
Exit pupil, mm	25			
Eye relief, mm	30			
Dioptric correction	±5			
Battery type	1 Standard AA battery or 1 Star	ndard CR123 Lithium Battery		
Battery life, hours	40 hours with one AA battery; 90 he	ours with CR123 Lithium Battery		
Low battery indicator	<b>√</b>	$\checkmark$		
I/R ON indicator	$\downarrow$			
Waterproof 2 m, 2 hours	√	$\checkmark$		
Dimensions, mm	115x42x62	170x70x70		
Weight, kg	0.300	0.650		



camEra adaptable



weaver mount



### NVS 6 aviator night vision GOGGLES

The NVS 6 night vision goggles provide a safe piloting of helicopters and low altitude planes at night or under low light conditions. The unit can also be used for boating, driving, or other activities at night. It is useful for surveillance, reconnaissance, target acquisition and aiming. The dual eye design incorporates 2 advanced image intensifiers. The mounting system allows quick attachment of the goggles to the head helmet and possibility to flip the

goggles up for unobstructed vision. The unit can use standard AA batteries or an on-board (27 V) power. The device has passed all applicable tests and has been accepted for use by several armies around the world.

#### FEATURES:

- \* Advanced Gen 2+ or 3 tubes
- \* Stereo Vision
- \* Automatic shut-off in the up-rise position
- \* Ergonomic and compact design
- \* Allows full peripheral vision
- \* Multiple adjustments provide optimum viewing position
- \* Quick disconnect
- \* Adaptable to most aviation helmets
- \* Automatic brightness control
- \* Lightweight

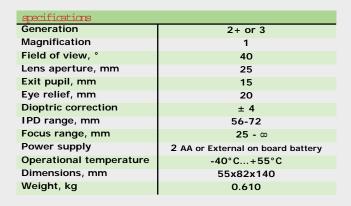
#### ACCESSORIES included:

- \* Lens covers
- \* Carrying case
- \* Manual
- \* Warranty card

#### optional ACCESSORIES:

- \* Counter weight
- \* Low voltage adapter
- \* Helmet mount
- \* Light interference filters
- \* Class A/B (minus blue) & leaky green filters
- \* Adapters for numerous international helmet systems
- \* Adapter for HUD or Eye Cam video recording









#### NVS 7 SERIES OF NIGHT VISION GOGGLES

Battle tested NVS 7 goggles can address any Military or Law Enforcement ability to observe the terrain under the darkest conditions. The goggles of this model are in service with over 40 militaries throughout the world. The large variety of available models allows the user to choose a variant that would satisfy his particular needs. Waterproof, lightweight, and compact - this advanced system is also the most affordable offer on the world market. NVS 7-2 standard is the most affordable professional goggles. NVS 7-2HD provides an unprecedented quality equivalent to 3rd generation models at much lower price. NVS 7-3 is the first mass production 3rd generation goggles without USA components. Thus, no USA export restricting rules are in effect with this model. NVS 7-2WA (Wide Angle) breaks the common conception of night vision goggles design. No more 'tunnel vision'! By using the advanced 25 mm tube we get 60 degrees Field of View that provides 2.5 times larger spatial angle

(58% horizontal x 58% vertical) than a conventional 40 degrees design

nvs 7-2











Laser aimer lam 10M

x4 lens with ir 75 iluminator

Model	NVS 7-2	NVS 7-2HD	NVS 7-2WA	NVS 7-3HD
Image Intensifier Tube (IIT)	18 mm Gen. 2+		25 mm Gen. 2+	18 mm Gen. 3
IIT model	NC104322	NC064322	NC064331_25	N3064322
IIT resolution, lp/mm	30-36	45-64	45-64	45-64
Field of view, °	4	0	60	40
Eye relief, mm	2	5	15	25
Objective focal length, mm	27	7.5	24.76	27.5
Objective F / T numbers	F 1.2 /	T 1.25	F1.35 / T1.4	F1.2 / T1.25
Magnification, x	i			
Interpipillary distance, mm	57-73			
Focus range, m	0.25- ∞			
Dioptric correction	±5			
Battery type	2 standard AA batteries			
Battery life, hours		Over 80 hours without I/	R; over 30 hours with I/R	
Low battery indicator	-	$\checkmark$	√	$\sqrt{}$
I/R ON indicator	-	$\checkmark$	$\checkmark$	$\checkmark$
Momentary I/R button	-	-	$\checkmark$	-
Automatic shut-off in the up-rise	-	$\checkmark$	√	$\checkmark$
position (optional)				
Waterproof 2 m, 2 hours	-	$\checkmark$	$\checkmark$	$\checkmark$
Dimensions, mm	150x120x55			
Weight, kg	0.480			



#### NVS 7 SERIES OF NIGHT VISION BINOCULARS

Battle tested NVS 7 binoculars are based on the popular NVS 7 goggles models. The 1x objective lens of the goggles is easily interchangeable. The personnel can use either goggles or binocular modification according to changing requirements. All NVS 7 goggles models can be transformed into binoculars in less than a minute. The binoculars are supplied with either 4x or 8x magnification lenses. NVS 7 binoculars are powerful night vision devices suitable for battle, marine or rescue operations under the

darkest conditions. NVS 7 /4x is the smallest size and weight 4x binocular in its class without compromising the optical quality. The 8x catadioptric lens with large

aperture makes NVS 7 /8x binocular an absolutely unique long-range observation device. Unrivalled quality high magnification image is obtained within a reasonable size package.





Model

nvs 7/4x



NVS 7-2/4x





NVS 7-3HD/4x

NVS 7-2WA/4x

nvs 7/8x

			1110 / 21110 12	1110 / 0112/ 12
	NVS 7-2/8x	NVS 7-2HD/8x	NVS 7-2WA/8x	NVS 7-3HD/8x
Image Intensifier Tube	18 mm Gen. 2+		25 mm Gen. 2+	18 mm Gen. 3
IIT model	NC104322	NC064322	NC064331_25	N3064322
IIT resolution, lp/mm	30-36	45-64	45-64	45-64
Eye relief, mm	2	25	15	25
Interpipillary distance, mm		57-	-73	
Focus range, m		10-in	finity	
Dioptric correction		±	5	
Battery type		2 standard	AA batteries	
Battery life, hours		Over 80 hours without I/R; over 30 hours with I/R		
Model	NVS 7-2/4x	NVS 7-2/8x	NVS7-2WA/4x	NVS7-2WA/8x
	NVS7-2HD/4x	NVS7-2HD/8x		
	NVS7-3/4x	NVS7-3/8x		
Magnification, x	4	8	4	8
Field of view,°	10	5	15	7.5
Objective focal length, mm	100	216.4	100	216.4
Objective F number	1.5	2	1.5	2
Tripod thread, standard 1/4"	-	√	-	$\checkmark$
Dimensions, mm	165x120x70	240x130x130	165x120x70	240x130x130
Weight, kg	0.690	1.470	0.690	1.470



### NVS 7-2 Flat Night Vision Goggles

These NVS 7-2 Flat goggles boast a convenient, compact size. As a result of a new patent applied prism design, these goggles are pocket sized. Adjustments can be made to fit any head size. Compact 'folded optics'

design allows very close centre of gravity thus reducing neck strain. Flip up mount, 'I/R on' and 'Low Battery' warning indicators contribute

to the advantages of this device.









#### ACCESSORIES included:

- \* Lens covers
- \* Carrying case
- \* Head Gear
- \* Helmet Mount (optional)
- \* Manual
- \* Warranty card

specifications	
Image Intesifier Tube (IIT)	Gen 2+ or 3
IIT type	ANVIS
Magnification	1X
Resolution, cy/mrad	1.34
Objective lens	F 1.2
Focus range,m	0.2 - ∞
Field of view, °	40
Interpupillary distance	58-72 mm (set)
Eye pupil diameter	9mm
Eye relief	25 mm
Dioptric adjustment	± 4
Operating temperature	-50°C to +55°C
Battery	3V Lithium CR123
Dimensions, mm	155 x 80 x 65
Weight (goggles/headgear), gr	460/260





### NVS 8 Long Range Night Vision Observation Device



#### Typical Applications:

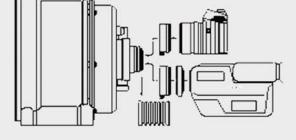
- \* Night Vision
- \* Security
- \* Night Vision Photography
- \* Law Enforcement
- \* Marine Navigation

#### FEATURES:

- \* Long Observation Range (over 1000 m at low light levels)
- \* Possibility to use the viewer under extremely low light levels  $(1x10^{-3} lux starlight or 1x10^{-4} lux on a cloudy night)$
- \* High image quality across the screen
- \* Unique fast optics with high light transmission
- \* Bright light cut off
- \* Automatic protection from lateral or frontal light sources
- \* Automatic brightness control with manual override (optional)
- \* Low power consumption
- \* Optional bi-ocular eye-piece allows observation with both eyes (this feature reduces magnification by 1.42)







Camera / Video adaptable

specifications	A	В	С	
Image Intensifier Tube				
Туре	Gen. 2, 25 mm	Gen. 2, 25 mm	Gen. 2+, 18 mm	
Photocathode sensitivity, µA/Lm	240	350	600	
Light Amplification	50000	30000	35000	
Resolution, lp/mm, minimum	32	45	45	
Optical				
Magnification, x	6.0	9.0	8.2	
Field of view, deg	7.0	5.2	5.2	
Objective lens	204mm, F-1.0, T-1.4			
Eye relief distance, mm	45			
Dioptric adjustment	±5			
Eletrical				
Voltage, V	3			
Power supply	2xAA batteries			
Batteries life, hours	50			
Other				
Working temperature, °C	-40 +55			
Relative humidity, %	Up to 98			
Dimensions, mm	370x250x240	370x250x240	400x250x240	
Net weight, kg	8.5	8.5	8.5	
Gross shipping weight including optional pedistal, kg	40	40	40	
	•		•	



#### PHANTOM 150 NIGHT VISION MONOCULAR

The unit is designed to address the requirements of Military, Law Enforcement or any other professional user to see under the darkest conditions. Waterproof, lightweight, and compact - this advanced system is the most affordable Gen. 2+ system on the market. Unlike some other compeating devices, Phantom 150 is produced

only with brand new (never used) Image Intensifier Tubes.

#### FEATURES:

- \* Rugged body
- \* Waterproof
- \* Camera/Video adaptable
- \* Built in Infrared Illuminator
- \* Interchangeable lens (M42x1)
- \* Compact and lightweight
- \* Low battery indicator (optional)
- \* Automatic delayed shut-off (optional)

#### ACCESSORIES included:

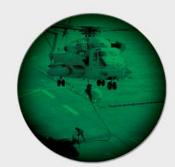
- \* Optional lenses (50/F1.2, 85/F1.5, 300/F4.5, 500/F5.6, 1000/F10)
- \* Camera/Video adapter 52x1 / 37x1 mm (Optional)
- \* Lens cover
- \* Case
- \* Strap
- \* Warranty card
- \* User manual

specifications	
Image Intensifier Tube (IIT)	Gen. 2+
Magnification, x	2.3
Field of view,°	16
Focus range, m	1- ∞
Objective focal length, mm	50
Objective F number	1.2
Objective lens adapter thread	M42x1 Pentax type
Eye relief, mm	25
System resolution, mrad	1
Dioptric correction	± 4
Tube resolution, lp/mm	36-40
Power supply	3V Lithium CR2
Battery life, hours	
Without I/R	25
With I/R	10
Dimensions, mm	185x85x65
Weight, kg	0.535





phantom 150 with rubin 1000





camara/video adaptable



#### DN 42 MULTY

The DN-42 MULTY is a professional 3 in 1 night vision device: binocular, monocular and camera/video adaptable apparatus. It is designed to provide long-range observation under the darkest conditions. The device is equipped with high quality Gen.2 optoelectronic image intensifier tube and a powerful I/R illuminator, which allows up to 400-600m viewing range. The unit utilizes

a 25mm tube, which delivers double the surface and system resolution than the regular 18mm tubes.



#### FEATURES:

- \* Panoramic viewer
- \* Camera/video adaptable
- \* Automatic brightness protection
- \* Manual brightness override
- \* Built-in I/R illuminator
- \* Low power consumption
- \* Interchangeable lens
- \* Water-resistant







specifications:	monocular	binocular
Image Intensifier tube (IIT)	Gen. 2, 25mm MCP	Gen. 2, 25mm MCP
IIT resolution, lp/mm	30-36	30-36
IIT photocathode sensitivity µA/Im	250-440 μA/lm	250-440 μA/lm
Magnification:	2.7x	2x
Field of view,°	12	17
Dioptric correction	-4+3	± 2
Light amplification	40,000-50,000	40,000-50,000
Focus range , m	0.6 - ∞	0.6 - ∞
Lens focal length, mm	85/F2	85/F2
Lens mount	42x1 Pentax type	42x1 Pentax type
Power supply	3V (2AA)	3V (2AA)
Battery life, hours at 20°C	30	30
Operational temperature°C	-40 +55	-40 +55
Dimensions, mm:	275x75x70	270x98x76
Weight, kg	1.4	1.65





#### DN 310 NIGHT VISION RIFLE SCOPE

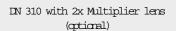
The DN 310 is one of the most lightweight and compact night vision sights on the market, measuring only 225mm in length (shorter than this page). The device is equipped with a brand new Second-Generation high-quality electro-optical image intensifier (Gen. II, 25mm MCP). The 25mm tube provides wider field of view and better resolution in comparison with the 18-mm tubes used by most other manufacturers.

#### FEATURES:

- \* Water-resistant
- \* Long range of vision
- \* Automatic brightness protection
- \* Manual Brightness override
- \* Camera/video adaptable
- \* Precision internal windage/elevation adjustments
- \* Long eye relief
- \* Low power consumption

- \* Weaver weapon mount
- \* Variable power, focusable I/R illuminator
- \* Soft padded carrying case
- \* Rubber eye guard
- \* Lens cap
- \* Camera adapter ring (52x1mm)
- \* Video adapter ring (37x1mm)
- \* English manual
- \* Warranty card
- \* 2x Multiplier lens (optional)
- \* East block side mount (optional)





specifications
Magnification, x
Field of view, °
Lens focal length, mm
Lens F number
Focus range, m
Eyepiece focal length, mm
Eyepiece relief distance, mm
Dioptric correction
Image Intensifier Tube
Image intensifier magnification
Tube photocathode sensitivity, µA/lm
Tube resolution lp/mm
Light gain
Power supply
Battery life, minimum
Dimensions, mm

DN 310	DN 310 4x		
2.8(5.2*)	4.4		
17(9*)	10		
64(128*)	100		
F/1.2	F/1.5		
10	- œ		
35			
45			
+3/ - 4			
Gen. 2, 25mm input/18mm output			
1.55x, recoil proof			
230-440			
41-45			
50,000x			
3V (2AA)			
60 hours			
225x82x74 (252x84x74*)			
0.970	1.100		



DN 310 on rifle

<sup>\*</sup> with optional 2x multiplier lens



#### DN 482/483 NIGHT VISION RIFLE SCOPE

The DN 482/483 is a modern multi-purpose Night Vision weapon scope, built to fit the most demanding military specifications. The unit is in service with several militaries around the world. This model is easy to service and maintain. It utilizes standard Image Intensifier Tubes, available from leading USA or European manufacturers. The scope body is made of lightweight composite materials in order to optimize the weight.





#### FEATURES:

- \* Long range of vision
- \* All types of weapon mounts are available (including Russian side mount)
- \* Shock proof, built for use with heavy recoil weapons
- \* Automatic brightness control
- \* Illuminated red color Mil-Dot reticle with adjustable brightness control
- \* Long eye relief distance
- \* Precision windage /elevation adjustment with audible clicks
- \* Shock resistant lightweight armored plastic body
- \* Powerful infrared illuminator (optional)
- \* Camera/video adapter (optional)

specifications			
Model	DN 482/483 4X DN 482/483 6x		
Image Intensifier Tube (IIT)	ANVIS Type Gen2+ (DI	N482) / Gen3 (DN483)	
Magnification	3.7	6.1	
Field of view, degrees	10 8		
Objective lens	100mm F/1.5	165mm F/2.0	
Eye relief distance	45		
Dioptric correction	-4+3		
Power supply, battery type	2 x AA		
Battery life, hours	Over 60		
Operating temperature, °C	-40 to +55		
Relative humidity, %	98		
Dimensions, mm	280x85x75	370x91x91	
Weight, kg	0.83	1.1	





#### NVS 4 SERIES NIGHT VISION WEAPON SCOPES

The NVS 4 series are the standard Night Vision weapon scopes used by Russian MoD and a number of other armies. Can be mounted on most kinds of East European infantry weapons, which have the side mount bar. Small overall dimensions and weight. The instrument needs minimal

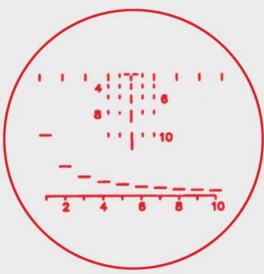
training, works in -50 C to +57 C temperatures and under any

adverse climatic conditions.

#### FEATURES:

- \* Suitable for a variety of infantry AK 47 variants and machine guns.
- \* Supplied with East Block side mount or a custom mount
- \* Precise internal Windage/Elevation adjustments
- \* Lit ballistic reticle with adjustable brightness intensity
- \* Automatic Brightness protection

- \* Weapon mount
- \* Carrying case
- \* Rubber eye guard
- \* Lens caps
- \* English manual
- \* Warranty card



Can be supplied with numeral ballistic reticules

specifications	NVS4	NVS4/5X		
Image Intensifier tube	Gen. 2+ or 3 18 mm			
Typical range at starlight, mm	350 500			
Magnification, x	4	5		
Field of view	6.3			
under eye relief 40 mm, deg	6.3	6		
Exit pupil diameter, mm	6			
Mount	East European			
Battery	AA, 1pc			
Supply voltage, V	1,5			
Continuous operation time	10 -30, depends on battery type			
under standard conditions, h	· •			
Overall dimensions	207X176X79 226X100X1			
Weight, kg	0.9 0.9			
List of recommended weapons	AK47, AK74, AK74M, AK101-108, AN94, AS, BSS, RPK, RPG.	AK47, AK74, AK74M, AK101- 108, AN94, AS, BSS. PKM, RPK, SVD, RPG		









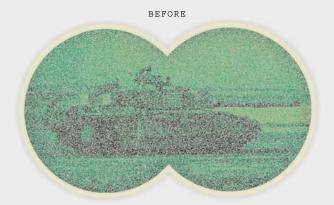


'FOGMASTER' Night Vision binocular with active synchronized Laser Illumination system

The operation of the FOGMASTER is based on the principle of laser illumination and selection of distance while any objects are invisible. A semiconductor laser radiates short pulses. Upon reaching an observed object, every such pulse is reflected and received by a gated Image Intensifier tube, opened only during the period when the reflected pulse is entering the device. Such design excludes the effects of backward scattering from particles of semitransparent atmosphere and ensures fast target recognition. The received optical signal is converted to electronic signal by the Image Intensifier and transmitted to the eyepiece. Unlike radar systems which give a point image, the FOGMASTER provides with identification of objects under observation achieved through visualization of the surroundings. The FOGMASTER digital indicators display a distance between the observer and an observed object. Therefore, the device can be also used as a rangefinder.

#### FEATURES:

- \* FOGMASTER can operate in two modes: passive and active mode
- \* The passive mode is used under more or less transparent atmosphere conditions with nature night lighting (starlight)
- \* The active mode is used at the bad visibility conditions, including, rain, snow, thin foliage, fog and for long distance







specifications	
Identification Range (for human figure), m	up to 400-1,000
Distance Measurement Accuracy, m	±20
Type of Image Intensifier Tube	Gen. 2 , Gated
Photocathode Sensitivity, µA/Lm	240-650
Gain	30-50,000
Sub lighting Power, mW	40
Radiation Wave Length, mkm	0.85
Radiation Pulse Duration, ns	100
Magnification, x	2.5
Field of view, deg	15 ° Passive Mode
	4.8° x 2.4° rectangular - Active/Active-Pulse Mode
Power Supply	9V (3xCR123) - internal or
	12V, 1,2A - external
Overall dimensions, mm	290x180x75



#### BURAN - PNK-4C (PNK-4CR)

Type: Commander's sight. The PNK-4C is a combined gyrostabilised (elevation) system for day and night aiming and surveillance. It is intended as a commander's sight for use in rotating turrets of T-72, T-80, T-82 tanks. The updated system PNK-4CR features Gen. 2+ image intensifier tube in the night channel and a universal passive working mode.







specifications	PNK 4c		PNK 4cr	
Magnification in optical channels, X	Day Channel 1 and 7,6	Night Channel 5,1	Day Channel 1 and 7,6	Night Channel 6,8
Field of View	7,2(V) 27,7(H)	7.7	7,2(V) 27,7(H)	7,7
of optical channels, °	7		7	
Resolution, angular seconds	8	72	8	72
Image Tube Generation		1	2+	
Immunity to flashes of light	N	lo	y.	es
Identification range (side projection of tank camouflaged in dark green) at an atmospheric transparency of 0,85 and illumination:				
> 0,003 lux	•	assive mode	1100 m in universal	
< 0,003 lux		ctive mode	passive mode	
Dioptre range of the eyepiece, dioptres	_	4	± 4	
Ambit with gyrostabiliser (elevation), °	- 10 to +20		- 10 to +20	
Operating voltage, V		27	27	
Components	1.TKN - C - sight 2. Power unit 3. Elevation locator unit 4. Protective glass for the head lens 5. Spare parts kit		1.TKN - C - sight 2. Power unit 3. Elevation locator unit 4. Protective glass for the head lens 5. Spare parts kit	
Tracking rate with gyrostabiliser	0,05-3 °/sec		0,05-3 °/sec	
Accuracy of the gyrostabilisation, angular minutes  * at normal conditions  * at -50 ° after 2 Min. of work  * after 30 Mm. of work	1 6,5 1		1 6,5 1	
Weight, kg  * sight  * power unit  * elevation locator unit	43 4,2 10,8 27 V DC		4 10	;9 ,2 ),8
Operating voltages	and 3-phas	se 36 V, AC of 400 Hz	and 3-phas	V DC se 36 V, AC of 400 Hz



#### AGAT -TO1-KO1 (TO1-KO1R)

Type: Gunner's sight. TO-KO1 is a tank night aiming and surveillance system with passive and active modes. It consists of the TPN4 sight, a commutation unit (BK), an interface unit (UWP) for inputting windage and elevation parameters and a parallelogram and a projector (L4A). It can be used for both the main armament and the machine gun if fitted. There are heating elements in the eyepiece and protective glass in the head lens. The updated system TO1-KO1R features Gen. 2+ image intensifier tube and a universal passive working mode.







specifications	TO1-K01	TO1-K01 r	
Magnification, X	6,8	7,5	
Field of View, °	5,4	5,4	
Resolution, angular seconds	42	42	
Image Tube Generation	1	2+	
Immunity to flashes of light	no	yes	
Identification range (side projection of tank camouflaged in dark green)			
at an atmospheric transparency of 0,85 and illumination:			
> 0,003 lux			
< 0,003 lux	1200 m in passive mode	1700 m in universal passive	
	1500 m in active mode	mode	
Dioptre range of the eyepiece, dioptres	± 4	± 4	
Elevation ambit, °	- 7 to +20	- 7 to +20	
Heating elements in the eyepiece and protective glass in the head lens	yes	yes	
Operating voltage, V			
Power consumption, W	27	27	
Power consumption of the illuminator, W	75	50	
Dimensions, mm	460	0	
Components of system	H (614),W(226),L(312)	H (614),W(226),L(312)	
	1.TPN-4 - sight	1.TPN-4R-sight	
	2.BK - commutation unit	2. Spare parts kit	
	3.UVP - interface unit for		
	inputing windage and eleva-		
	tion.		
	4.Parallelogram		
	5.Projector L4P		
	6.Spare parts kit		
Weight of sight TPN-4, kg	32	28	
Weight of the system, kg	76	30	



### DAY/NIGHT EQUIPMENT

### DAY/NIGHT MONOCULAR MDN 7x50, MDN 12x40-2 DAY/NIGHT BINOCULAR BDN 7x50

With these devices, Newcon Optik has replied to repeated requests from professional users to have a single day/night observation instrument. Now one can have only one optical device that serves you 24 hours / day: from bright sunny daylight through misty twilight to total darkness. Day/night integrated monocular and binocular instruments combine a perfect clear daytime optics with advanced night vision image intensified technology. Large fast lenses, coupled with high quality image intensifier tubes and wide field of view contribute to the best image possible. The built-in infrared illuminator allows observation under extremely dark con-

ditions or even in total darkness. The devices are very easy to use. Just slide a single lever to switch between day and night modes. Ergonomic, lightweight, weather and shock proof, BDN and MDN are the only compact and robust integrated Day/Night

devices currently available on the market.







mdn 7x50

and all of more than a	MDN 7x50		bDN 7x50		MDN 12x40-2	
specifications	Day	Night	Day	Night	Day	Night
Magnification, x	7	2.1	7	2.1	12	3.5
Field of View, °	6.5	8.8	6.5	8.8	4	14
Objective lens, mm		5	o		39.2	
Dioptric Correction		± 4				
Image Intensifier Tubes (IIT)	Ge	Gen 1 Gen 1		Gen 2+ or 3		
Infrared switch type	Momentary and Momentary		Momentary and			
	perm	anent			perm	anent
Operating temperature, °C	-40 to +55					
Power Supply	2 /	2 AAA 2 AA		AA	1 CR123	
Battery life, hours	Over 40 (without I/R),		65 (with	out I/R)		
	over 15 (with I/R)		18 (wi	ith I/R)		
Dimensions, mm	175x1	105x65	175x	204x75	173x9	5x51.5
Weight, kg	C	).7	1	1.3	0	.6





### DAY/NIGHT EQUIPMENT

### DAY/NIGHT VISION RIFLE SCOPE DN510 2.5-7.5x50 (Gen. 2+, 3)



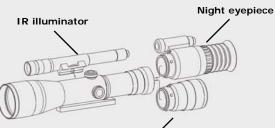
#### APPLICATIONS:

- \* Night surveillance / Hunting
- \* Patrol / Search & Rescue
- \* Police / Law Enforcement / Military

#### KEY FEATURES:

- \* Interchangeable day and night eyepieces maintain rifle's zero
- \* Unique high quality specially designed day/night optics (F/2.0), ensuring:
  - Long range of vision (450-1000m) at low levels of light exposure and more than 100-250m for no-light situations with IR illuminator
  - Effective use under Star Lights (10<sup>-3</sup> Lx) and Night Cloudy Sky (10<sup>-4</sup> Lx)
  - Wide field of view
  - Variable power
  - Wide range focus adjustment
  - Comfort of observation
- \* Precision internal windage / elevation adjustments with audible clicks and fine 1/4 MoA step
- \* Water resistant
- \* Optional powerful IR illuminator (35, 75 or 200 mW)











dn 510 on rifle

	specificat
Magnification (day/night), x	2.5-6.0 / 3.7-7.5
Field of view, degrees	12 to 5.2
Objective lens diameter, mm	50
F-number (for magn. 3.7x)	2.0
Eye relief distance, mm	45
Diopter setting, D	-4 +2
Power supply (battery type)	SR123 Lithium 1 pc
Feed voltage, V	3
Battery life, hours	min 30
Overall length (day/night), mm	320/345
Weight (day/night), gr	970/990

ions				
The image intensifier. tube				
Type (Gen, 18mm MCP)		2+		3
Photosensitivity,µA/lm		550		1800
Gain	30 00	0	35 000	
Resolution, lp/mm	solution, lp/mm min. 45			n. 45
Environmental				
Operating temperature		-40°C up to + 50°C		
Relative humidity up to 98 9			98 %	
PS. Specifications are subje	ect to c	hange withou	ut no	tice.
	D	N 510	СО	MPETITION
Field of view at 3x	12° (better)			6.48°
Lens aperture at 3.7x	2 (	better)		3.5
Lens aperture at 3.7x	2 (	better)		3.5



### DAY/NIGHT EQUIPMENT

#### NVS 10MG DAY/NIGHT WEAPON SCOPE

The NVS 10MG is a unique Day / Night weapon scope. It allows the convenience of 24hr/day usage. The user switches between day and night modes with the flip of a lever. Eliminates the need to carry separate Night Vision Weapon Scope and Day Scope. There is no need for the lengthy task of changing sights between Day and Night operations, and re-zeroing the different sight to the weapon over and over. It is intend-

ed for use on various 5.56mm and 7.62mm assault rifles, machine guns, anti tank guns, grenade launchers etc. The sight contains an adjustable

brightness lit ballistic reticle. The reticle can be changed (at the factory) to match the particular weapon/ammunition combination.

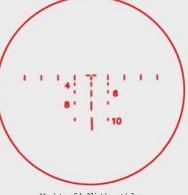
#### FEATURES:

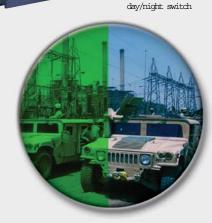
- \* Suitable for a variety of weapons, including M16, AK 47 variants, Carl Gustaff Grenade Launcher, RPG, Machine guns etc.
- \* Can be supplied with weaver (STANAG 1913) NATO mount,

East Block side mount or a custom mount

- \* Precise internal Windage/Elevation adjustments with audible clicks
- \* Lit ballistic reticle with adjustable brightness
- \* Automatic Brightness protection







Variety of ballistic reticles are available

specifications	NEWCON NVS 10MG	LITTON PVS 10 *
Image Intensifier Tube	18 mm, Gen 2+ or 3	18 mm, Gen 2+ or 3
Magnification	4x	8.5
Field of view	9°	2°
Objective Lens Focal length/F	108mm/F1.5	125mm/F1.7
Objective Lens Diameter, mm	72	73.5
Focus range, m	10 - ∞	
Eyepiece focal length, mm	27.4	
Eyepiece relief distance, mm	50	
Exit pupil diameter, mm	9	
Dioptric adj. relative to reticle	-0.5 to -1 D	
Windage/Elevation adjustment	± 34 MoA (Minute of Angle)	
Windage/Elevation step	0.7 MoA	
Human viewing distance, m	>600	
Vehicle viewing distance, m	>1600	
Power supply	3V (2 x AA)	3V (2 x AA)
Battery life, minimum	60 hours	
Operations temperature °C	-54 to +55	
Storage temperature °C	-54 to +70	
Water resistant construction	Yes	
Dimensions, mm	308x190x95	432x102x102
Weight, kg	1.8	2.2

 $<sup>\</sup>boldsymbol{\ast}$  Data for comparison only, the product is not for sale

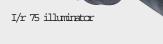
- \* Weapon mount
- \* Carrying case
- \* Rubber eye guard
- \* Lens caps
- \* English manual
- W arranty card

## INFARED ILLUMINATORS/AIMERS

#### I/R 75, 200, 400 INFRARED ILLUMINATORS

Give your Night Vision a huge performance boost! I/R Illuminators work in infrared range. The emitted light beam is invisible to the naked eyes and can be seen through a Night Vision device only. As a result, a typical 1st generation Night Vision device with an illuminator outperforms 2nd or 3rd generation products (used without I/R illuminator) at fraction of the cost.

Correspondingly 2nd or 3rd generation devices combined with the illuminator deliver a drastically improved performance. An adjustable angle of illumination allows either to focus the beam for longer distance viewing or to spread it over a wider observation area.







#### FEATURES:

- \* Long distance illumination
- \* Shockproof body
- \* Water resistant
- \* Standard batteries
- \* Adjustable angle of illumination
- \* Can be installed on many Night Vision devices with the help of included mounting system
- \* High quality carrying case is included
- \* Compact size
- \* Lightweight
- \* Variable output power settings



specifications				
Models	I/R 75	I/R 200	I/R 400	
Type of emitter	IR diode (eye safe)	IR laser (not eye safe)	IR laser (not eye safe)	
Output power, mWt	75	200	400	
Wavelength, nm	805	820	820	
Beam angle, °	5-20	4-16	1-15	
Supply current, mA	100	600	900	
Power supply, V	3	3	6	
Type of batteries	2x AA	2x AA	2x CR123	
Battery life, hours	7	5	2	
Attaching screw thread	14" (Tripod type)	1/4" (Tripod type)		
Design	Shock	c resistant, black non-reflec	ctive paint.	
Operating temperature, °C	-40+55			
Weight, g	132	110	200	
Size (diameter x length), mm	120x40x25	Ø 22x200	Ø 40x165	

## INFARED ILLUMINATORS/AIMERS

#### INFRARED LASER AIMER LAM 10M

This unique laser instrument provides an instant aiming point for sniper firing at any distance without eyesight strain. The emitted infrared laser beam is invisible to the naked eye but can be easily seen through night vision goggles. Fire adjustments (windage/elevation) are performed with a simple and reliable mechanism. The unit is totally waterproof and has a durable metal construction for maximum utility. Mode select switch switches LAM 10M in continuous or manually activated mode. It's possible to select high power mode for maximum distance or lower power to maximize battery life. Hand controlled pressure switch is fixed on the weapon at easy reach. LAM 10M can be mounted on weapon barrel using a

special mount (fitting diameter 15 mm).

#### FEATURES:

- \* Full mil specs, waterproof
- \* Compact size, light weight
- \* Adjustable pressure locking lever
- \* Windage/elevation adjustments
- \* Remote control (membrane type switch)
- \* Shuts off automatically in 10-30 minutes to coserve battery life
- \* Variety of mounts available, including:
  - \* Barrel mount (for M16, AK 47 etc)
  - \* Weaver (Picatinny) rail
  - \* Other







#### Accessories:

- \* Case
- \* Remote control (wired)
- \* Velcro tape
- \* Weapon mount (exact type to be specified)
- \* Battery (optional)
- \* English manual





specifications	LAM 10M	LAM 10M 3a	
Illumination wavelength, nm	850 875		
Eye Safety Class	1 (eye safe)	3A (not eye safe)	
Output power, mWt	0.1	0.9	
Dot visibility distance, m	> 200	> 1,000	
Beam divergence, mrad	0	.5	
Spot size at a distance 50m, mm	2	!5	
Windage/elevation adjustment range, degrees	±	20	
Step of adjustment, mm/100m	50 (0.5)		
Adjustment accuracy after 1000 shots, mrad	0.1		
Adjustment accuracy after 100 'install/remove' operations,mrad	d 0.25		
Battery	Lithium Cl	R 123 (3V)	
Battery life, minimum, hours	30	10	
Auto shut off	Υ	es	
Operating temperature range, °C	-40+60		
Waterproof	8 m		
Dimensions, mm:	113x43x32		
Weight, kg	0.1	148	

# INFARED ILLUMINATORS/AIMERS

#### DUAL CHANNEL LASER AIMER LAM 18DN (DAY /NIGHT)

This unique laser instrument provides an instant aiming point for sniper firing at any distance without eyesight strain in both day (visible beam) and nighttime (infrared beam). The channels can be instantly toggled. I/R channel beam is invisible to the naked eye but can be easily seen in conjunction with night vision goggles. Fire adjustments (windage/elevation) are performed with a simple and reliable mechanism. Both weaver and side mounts are available. The device can be also mounted on a barrel. The unit is waterproof and has a durable metal construction for maximum utility.

#### FEATURES:

- \* Full mil specs, waterproof
- \* Compact size, light weight
- \* Windage/elevation adjustments
- \* Remote control (membrane type switch)
- \* Variety of mounts available, including:
- \* Barrel mount (for M16, AK 47 etc)
- \* Weaver (Picatinny) rail
- \* Other

#### Accessories:

- \* Case
- \* Weapon mount (exact type to be specified)
- \* Remote control (wired)
- \* Velcro tape
- \* Battery (optional)
- \* Allen keys
- \* English manual





remote activation switch





specifications	Day channel (visible)	Night channel (invisible)	
Illumination wavelength, nm	650 (Red)	850 (Infrared)	
Output power, mWt	2	0.9	
Dot visibility distance, m	>1000	>1000	
Beam divergence, mrad	0.5	0.7	
Spot size at a distance 50m, mm	25		
Windage/elevation adjustment range, degrees	± 4.5		
Step of adjustment, mm/100m 50		50	
Adjustment accuracy after 1000 shots, mrad 0.5		0.5	
Adjustment accuracy after 100 'install/remove' operations, mrad	0.25		
Battery	3V Lithium CR 123		
Battery life, minimum, hours	10		
Operating temperature range, °C	-40	+60	

### THERMAL IMAGERS

#### THERMAL IMAGERS TVS 1M1 / TVS 8

Newcon Optik thermal imagers are one of the most affordable devices on the market, costing 50-80% less than other systems with comparable performance. Built to full military specs.

Highly sensitive compact thermal vision device allows transformation of invisible infrared images into visible image, observed through a monocular. The unit will work in the dark and through different atmospheric conditions (haze, fog). Some of the tasks suitable for the instrument:

- \* Search and Rescue
- \* Hunting and animals observation
- \* Industrial research and process control
- \* Inspection of thermal insulations in residential and industrial buildings
- \* Inspection of high voltage transmission lines











specifications	TVS 1M1	TVS 8
Spectral diapason, mkm	3-5	3-5
Magnification, x	2	2
Image format, pixels	64x128	128x256
Thermal resolution, °K	0.2	0.08
Field of view (vertical x horizontal), degrees	4x9	4x7
Detection distance (standing human), m	700	1200
Recognition distance (standing human), m	500	700
Power consumption, Watt	4	6
Working temperature range, °C	-40 - +55	-40 - +55
Battery type	3xLSH14	Lithium rechargeable
Battery life for continuous work without recharge, hr	10	2
Image display frequency, H2.	30	25
Focus range, m	3 - infinity	3 - infinity
Dimensions, mm	154x157x112	195x124x106
Weight with battery, kg	0.9	1.2



#### CLOSE RANGE LASER RANGEFINDER MONOCULARS

LRM 1200 / LRM 1500 / LRM 1500SPD

Close range Laser Rangefinder Monocular series comprises three models suitable for wide variety of tasks from amateur hunting to sniper and artillery shooting. All devices in the line are manufactured in unified ergonomic lightweight case with rubberized grip. These advanced Laser Range Finder systems provide instant distance and speed (SPD modification) measurements consistently and accurately. The outstanding optics allows a sharp, clear image under all conditions. LRM models utilize a revolutionary digital design, which outperforms any other product in its class and price range.

- 1 Measurement result
- 2 Units of measurement (Yards, Meters, KMH, MPH, Mils, degrees)
- 3 Low battery indicator
- 4 Over 100m indicator (optional)
- 5 Laser active indicator
- 6 Target quality indicator (optional)
- 7 Reticle (cross or rectangular selectable)



MANUFACTURER		Newcon-Optik		Bushnell*	Bushnell* Nikon*
MODEL	LRM 1200	LRM 1500	LRM 1500 SPD	Bushnell 1000	Bushnell 800 Nikon 800
1. Optics					
Magnification, x		7		6	8
Objective lens, mm		25		21	27
Field of view, °		8°		5.7°	4.6°
Laser Type			Class 1 eye s	afe	
2. Range Finder					
Measuring range, m	20-1,200	20-1,500	20-1,500	25-1,300	20-800
- Max. distance, m (white target)	1140	1460	1460	968	800
- Max. distance, m (black target)	436	608	608	406	302
Accuracy, m	± 1	± 1	± 1	± 1	± 2
Meters/Yards display	_	$\checkmark$	√	$\checkmark$	√
Target quality indicator	$\sqrt{}$	$\checkmark$	√	√	√
Last 10 readings recall	√	$\checkmark$	√	-	-
Reticle shape selection (+ or □)		√	<b> </b> √	-	-
Scan mode	<b>√</b>	$\checkmark$	√	-	$\checkmark$
Automatic rain mode		√	√.	-	-
Automatic >100m mode	√	$\checkmark$	V	-	-
Reflective mode	√	$\checkmark$	√	-	-
'Last Target' measurement	√	$\checkmark$	√.	-	-
Optional speed detector	-	-	√	-	-
3. Miscellaneous					
Battery		9 V		9 V	AAA(4)
Low battery indicator		<b>√</b>			$\checkmark$
Tripod socket		V			-
Weight without battery, g		420		385	326
Dimensions, mm		120x122x60			95x121x51
Country of origin		Canada			China





The above table is confidential and cannot be used without Newcon's written permission.



#### CLOSE RANGE LASER RANGEFINDER BINOCULARS

LRB 7x40 / LRB 7x50

Newcon Optik close range Laser Rangefinder Binocular series is manufactured in two different optics variants with identical electronics. Depending on objective lens size one can choose either compact 7x40 model or higher performance 7x50 model. These advanced Laser Rangefinder systems provide instant distance and speed (SPD modification) measurements consistently and accurately. Superior glass multi-coated optics allows a sharp, clear image under all conditions. herefore, there's no need to carry a separate binocular and rangefinder. LRB models utilize a revolutionary digital design, which outperforms any other product in its class and price range.





MANUFACTURER	Newcor	Newcon-Optik		
MODEL	LRb 7x40	LRb 7x50	GEOVID BD	
1. Optics				
Magnification, x	7	7	7	
Objective lens, mm	40	50	42	
Exit pupil diameter, mm	5.7	7	6	
Eye relief, mm	20	25	18.5	
Field of view, °	6	5	5	
Interpupillary distance, mm	60-70	58-72	58.5-71.5	
Diopter adjustment range	± 4	± 4	± 4	
2. Range Finder Laser type	Eye safe 905nm	Eye safe 905nm	Eye safe 860 nm	
Measuring range, m	15-1,500	15-1,500	25-1,000	
Accuracy, m	± 1	± 1	± 2	
Resolution, m	1	1	1	
Measurement time, sec	<1	<1	<1	
Meters/Yards display	$\checkmark$	$\checkmark$	$\checkmark$	
Last 10 readings recall	$\bigvee$	<b>√</b>	-	
Reticle shape selection (+ or □)	√	$\checkmark$	-	
Target quality indicator	$\checkmark$	$\checkmark$	-	
Scan mode	$\checkmark$	$\checkmark$	-	
Optional speed detector (SPD Models)	$\checkmark$	$\checkmark$	-	
3. Miscellaneous				
Battery	Standard 9v	Standard 9v	6 V (type 2CR5)	
Battery capacity, shots	>3000	>3000	>2000	
Low battery indicator	$\sqrt{}$	$\checkmark$	$\checkmark$	
Rubberized covering	$\sqrt{}$	$\checkmark$	$\checkmark$	
Water resistant construction	$\checkmark$	$\checkmark$	$\checkmark$	
Tripod thread	1/4"	1/4"	1⁄4"	
Dimensions, mm	158x45x69	210x150x80	206x178x81	
Weight, kg	0.970	1.300	1.395	



- 1 Measurement result
- 2 Units of measurement (Yards, Meters, KMH, MPH, Mils, degrees)
- 3 Low battery indicator
- 4 Over 100m indicator (optional)
- 5 Laser active indicator
- 6 Target quality indicator (optional)
- 7 Reticle (cross or rectangular selectable)



Actual photo taken through LRB 7x50 eye piece

<sup>\*</sup> Data for comparison only. Product is not for sale.

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#### MEDIUM RANGE LASER RANGEFINDER MONOCULARS

LRM 2500 / LRM 2500CI / LRM 4000CI

Medium range Laser Rangefinder Monocular series consists of three models in unified ergonomic lightweight case with rubberized grip. All models are identical in optics and electronics and vary in laser subsystem. LRM 2000 is built with powerful 905 nm laser diode. LRM4000 utilizes the most robust 1,550 nm technology. The latter model is invisible through the image intensified night vision optics. These advanced Laser Rangefinder systems provide instant distance, height, azimuth, elevation, and speed measurements consistently and accurately. Computer output provides immediate data acquisition by any system with standard RS-232 interface.

#### FEATURES:

- 1 Measurement result
- 2 Units of measurement (Yards, Meters, KMH, MPH, Mils, Degrees)
- 3 Low battery indicator
- 4 Over 100m indicator (optional)
- 5 Laser active indicator
- 6 Target quality indicator (optional)
- 7 Reticle (cross or rectangular selectable)



MANUFACTURER		Newcon-Optik		Leica*
MODEL	LRM 2500	LRM 2500CI	LRM 4000CI	PLRF
1. Optics		•	•	1
Magnification, x		7		6
Objective lens, mm		25		21
Field of view, °		8		5.7
2. Range Finder				
Laser Type	Eye safe 905 nm	Eye safe 905 nm	Eye safe 1,550 nm	Eye safe 1,550 nm
Measuring distance range, m	20-2,500	20-2,500	20-4,000	5-2,500
Measuring azimuth range, mils/°	-	6,400 / 360	6,400 / 360	-
Measuring elevation range, °	-	±60	±60	-
Distance accuracy, m	±1	± 1	± 1	± 2
Azimuth accuracy, °	-	±1	±1	-
Elevation accuracy, °	-	±0.4	±0.4	-
Distance resolution, m	1	1	1	-
Measurement time, sec	0.3	0.3	0.3	0.3
Elevation measurement rate, sec	<u>-</u>	0.1	0.1	-
First / Last logic	✓	√	√	-
Gating capability, m	100-2,500	100-2,500	100-4,000	-
Gating step, m	100	100	100	-
Meters/Yards display		V	√	?
GPS interoperability/ Computer output	PLGR+96 / RS232	PLGR+96 / RS232	PLGR+96 / RS232	-
Last 10 readings recall	√	√.	V	-
Reticle shape selection (+ or □)		$\sqrt{}$	$\downarrow$	-
Target quality indicator		V	√	?
Scan mode		√.	√.	-
Speed detector	√	<b>√</b>	<b>√</b>	_
3. Miscellaneous				
Battery		9 V		
Low battery indicator		<b>√</b>		
Tripod socket				
Weight without battery, g		420		
Dimensions, mm		120x122x60		124x100x50

\* Data for comparison only. Product is not for sale.

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#### MEDIUM RANGE LASER RANGEFINDER BINOCULARS

LRB 7x40 3K / LRB 7x50 4K / LRB 6000

Newcon medium range Laser Rangefinder Binocular series was designed using the latest achievements in optronics and electronics. LRB 7x40 3K and LRB 7x50 4K are built with powerful 905 nm laser diode. LRB6000 utilizes the most robust 1,550 nm technology. These advanced Laser Rangefinder systems provide instant distance, height, azimuth, elevation, and speed measurements with astonishing accuracy. Superior glass multicoated optics delivers sharp, clear image. The waterproof and shockproof body allows the user to enjoy the outstanding performance under the most severe conditions. Computer output provides instant data acquisition by any system with standard RS-232 interface. Optional night vision devices can be easily attached to the oculars allowing both day and night battle operations.







LRB 6000 with optional NVS 14 ATTACHED

MANUFACTURER		Newcon-Optik		Ieica*
MODEL	LRb 7x40 3k	lrb 7x50 4k	LRb 6000	Vector IV
Magnification, x	7	7	7	7
Objective lens, mm	40	50	50	42
Exit pupil diameter, mm	5.7	7	7	6
Eye relief, mm	20	25	25	18.5
Field of view,	6	5	5	6
Interpupillary distance, mm	60-70	58-72	58-72	58.5-71.5
Diopter adjustment range	±4	±4	±4	± 6
Laser type	Eye safe 905 nm	Eye safe 905 nm	Eye safe 1550 nm	Eye safe 1550 nm
Measuring distance range, m	20-3,000	20-4,000	20-6,000	5-4,000
Measuring azimuth range, mils/°	6,400 / 360	6,400 / 360	6,400 / 360	6,400 / 360
Measuring elevation range, °	-	±60	±60	±45
Distance accuracy, m	±1	±1	± 1	± 2
Azimuth accuracy, °°	±1	±1	± 1	± 1
Measurement time, sec	0.3	0.3	±0.3	±0.3
First / Last logic	<b>√</b>	√	√	?
Gating capability, m	-	50-6,000	50-6,000	?
Gating step, m	-	100	100	?
Meters/Yards display	√	√	√	√
GPS interoperability / Computer output	-	PLGR+96 / RS232	PLGR+96 / RS232	PLGR+96
Last 10 readings recall	√.	<u>√</u>	√	-
Reticle shape selection (+ or □)	√.	√.	√	-
Target quality indicator	√.	√.	√	-
Scan mode	√	√	√	-
Speed detector	√	√	√	-
Battery	Standard 9v	Standard 9v	Standard 9v	6 V (type 2CR5)
Battery capacity, shots	>3000	>3000	>3000	>2400
Low Battery indicator	V	√	√	<b>√</b>
Tripod thread	1/4"	1/4"	1/4"	1/4"
Dimensions, mm	158x45x69	210x150x80	210x150x80	226x178x82
Weight, kg	0.97	1.300	1.300	1.710

<sup>\*</sup> Data for comparison only. Product is not for sale.

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#### LONG RANGE LASER RANGEFINDERS LRB 20 000

The unit is a military specs bi-ocular intended for ground surveillance, observation of individual targets and measurement of distances up to 20 km. The range finder with the optional angular mount is designed for referencing targets coordinates, and is capable of:

- Measuring the distance to the target
- Measuring horizontal angles and magnetic azimuths
- Measuring vertical angles and angles of elevation
- Determination of target and landmark polar coordinates
- Polar-to-rectangular target coordinate conversion.

In addition to military purposes, the range finder is useful for many civilian applications: for geological and engineering surveying, repair works, maritime navigation, meteorology, tourism and more.

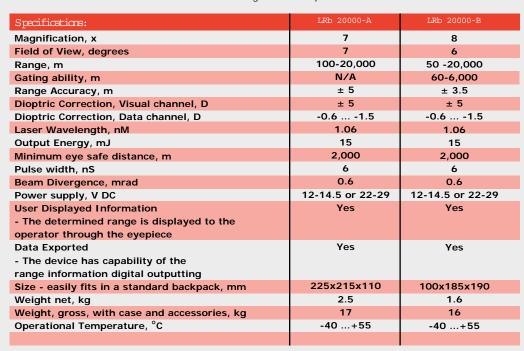


lrb 20 000 on tripod





- \* Up to 20 km distance
- \* First or last target selection
- \* Illumination for dark conditions
- \* Digital data output







#### Accessories:

- \* Tripod (optional)
- \* Angular mount (optional)
- \* Rechargeable battery 10D-0,55c-1
- \* Fuse link VP1-1 1,0 A 250 V
- \* Sealing ring
- \* Framed lens
- \* Membrane
- \* Eye shield
- \* Diaphragm
- \* Wrench
- \* Lens brush
- \* Coordinate converter
- \* Cables
- \* Computer floppy disk or CD



#### LONG RANGE EYE SAFE LASER RANGEFINDER

LRB 25000

This Long-Range Laser Rangefinder is class 1 Eye Safe device utilizing Erbium Glass Laser technology. The unit is easy to use, and withstands the harshest environmental conditions. The instrument has a comprehensive digital display and different range settings. A user can make First or Last target selection by pressing a button

In addition to military purposes, the range finder is useful for Topography & Geodesy, Marine Navigation, Highway Engineering, Building Construction, Airborne Altimeters & Locators, Traffic Control & Meteorology.







1rb 25000 on tripod

Specifications:	
Laser Type	Erbium Glass, eye safe
Wavelength, mkm	1.54
Emission Energy, mJ	5-8
Pulse Duration at 1/2 width, ns	~30
Measuring Range, m	50-25,000
Gating Minimum range, m	60-4,000
Gating step, m	20
Accuracy, m	± 5
Laser Beam Divergence, mrad	1.0 (80% of the energy)
Pulse Repetition Rate, Hz	0.2
Dioptric Adjustment	± 4
Sight Magnification, x	7.5
Field of View, °	5.0
Viewing channel objective lens Aperture, mm	43
Operating temperature, °C	-30 +60
Protective filter against 1.06nm lasers	Optional
Standard 1/4" tripod thread	Optional
Output Interface	RS 232
Power Source	DC 12V or Ni Cad battery (built-in)
Low Battery Indicator	Yes
Dimensions, mm	220x200x90
Weight, kg	1.9





#### RIFLESCOPE WITH LASER RANGEFINDER

LRS 6 / LRS 8 / LRS 10

The LRS series devices are a riflescope with a built-in laser rangefinder. It measures accurately distance to the aimed target with a click of a button. The optical axis of the riflescope coincides exactly with the emitting axis of the laser. Windage and elevation mechanisms allow precise reticle adjustment.





#### FEATURES:

- \* Water-resistant
- \* Instant distance measuring
- \* Long eye relief
- \* Precision internal windage/elevation adjustments
- \* Low power consumption

- \* Weaver weapon mount
- \* Detachable remote activation trigger
- \* Soft padded carrying case
- \* Lens caps
- \* English manual
- \* Warranty card



Specifications:	LRS 6	LRS 8	LRS 10
1. Optics			
Magnification, x	6	8	10
Objective lens diameter, mm	52	52	52
Field of view,°	3 30'	3 06'	2 40'
Exit pupil diameter, mm	7.5	5.75	4.6
Eye relief, mm	86.5	81.5	78
Dioptric correction	±1.5		
Resolution in the middle, arc. second	6		
2. Rangefinder			
Measuring distance range, m	50750		
Accuracy, m	±2		
Power supply	6 V (4xAAA)		
Operation temperature range, °C	-10+40		
3. Riflescope			
Maximum adjustment range, cm/100m	90		
Adjustment per click, mm/100m	3.3		
Dimensions, mm	294x61x71		
Weight, g	980		



### STABILIZED BINOCULARS

#### STABILIZED IMAGE BINOCULAR SIB 16x50M

This unique optical instrument utilizes a revolutionary patented mechanical system (no need for batteries!) to produce a stabilized image. With this device, an observer can use high power binoculars within moving / vibrating surroundings such as aboard an aircraft, land vehicles, vessels or other mobile environment.

#### FEATURES:

- \* Stabilized image
- \* Rigid construction
- \* Value priced up to 80% below competition
- \* Weather proof
- \* Surveillance under any motion condition
- \* No batteries required
- \* Wide angle image







sib 16x50 with night VISION ATTACHMENT



before



After

	Newcon Optik	Newcon Optik	CANON *	FUJINON *	ZEISS *
	SIB 16x50M	SIB 20x50M	15x50 IS	S1640	20x60 S
Magnification	16	20	15	16	20
Objective lens, mm	50	50	50	40	60
Eye relief, mm	11.5	11	15	12	?
Field of View, °	4.3	3.2	4.5	3.4	2.9
Apparent FOV, °	68.8	66	67.5	54.4	58
Resolution in the center, " **	5	2.8	5.3	10	5
Stabilization System	Mechanical	Mechanical	Electronic	Mechanical-Gyro	Mechanical
Delay for Stabilization start	0	0	0	1 minute	0
Batteries	Not required	Not required	2xAA	4xAA	Not required
Cold temperature operations	YES	YES	Prolematic	Problematic	YES
Compensation Angle, deg. **	3.5	4	0.7	5	3.5
Mean time before failure(MTBF), h	10,000	10,000	3,000	200	3,000
Dimensions, mm	230x162x72	217x158x69	185x141x73	200x210x90	275x161x78
Weight,kg	1.380	1.250	1.250	1.900	1.660
'Street Price' in USA	\$ 700	\$ 1,200	\$ 1,400	\$ 3,500	\$ 4,000

Performance scale used in the table:	Highest performance	average performance	lower performance

<sup>\*</sup> Data for comparison only, the product is not for sale.

<sup>\*\*</sup> Compensation Angle and resolution are the most important criteria characterizing the quality of the achieved image stabilization.



### STABILIZED BINOCULARS

#### GYROSTABILIZED BINOCULAR SIB 16x40

SIB  $16 \times 40$ GR Gyro Stabilizing Binocular incorporates gyroscopic image stabilization technology. It enables the user to observe distant objects from moving platforms without degradation of the image resolution, which is typically caused by mechanical vibrations or normal hand tremors. Combining fully coated, computer designed optics with high-speed internal gyro stabilizing system the SIB  $16 \times 40$ GR is the ultimate instru-

ment for long-range observation, tracking and surveillance. High magnification optics and ease of handling allows shake free observation under any demanding condi-

tions.

#### FEATURES:

- \* Stabilized image
- \* Rigid construction
- \* Value priced up to 70% below competition
- \* Weather proof
- \* Surveillance under any motion condition
- \* Alternative external power supply
- \* Wide angle image

- \* Carrying Case
- \* Strap
- \* Lens Caps
- \* Amber Filters (optional)
- \* DC regulator
- \* Night Vision eyepieces (optional)
- \* Warranty card
- \* Manual



sib 16x40gr with night VISION ATTACHMENT





	_	_
specifications	Newcon SIB 16x40GR	Fujinon <sup>*</sup> Stabiscope 16x40
Magnification, x	16	16
Angular field of view, degrees	3.4°	3.40
Minimum focus, m	30	51
Interpupillary adjustment, mm:	58 - 72	60 - 70
Power source:	6 (AA) batteries	4 (AA) batteries
From an on-board source, V	12	12 - 32
Angular velocity of panning		
in any direction, degree/sec:	0 - 6	
Stabilization freedom, degrees	±5	±5
Overall dimensions, mm:	215×190×96	210x200x96
Weight (w/o batteries), kg,	1.98	1.89
Temperature range, °C	-30 +55	
Relative humidity (at +25°C) %:	up to 98	
Street Price, US\$	\$ 1,700	\$ 4,000

<sup>\*</sup> Data for comparison only, the product is not for sale.



# SPECIALTY DAYTIME OPTICS

#### MILITARY BINOCULARS BPO 7x30 / BPO 10x42

Military standard BPO series binoculars are designed for distant objects observation during the daytime over the temperature range from  $-50^{\circ}$ C to  $+60^{\circ}$ C. These units are in military service with over 40 armies around the world. BPO models distinguish from other binoculars by the increased image quality over the whole field of vision, increased photometric characteristics enabling observation in cloudy weather and twilight, and enhanced outstanding endurance, which makes them particularly useful for battle operations. The binoculars of this quality are essential for army personnel, guards, police members, hunters, and true nature lovers.







#### FEATURES:

- \* High quality achromatic lenses
- \* Rubberized body
- \* Water- resistant
- \* Variable eye relief distance
- \* Extra large eyepieces
- \* Optional range finding scale

- \* Case
- \* Straps
- \* Amber filters (optional)
- \* Objective caps
- \* Manual
- \* Warranty card



specifications	BPO 7x30	BPO 10x42
Magnification, x	7	10
Objective diameter, mm	30	42
Angular field of view, deg	8°30'	5°57'
Field of view m/1000m	145	102
Exit pupil diameter, mm	4.3	4.2
Eye relief, mm	1122.5	21
Maximum resolution in the center	7'	4'29"
Dioptric correction	-3+5	±5
Overall dimensions, mm	65x175x185	70x220x220
Weight, kg	1.10	1.35



#### GIANT BINOCULARS BPC 20x60 / BPC 26x70

When you need to find an object and see it in details, nothing matches these high power binoculars. Indispensable for Law Enforcement, marine operations, astronomy, bird watching, etc., BPC Giant Binoculars can satisfy the most demanding customer. The precisely grinned lenses produce true color reproduction and sharp images even in twilight or under hazy conditions.





- \* High quality achromatic lenses
- \* Extremely durable and rugged
- \* Value priced

- \* Case
- \* Straps \* Tripod mount
- \* Amber filters (optional)
- \* Objective caps
- \* Eye piece caps
- \* Manual
- \* Warranty card





specifications	BPC 20x60	BPC 26x70
Magnification, x	20	26
Objective diameter, mm	60	70
Angular field of view, deg	3°34'	2°30'
Field of view m/1000m	62	43.6
Exit pupil diameter, mm	3	2.7
Eye relief, mm	11	9.04
Interpupillary distance, mm	56-74	56-74
Maximum resolution in the center	3'	3'
Dioptric correction	±6	±5
Focus system	Central	Individual
Prism system	Porro	Porro
Overall dimensions, mm	265x218x73	274x226x87
Weight, kg	1.45	1.70

# SPECIALTY DAYTIME OPTICS

BIG EYE Giant Binoculars 20x110, 15x110

These Giant Binoculars are designed to fit rigorous military specifications and extraordinary quality standards and are capable to withstand the extreme maritime weather. They are useful as ship observation binoculars, border guard instrument, and with other applications wherever long-range viewing is required. Binoculars are completed with yoke mount and adjustable shipboard pedestal mount. The 20x or 15x magnification has massive 110mm objective lenses, BAK-4 prisms and precision-ground, multi-coated optics. One can note the incredible optical quality with extraordinary edge-to-edge image definition. Apparent field of view is up to an amazing 100°. Oversized, individually focusing ocular lenses are set at an angle for comfortable, ergonomic viewing. The mounted device swivels a full 360° horizontally and 105° vertically (built-in azimuth scale). Each unit is nitrogen filled to prevent fogging; internal humidity collector will eliminate the first sign of moisture. Loaded with features like individually focusing diopters, reticle scales with rangefinder, collapsible sunshades, flip-up rubber headrest, and top peep sight these binoculars beat all competing models.







- \* Metal Pedestal (optional)
- \* Tripod (optional)
- \* Manual
- \* Neutral Filters (for bright light conditions)
- \* Light orange filters for increased contrast in reduced illumination or fog conditions
- \* Blue/Green filters for eye protection against laser I/R radiation

specifications	Big Eye 20x110	Big Eye 15x110
Magnification	20	15
Objective lens diameter, mm	110	110
Exit pupil diameter, mm	5.5	7.3
Resolving power in the center	2.6"	4"
Field of view, degrees	5°	6°
Eye relief, mm	17	15
Eyepiece dioptric correction	-3+5	-3+12
Interpupilary distance, mm	54-72	54-72
Angle of eye pieces disposition	45°	30°
Horizontal swivel, °	360	360
Vertical swivel, °	-45 +60	-35 +60
Dimensions, with pedestal, mm	700x415x1225	400x402x580
Weight, without pedestal, kg	23	30








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