



# ALPHA OPTICS

NIGHT VISION

THERMAL IMAGING

VEHICLE-MOUNTED CAMERA

DAY TIME OPTICS

ACCESSORIES

TEST EQUIPMENT

PRODUCT CATALOGUE  
**2025-2026**

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Alpha Optics Systems Inc.

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Images are for illustration purposes only.

Specifications are subject to change without notice, check our website

[www.alphaopticsinc.com](http://www.alphaopticsinc.com)



# ABOUT

Alpha Optics Systems Inc.

Alpha Optics manufactures and distributes night vision, thermal imaging, and daytime optical devices. Our engineers, sales and customer service staff have many years of experience producing and distributing optics around the world. We work with the leading manufacturers in the industry and with those who use our products every day in real life situations. We develop and produce the most technologically advanced optical products for tactical, law enforcement, and commercial applications.

Our products are of the highest quality and are used by the world's elite military and law enforcement units. These include compact multipurpose night vision monoculars, goggles, binoculars, and weapon sights. Our thermal imaging devices can be used at any time of the day and easily cut through fog, smoke or haze. If you need high-performance daytime optics, we can supply you with top-of-the-line, battle-proven weapon sights, rangefinders and binoculars. Our daytime optics devices are famous around the world for their high quality and affordable price. Whatever your application may be, Alpha Optics can supply the best equipment for the job, at the most reasonable price, and deliver it to you on time, anywhere in the world.

If you have questions regarding any of our products, please do not hesitate to contact us. Our highly trained and qualified staff will be happy to answer all your questions and provide you with the most up-to-date product information.

A full-page background image of a soldier in tactical gear, including a helmet with night vision equipment, holding a rifle. The image is in a dark, blue-tinted color scheme.

# NIGHT VISION

Alpha Optics Systems Inc.

A night-vision device is an optoelectronic device that allows images be produced in the environment approaching total darkness by collecting the tiny amount of light, including the lower portion of the infrared light spectrum, and converting it to the visible light. It is usually a complete unit, including an image intensifier tube, a protective water-resistant housing, some type of mounting system, and IR illuminator.

Our night vision devices are built using advanced image enhanced technology, innovative, highest-quality lenses and construction materials to satisfy a wide range of application – from military, law enforcement, security and surveillance to wildlife observation, hunting, search and rescue, sport and entertainment.

## NIGHT VISION PRODUCT CATEGORIES

- Monoculars
- Binoculars
- Goggles
- Weapon Sights



## PVS-14/6015 Night Vision Monocular

The ALPHA OPTICS PVS-14/6015 Night Vision Monocular is a rugged, lightweight, multi-purpose night vision device with superb optics designed for the most challenging of nighttime operations. Protective and waterproof housing is compatible with different types of mounting systems. The device can be handheld, head, helmet, or weapon mounted for hands-free use, or attached to a camera or camcorder for nighttime photography. The unit includes manual gain control (ALPHA OPTICS PVS-14), or auto-gain control (ALPHA OPTICS 6015), an automatic bright light shut-off feature, and a built-in Infrared (IR) illuminator which makes it possible to use the unit in low light or total darkness. The bright light shut-off feature ensures that the high-quality photocathode tube is protected. Designed for the most demanding nighttime military or law enforcement operations, ALPHA OPTICS PVS-14/6015 is also available for a wide range of applications for civilian users.

### Features

- Compact, rugged design
- Waterproof
- Head or helmet mountable
- Ergonomic, simple, easy to operate controls
- Built-in Infrared illuminator and flood lens
- Bright light cut-off
- Automatic shut-off system
- MIL-STD-810



### Specifications

<b>Image Intensifier</b>	Gen 2+ or Gen 3
<b>Magnification</b>	1x (3x, 4x, 5x – optional)
<b>Field of View</b>	40°
<b>Lens System</b>	26 mm; F/1.2
<b>Focus Range</b>	0.25 m to infinity
<b>Battery Type</b>	AA
<b>Environmental Rating</b>	IP67
<b>Weight</b>	315 g



## NM34 Night Vision Monocular

The ALPHA OPTICS NM34 is a hand-held, head-mounted, helmet mounted, or weapon-mounted night vision system that enables walking, short-range surveillance, map reading, vehicle maintenance, and administering first aid in both moonlight and starlight. Each unit allows for vertical adjustment (by using head straps), fore-and-aft adjustment, objective lens focus, and eyepiece focus and equipped with an infrared light emitting source. The optical system of the monocular consists of an objective lens, an image intensifier tube and an eyepiece. Even under unsteady brightness conditions, Automatic Brightness Adjustment System always keeps the intensifier brightness level constant. The Automatic Protective System controls the existing illumination level through the photo receiver. If the illumination level surpasses 100-300 lx for the following 10 seconds, the Monocular will shut off automatically. The built-in IR Illuminator makes it possible to observe the objects when the monocular works in the conditions of low light or total darkness. Smooth and ergonomic design makes it an ideal choice for use by professionals or civilians for any nighttime operations.

### Features

- Compact, rugged design
- Head, helmet, or weapon mountable for hands-free usage
- Water resistant
- Built-in IR illuminator
- Auto brightness control
- Bright light cut-off
- Ergonomic, simple, easy to operate control
- Adaptable for use with cameras



### Specifications

<b>Image Intensifier</b>	Gen 2+, Gen 3
<b>Magnification</b>	1x (3x, 5x – optional)
<b>Field of View</b>	40°
<b>Lens System</b>	27 mm; F/1.2
<b>Focus Range</b>	0.25 m to infinity
<b>Battery Type</b>	CR123A
<b>Environmental Rating</b>	IPX6
<b>Weight</b>	280 g



## MUM-14A Night Vision Monocular

The ALPHA OPTICS MUM-14A is a high performance modular, hand-held passive night vision monocular device that utilizes a single Gen 2+ or Gen 3 intensifier tube to provide crisp, clear images under the darkest conditions maintaining optimal situational awareness and flexibility of equipment applications. Small, lightweight and versatile, the MUM-14A gives you a high performance in the smallest package available. It can be weapon mounted, head/helmet mounted, handheld, or optionally attached to cameras and extender 3x/5x afocal objective lenses. The on-axis rail system permits the device to use a wide range of mounting options. Also available a dual-system head/helmet mount allows two ALPHA OPTICS MUM-14A's to become one binocular system.

### Features

- Compact, rugged design
- Waterproof
- Head or helmet mountable
- Ergonomic, simple, easy to operate controls
- Unique electronic switch
- Built-in Infrared illuminator and flood lens
- Bright light cut-off
- Automatic shut-off system
- MIL-STD-810



### Specifications

<b>Image Intensifier</b>	Gen 2+, Gen 3
<b>Magnification</b>	1x
<b>Field of View</b>	40°
<b>Lens System</b>	27 mm; F/1.2
<b>Focus Range</b>	0.25 m to infinity
<b>Battery Type</b>	CR123A or AA
<b>Environmental Rating</b>	IPX8
<b>Weight</b>	275 g



## PVS-7-4X Night Vision Binoculars

The ALPHA OPTICS PVS-7-4X Night Vision Binoculars are a perfect tool for mid-range and long-range observation. The devices are compatible with a range of professional high-quality objective lenses to match all users' requirements due to its unmatched performance, even in extreme temperatures and challenging weather conditions such as rain or excessive humidity. These devices can be outfitted with either a Gen 2+ or Gen 3 high-performance image intensifier tube, which can be repaired or upgraded easily. The bright light shut-off feature ensures that the high-quality photocathode tube is protected. Supplied with two AA batteries, the devices can operate up to 40 hours of continuous use. They are also equipped with Automatic Brightness Control (ABC), which adjusts the image brightness automatically, providing the highest possible image quality even in changing light conditions.



### Features

- Multi-coated, all-glass optics
- Dual eye viewing system for long viewing sessions
- Detachable long-range infrared illuminator
- Lightweight rugged design
- Waterproof
- Auto brightness control
- Ergonomic and easy to operate controls

### Specifications

<b>Image Intensifier Tube</b>	Gen 2+ or 3
<b>Magnification</b>	4 x
<b>Field of View</b>	10.3°
<b>Lens System</b>	70 mm; F/1.8
<b>Focus range</b>	3 m to infinity
<b>Battery type</b>	AA (2)
<b>Environmental Rating</b>	IPX8
<b>Weight</b>	0.85 kg





## PVS-7 Night Vision Goggles

The ALPHA OPTICS PVS-7 is a high-quality mono tube, bi-ocular night vision goggle system providing hands-free operation at low light conditions. The Generation 2+ and/or 3 image intensifier tube features Automatic Brightness Control (ABC) which automatically adjusts the brightness of the image tube to achieve the highest quality image resolution under varying light conditions as well as a built-in infra-red illuminator which allows the user to operate under zero light conditions. The device is auto-gated (optional) to prevent image intensifier damage if exposed to intense light. It is waterproof and charged with nitrogen to prevent internal condensation while moving between extreme temperatures. Additional features include IR-On and Low-Battery Indicators. Image clarity is achieved by focusing the front objective while each eyepiece can be independently adjusted for eyesight correction. The fully adjustable headgear provided allows the PVS-7 to be flipped-up (optional) or quickly detached from the mask. Lightweight and versatile, the ALPHA OPTICS PVS-7 can be hand-held, head-mounted, and helmet-mounted. Optional Long-Range objectives convert the night vision goggles into a useful night vision field binocular.

### Features

- Lightweight
- Multifunctional
- Automatic high-light cut-off
- Low battery and IR on indicators
- Nitrogen purged
- Waterproof



### Specifications

<b>Image Intensifier</b>	Gen 2+ and Gen 3
<b>Magnification</b>	1x
<b>Field of View</b>	40°
<b>Diopter Adjustment</b>	from -6 to +2
<b>Lens System</b>	26 mm; F/1.2
<b>Focus Range</b>	0.25 m to infinity
<b>Battery Type</b>	AA (2)
<b>Environmental Rating</b>	IPX7
<b>Weight</b>	550 g



## NG40/NG51 Night Vision Goggles

The ALPHA OPTICS NG40 and NG51 are dual-channel night vision systems. With a 40° and 51° field of view (FOV), night vision goggles provide a large visual field without needing to move the binoculars. The devices use advanced multi-coated optics and are built to last with a compact composite housing. Operating from a single AA alkaline battery or CR123A battery, the NG40 and NG51 can run up to 20 hours. They are also equipped with an integral infrared illuminator for reading in the dark. For hands-free operation, the ALPHA OPTICS night vision goggles include head and helmet mounting options, it can be used as binoculars, as a monocular, goggles or stowed out of the way. Operated by a single gain control knob, the NG40 AND NG51 utilize features like a flip-up-turn-off, and a flip-down-turn-back-on option when mounted to a helmet.



NG40



NG51

### Features

- Compact, lightweight, rugged
- Dual-tube design
- True stereoscopic vision
- Head or helmet mounted
- Built-in IR illuminator
- Waterproof
- Automatic bright light shut off
- Comfortable flip-up headgear
- Ergonomic, simple, easy to operate control

### Specifications

	NG40	NG51
<b>Image Intensifier Tube</b>	Gen 2+, Gen 3	Gen 2+, Gen 3
<b>Magnification</b>	1x, 3x	1x, 3x
<b>Field of View</b>	40°	51°
<b>Lens System</b>	27 mm; F/1.3	19 mm; F/1.26
<b>Focus Range</b>	0.25 m to infinity	0.25 m to infinity
<b>Battery Type</b>	CR123A or AA	CR123A or AA
<b>Environmental Rating</b>	IPX8	IPX8
<b>Weight</b>	645 g	615 g



## AVS-9 Aviation Night Vision Goggles

Recent design improvements to the aviation night vision imaging system (ANVIS) increase situational awareness, improve system performance, and enhance ergonomic characteristics. The device features binocular viewing for optimized depth perception and large 25 mm eyepieces that provide improved eye relief, accommodating operators wearing eyeglasses. Ergonomically designed interface controls (including inter-pupillary and vertical/fore-aft/tilt adjustments) provide improved system fields-of-view. The ALPHA OPTICS AVS-9 accepts integration of different grades of image intensifier tubes, enabling performance characteristics to be matched to operational requirements. Rotary and fixed-wing versions are available.

### Features

- Lightweight
- Innovative Ergonomic Design
- Compatible with all types of helmets
- “Minus Blue” filters
- Low profile battery packs
- Low battery indicator
- Nitrogen purged



### Specifications

<b>Image Intensifier</b>	Gen 2+ or Gen 3
<b>Magnification</b>	1x
<b>Field of View</b>	40°
<b>Objective lens</b>	27 mm
<b>Battery type</b>	AA
<b>Weight</b>	530 g



## NW48 Night Vision Weapon Sight

The ALPHA OPTICS NW48 Night Vision Weapon Sight is constructed from a rugged aluminum housing which provides durability and dependable boresight retention as well as the lowest possible weight to the sights. The sight provides excellent observation, target acquisition and aiming capabilities at night and has a high light cut-off capability and can operate at extreme temperatures. The NW48 incorporates a Mil-Dot reticle that is sharply defined and has variable intensity for best contrast on light or dark targets. To enhance the survivability and operability of these sights, the external objective lens and eyepiece lens elements are protected with an ultra-durable (scratch-resistant) coating which permits cleaning without fear of damaging the optical coatings.



### Features

- High light cut-off capabilities
- Illuminated Mil-dot reticle
- Ultra-durable coating
- Made from aircraft aluminum alloy
- Mounts to standard weaver rails
- Waterproof

### Specifications

<b>Image Intensifier Tube</b>	Gen 2+ or Gen 3
<b>Magnification</b>	4x
<b>Field of View</b>	8.3°
<b>Focus Range</b>	25 mm to infinity
<b>Battery Type</b>	AA (2)
<b>Environment Rating</b>	IPX8
<b>Weight</b>	1.0 kg

A close-up photograph of a black thermal imager, likely a monocular, lying on a concrete surface. The device has a textured grip and a lens at the front. The background is slightly blurred, showing some debris on the ground.

# THERMAL IMAGING

Alpha Optics Systems Inc.

Thermal imaging is a method of improving visibility of objects in a dark environment by detecting the objects' infrared radiation and creating an image based on that information. Thermal imaging works in environments without any ambient light and can penetrate obscurants such as smoke, fog and haze.

All objects emit infrared energy (heat) as a function of their temperature - the hotter an object is, the more radiation it emits. A thermal imager can detect tiny differences in temperature, collect the infrared radiation from objects in the scene and create an electronic image based on information about the temperature differences.

Thermal images are normally grayscale in nature: black objects are cold, white objects are hot and the depth of gray indicates variations between the two. Our devices, however, have a variety of coloured polarity modes to help users identify objects at different temperatures.

We offer thermal imaging hand-held monoculars for short, medium and long-range observation, medium and long-range binoculars, goggles, weapon sights for a variety of weapons, and easy-to-use clip-on systems.

## THERMAL IMAGING PRODUCT CATEGORIES

- Monoculars
- Binoculars
- Weapon Sights
- Clip - ONs



## Pulsar AXION XG30 COMPACT Thermal Imaging Monocular

Designed to fit perfectly in one hand or in a standard-size pocket, AXION XG30 COMPACT by Pulsar ensures comfortable grip and easy carrying and makes it an optimal portable unit for scouting and spotting. Powerful objective lens in combination with a 12  $\mu\text{m}$  professional grade thermal imaging sensor provides exceptional detection capabilities. A standard 1.8 m tall object can be detected at a 1300 m distance in complete darkness. AXION XG30 COMPACT offers the highest magnification in the class of compact thermal imagers. Housing made from light weight magnesium alloy ensures high structural rigidity and ruggedness while retaining small weight and ergonomics. Quick start-up helps to save energy and thus prolongs time of operation. The 8-color palette enhances viewing in varying conditions. The built-in video recorder is a great asset when it comes to filming or taking photos of once-in-a-lifetime experiences. Upon activation, the Picture in Picture function displays a second small image with magnification in the top part of the screen. The Pulsar AXION XG30 COMPACT is designed for use both at night-time and during the day in difficult weather conditions (fog, smog, rain), as well as where obstacles are present that impede the detection of a target (branches, tall grass, dense shrubs etc.), for night-time hunting, observation, and terrain orientation, and carrying out rescue operations.

### Features

- Lightweight and compact
- Quality thermal imaging sensor
- Wide field of view
- Photo and video recording
- Rigged magnesium alloy housing
- 3 sensitivity amplification levels
- 8 colour palettes
- Stream Vision 2 APP support
- Frost-resistant AMOLED display
- IPX7 waterproof rated
- Digital zoom



### Specifications

<b>Sensor Type</b>	640 x 480, 12 $\mu\text{m}$
<b>Refresh Rate</b>	50 Hz
<b>NETD</b>	<40 mK
<b>Lens System</b>	30 mm; F/1.2
<b>Field of View</b>	14.6° x 9.2°
<b>Optical Magnification</b>	2-16 x
<b>Detection Distance</b>	1300 m
<b>Battery Type</b>	APS 3 Li-ion Battery Pack
<b>Environmental Rating</b>	IPX7
<b>Dimensions</b>	144 x 41 x 69 mm
<b>Weight</b>	310 g



## Pulsar TELOS Thermal Imaging Monocular

With components and parts that are capable of being upgraded and customized according to the user's needs, the TELOS ensures cutting edge thermal technology is at your fingertips for years to come.

It stands as an extremely powerful optic. With an industry leading sensor and enhanced image processing algorithms, this extremely powerful thermal monocular gives users highly refined details, even in the toughest conditions. The adjustment rings allow users to gradually zoom in and focus in one fluid motion. This fine camera-like digital control system allows smooth magnification adjustments and pristine quality even at high magnifications.

Outfitted with a brand new LPS 7i quick-charge Lithium-ion battery, the TELOS has more than 8.5 hours of battery life. Further enhancing its long-range viewing abilities, the TELOS has a detection range capable of detecting human-sized heat sources in the harshest weather.



### Features

- High-aperture F/1.0 lens with fixed focus from 5 m to infinity
- Waterproof and nitrogen purged
- Compact and lightweight
- Automatic silent calibration
- Customized user interface
- Max detection distance up to 2300m
- Option of external power supply
- Video output
- TELOS LRF models are available

Specifications	TELOS XQ35	TELOS XP50	TELOS XG50	TELOS XL50
<b>Sensor Type</b>	384 x 288, 17µm	640 x 180, 17µm	640 x 180, 12µm	1024 x 768, 12µm
<b>Refresh Rate</b>	50 Hz	50 Hz	50 Hz	50 Hz
<b>NETD</b>	<25 mK	<18 mK	<40 mK	<40 mK
<b>Lens System</b>	35 mm; F/1.0	50 mm; F/1.0	50 mm; F/1.0	50 mm; F/1.0
<b>Field of View</b>	10.7° x 8°	12.4° x 9.3°	8.8° x 6.6°	14° x 10.5°
<b>Optical Magnification</b>	3 – 12 (x4 zoom)	2.5 – 10 (x4 zoom)	3.5 – 14 (x4 zoom)	2.5 – 20 (x4 zoom)
<b>Detection Distance</b>	1300 m	1800 m	2300 m	2300 m
<b>Battery Type</b>	LPS 7i Li-Ion	LPS 7i Li-Ion	LPS 7i Li-Ion	LPS 7i Li-Ion
<b>Environmental Rating</b>	IPX7	IPX7	IPX7	IPX7
<b>Dimensions</b>	224 x 66 x 59 mm	238 x 72 x 62 mm	238 x 72 x 62 mm	243 x 72 x 62 mm
<b>Weight</b>	570 g	670 g	670 g	680 g



## FLIR BREACH PTQ136 Multifunctional Thermal Imaging Monocular

Built for the rigors of law enforcement, the FLIR Breach PTQ136 spots the heat of suspects and objects in total darkness. Featuring the new FLIR Boson core and a compact design, the FLIR Breach offers unmatched tactical awareness. Weighing only 7.4 ounces (210 grams) the FLIR Breach can be concealed in a pocket or mounted to a helmet with its mini-rail feature while adding minimal weight to officers' heavy gear. Additional features include onboard recording and seven palettes for fast detection of suspects or evidence day or night. The advanced image processing of the internal FLIR Boson thermal core and a bright high-definition display create excellent image clarity and provide better detection and classification day or night. For hands-free operation Breach PTQ136 has multiple mini-rail mounting points designed to allow for a wide variety of head mounts helmet mounts and to install additional equipment. Document operations with on-board video recording and image capture. Choose from multiple palettes to perfect viewing during varied situations. Enhance situational awareness with a digital compass/inclinometer.



### Features

- FLIR Boson thermal core
- Compact design and lightweight
- Mid and long-range detection
- Aircraft-aluminum alloy construction
- Easy and intuitive drop-down user interface
- Various color modes
- Digital e-zoom
- External power supply
- Rapid start-up

### Specifications

<b>Sensor Type</b>	320 x 256 12 $\mu$ m VOx Microbolometer
<b>Refresh Rate</b>	60 Hz
<b>Eye Relief</b>	16 mm
<b>Lens System</b>	9.1 mm; F/1.04
<b>Field of View</b>	24° x 19°
<b>Optical Magnification</b>	1x
<b>Diopter Adjustment</b>	-5 to +5 dpt
<b>Battery Type</b>	One CR123A 3V Lithium battery
<b>Environmental Rating</b>	IPX7
<b>Dimensions</b>	139 x 70 x 49 mm
<b>Weight</b>	210 g





## FLIR SCOUT PRO Thermal Imaging Monocular

The FLIR Scout Pro is the next-generation thermal monocular, designed for and with law enforcement and public safety professionals. Built for reliability in high-stakes missions where time and focus are critical, the Scout Pro offers simplified controls so you never get lost in menus, robust durability to withstand harsh conditions, and live view capabilities to keep your team informed in real-time. With a 32° field of view—the widest available on the market—the Scout Pro allows for rapid area sweeps, identifying human heat signatures up to 500 meters away, even in darkness. Advanced image enhancements are tailored specifically for human detection, ensuring you never miss a target.



### Features

- Compact design and lightweight
- Wide lens for quick sweeps
- Instant human detection
- Easy to use
- Four color modes
- Real time video streaming
- Rugged and reliable

### Specifications

<b>Sensor Type</b>	640 x 480 17 $\mu$ m VOx Microbolometer
<b>Refresh Rate</b>	30 Hz
<b>NETD</b>	<38 mK
<b>Lens System</b>	19 mm; F/1.00
<b>Field of View</b>	32°
<b>Optical Magnification</b>	2x, 4x, 6x, 8x
<b>Diopter Adjustment</b>	-5 to +5 dpt
<b>Battery Type</b>	Internal Li-Ion cell
<b>Environmental Rating</b>	IP67
<b>Dimensions</b>	192 x 64 x 64 mm
<b>Weight</b>	498 g



## PULSAR MERGER LRF Thermal Imaging Binoculars

Merger LRF thermal imaging binoculars are built with the classic design of daytime binoculars. The Binoculars accommodate day and nighttime observations. The device provides exceptional image quality even in adverse weather conditions (fog, smog, rain) and beyond obstacles like branches, tall grass, dense foliage, etc. known to hinder target detection. The interpupillary distance in the Merger LRF binoculars is adjustable from 62 to 74 mm in accordance with the individual characteristics of a particular user. A built-in laser rangefinder with a range of up to 1 kilometre allows you to measure distances in single measurements and continuous scanning modes with an accuracy of  $\pm 1$  meters for quick and error-free assessment of the situation. Merger LRF thermal imaging binoculars are perfectly suited for night hunting, observation, trail orientation, identifying hazards, rescue operations, etc.

### Features

- Classic design. Compact size
- Precise laser rangefinder with 1000 m measuring distance
- High-definition thermal imaging
- Fast aperture F50/1.0 germanium lens
- Detection range up to 2300 m
- Rugged magnesium alloy housing
- Built-in photo and video recorder
- Wi-Fi integration with iOS & Android devices
- High-contrast HD AMOLED displays
- A selection of 8 color palettes
- IPX7 waterproof rated



### Specifications

	MERGER LRF XP50	MERGER LRF XL50
<b>Detector Type</b>	640 x 180, 17 $\mu$ m	1024 X 768, 12 $\mu$ m
<b>Refresh Rate</b>	50 Hz	50 Hz
<b>NETD</b>	<25 mK	<40 mK
<b>Lens System</b>	50 mm; F/1.2	50 mm; F/1.2
<b>Field of View</b>	12.4° x 9.3°	14° x 10.5°
<b>Optical Magnification</b>	2.5 – 20 (x8 zoom)	2.5 – 20 (x8 zoom)
<b>Detection Distance</b>	1800 m	2300 m
<b>Battery Type</b>	APS3 Li-Ion Battery pack	APS3 Li-Ion Battery pack
<b>Environmental Rating</b>	IPX7	IPX7
<b>Dimensions</b>	196 x 143 x 76 mm	197 x 140 x 72 mm
<b>Weight</b>	800 g	950 g



## TW34 LRF Thermal Imaging Weapon Sight

The ALPHA OPTICS TW34 LRF thermal imaging weapon sights are the next generation of compact thermal devices with the extended functionality of electronic parts and presence of a built-in laser rangefinder. Displaying the thermal differences in the scene, the high-performance thermal imaging system of the device provides round-the-clock, all-weather detection and discrimination of heat-generating objects, including those that are hidden. It could be mounted on head or helmet or could be intended for use as a handheld device.

The weapon sight is designed with shutterless calibration technology enabling quick start and continuous image without stops and delays. The specially developed control electronics of the device works without a complicated menu. Ballistic corrections and four memory slots enable saving zeroing profiles for different distances and different types of ammunition. The TW34 LRF is effective at close and long ranges regardless of light and weather conditions, such as in total darkness or through smoke, haze, fog, and light rain.

### Features

- Compact and lightweight
- High aperture germanium lens
- Detection distance up to 1400 m
- Built-in LRF
- 1000m accurate laser distance measurement
- User friendly menu
- OLED high performance display
- Built-in Photo and Video recording
- Wi-Fi support
- Withstands the recoil of large caliber weapons
- Automatic silent calibration
- Electronic compass and motion sensor



### Specifications

<b>Sensor Type</b>	384 x 288, 12µm
<b>Refresh Rate</b>	50 Hz
<b>NETD</b>	<35 mK
<b>Lens System</b>	35 mm; F/1.2
<b>Field of View</b>	7.5° x 5.7°
<b>Optical Magnification</b>	3.3 - 13 x
<b>Detection Distance</b>	1400 m
<b>Wavelength</b>	905 nm
<b>Battery Type</b>	26500 (1)
<b>Environmental Rating</b>	IPX7
<b>Dimensions</b>	190 x 110 x 65 mm
<b>Weight</b>	582 g



## TWC34 Universal Thermal Imaging Clip-On Weapon Sight

The ALPHA OPTICS TWC34 Thermal Imaging Universal Clip-On Weapon Sight is the next generation of compact thermal devices and can work as a Clip-On System or Standalone Weapon Sight. Displaying the thermal differences in the scene, the high-performance thermal imaging system of the device provides round-the-clock, all-weather detection and discrimination of heat-generating objects, including those that are hidden. It could be mounted on head or helmet or could be intended for use as a handheld device.

The device is designed with shutterless calibration technology enabling quick start and continuous image without stops and delays. The specially developed control electronics of the device works without a complicated menu. Ballistic corrections and four memory slots enable saving zeroing profiles for different distances and different types of ammunition. The device has two interchangeable eyepiece – for clip-on and weapon sight modes. The innovative two-power supply design makes it easy to shoot in different conditions. No need to disconnect power when replacing batteries.



### Features

- Works as clip-on and standalone weapon sight
- High aperture germanium lens
- Detection distance up to 1600 m
- User friendly menu
- OLED high performance display
- Built-in Photo and Video recording
- Wi-Fi support
- Withstands the recoil of large caliber weapons
- Automatic silent calibration
- Electronic compass and motion sensor

### Specifications

<b>Detector Type</b>	384 x 288, 12 $\mu$ m
<b>Refresh Rate</b>	50 Hz
<b>NETD</b>	<20 mK
<b>Lens System</b>	35 mm; F/1.0
<b>Field of View</b>	7.5° x 5.7°
<b>Basic Magnification Standard</b>	3.25x
<b>Basic Magnification Clip-On</b>	1x
<b>Diopter Adjustment</b>	-5 to +5 dpt
<b>Battery Type</b>	CR123 (1) or RCR123 (1)
<b>Environmental Rating</b>	IPX7
<b>Dimensions Clip-On</b>	187.5 x 70 x 83.4 mm
<b>Dimensions Standard</b>	220 x 70 x 83.4 mm
<b>Weight</b>	515 g



## PULSAR KRYPTON 2 Thermal Imaging Attachment

A thermal scope attachment is an excellent tool for transforming your daytime scope into a thermal imaging device, making it ideal for those new to thermal vision. Compact models are available for beginners, while more powerful options cater to advanced users. These clip-on scopes mount at the front of your riflescope and come with a Bluetooth remote control for easier use. Additionally, they can double as handheld thermal monoculars when attached to a compatible device, offering two functions in one. Advanced models also feature compact designs, improved balance, and long-lasting external batteries, making them versatile and user-friendly for hunters.

**Pulsar Krypton 2 FXQ35** is a compact front-attachment with long battery life and features, most suited for forests, stalk hunting and cutting through thick foliage or fog.

Higher resolution sensor of **Pulsar Krypton 2 FXG50** ensures a more comfortable observation paired with more detailed image. Suitable for animal identification on mid and longer distances.

### Features

- Compact and well-balanced design
- Easily converts daylight optical riflescopes into thermal imaging riflescopes
- Preserves the benefits of daylight optics in night-time conditions
- Three calibration modes (manual, semi-automatic and automatic)
- 3 levels of sensitivity enhancement: Normal, High, Ultra
- Compatible with a wide range of daylight optical magnifications
- High caliber recoil resistance 12 gauge, 9.3x64, .375 H&H
- Instant start
- Built-in video recording
- Remote Firmware update
- Completely waterproof IPX7



### Specifications

	KRYPTON 2 FXQ35	KRYPTON 2 FXG50
<b>Sensor Type</b>	384 x 288, 17µm	640 x 480, 17µm
<b>Refresh Rate</b>	50 Hz	25 Hz
<b>NETD</b>	<25 mK	<40 mK
<b>Lens System</b>	35 mm; F/1.2	50 mm; F/1.2
<b>Field of View</b>	10.7° x 8°	8.8° x 6.6°
<b>Optical Magnification</b>	2 – 6 x	2 – 6 x
<b>Detection Distance</b>	1300 m	2300 m
<b>Battery Type</b>	IPS7 Li-Ion Battery pack	IPS7 Li-Ion Battery pack
<b>Environmental Rating</b>	IPX7	IPX7
<b>Dimensions</b>	116 x 73 x 83 mm	131 x 78 x 84 mm
<b>Weight</b>	400 g	450 g



## DEFIANCE 640 PTZ Vehicle-Mounted Thermal Camera by Dark30

The Dark 30 Defiance is a cutting-edge 360° PTZ vehicle-mounted thermal camera designed for ultimate precision and reliability. Effortlessly pan, tilt, and zoom for detailed observation with sensitive remote adjustments. The intelligent sleep mode protects the lens and prevents night blindness, ensuring your vision remains sharp in low-light conditions. Quickly return to front and center with sleep mode reactivation or the home button, helping you maintain your bearings. The on-screen directional indicator shows the camera's pointing direction for precise tracking, and the 640x480 thermal imaging provides clear and detailed visuals for accurate assessment. Versatile mounting options include permanent bolts, suction cups, or 100lb pull magnets for flexible installation. Built to withstand various weather conditions, the water-resistant Defiance ensures durability and reliability, while conveniently plugging into your vehicle's cigarette lighter for easy setup.

### Features

- Sensitive Remote-Controlled Adjustments
- Intelligent Sleep Mode
- Instant Orientation
- High Resolution 640x480 thermal imaging
- Infinite 360° Panning
- Low Latency HDMI compatible Wired Screen
- App Control on the Dark 30 App
- Versatile Mounting Options: (Permanent bolts, suction cups, or 100lb pull magnets)
- Water Resistant



### Specifications

<b>Sensor Type</b>	640 × 480, 17 μm
<b>Refresh Rate</b>	60 Hz
<b>NETD</b>	<30 mK
<b>Spectral Range</b>	8 - 14 μm
<b>Field of View</b>	20° × 15° × 25°
<b>Digital Zoom</b>	1-8 x
<b>Lens Diameter</b>	32 mm
<b>External Power Supply</b>	Car cigarette, 12 DVC
<b>Environmental Rating</b>	IP66
<b>Dimensions</b>	169 x 195 x 198 mm
<b>Weight</b>	3.15 kg



## DB15 10x50 Daytime Binoculars

The ALPHA OPTICS DB15 10x50 daytime binoculars are built from only the most exceptional quality glass to deliver a crisp and clear image. The glass features a special proprietary lens coating used in night vision technology to maximize light transmission for better performance in low light environments. The binoculars are built tough to withstand the harshest environmental conditions. Each device is rubber armored, completely sealed against dust, sand, and water, and also filled with nitrogen to prevent fogging of internal lens surfaces. Wide field of view reveals a larger portion of the horizon, allowing you to search more efficiently. Large 50 mm objective lenses have tremendous light gathering ability. Multi-coated optics dramatically increase light transmission for brighter images with increased contrast and resolution. Large exit pupil provides maximum light during nighttime and low-light viewing sessions.

### Features

- BAK4 porro prisms
- Fully multi-coated optics
- All metal body
- Mil ranging reticle
- Extremely wide field of view
- Long eye relief
- Individual focusing
- Shock proof, waterproof
- Anti-slip rubber body
- Tripod adaptable



### Specifications

<b>Magnification</b>	10 x
<b>Objective Lens</b>	50 mm
<b>Field of View</b>	105 m at 1000 m
<b>Eye Relief</b>	18.5 mm
<b>Exit Pupil Diameter</b>	5 mm
<b>Interpupillary Adjustment</b>	56 - 72 mm
<b>Dimensions</b>	190 x 177 x 60 mm
<b>Weight</b>	900 g



## ELCAN Specter® Dual Role Optical Sight

**NEW** ELCAN SpecterDR comes equipped with integrated Picatinny rails, ambidextrous magnification throw levers, improved battery covers, and hard-wearing CERAKOTE® performance finishes in Black or Flat Dark Earth (FDE). It is the second evolution in the family of Dual Role Optical Sights. Based upon the battle-proven SpecterDR design, the optical sight provides higher magnification to enable greater precision and longer engagement ranges, while at the same time providing exceptional field of view in CQB mode.

The New SpecterDR enjoys ELCAN's famous crystal-clear optics as well as a generous eye relief, making it the ideal instrument for designated marksman rifles and other long-range applications. As with all SpecterDR sights, the magnification and field of view can be changed instantly with the throw of a lever. Depending upon the situation, the user may adjust the sight to illuminate the crosshair or just a brilliant red dot in the center. Because the reticles are etched in glass, they are plainly visible even in the case of loss of electrical power due to battery failure or EMP.



Specter DR 1x/4x



Specter DR 1.5x/6x

### Features

- Ambidextrous magnification throw levers
- Integrated Picatinny rail
- Improved battery cover
- Eye relief and bore sighting remain constant between magnifications
- Generous eye relief and wide viewing angle for rapid target acquisition
- Hard-wearing CERAKOTE® performance finishes
- Large exit pupil diameter for extended low light performance
- Shock protected precision optics for rugged reliable performance
- Integrated lever-lock mount for optimum weight reduction
- Two sights in one
- Adjustable A.R.M.S. Lever (optional)

### Specifications

Specifications	SPECTER DR 1X/4X	SPECTER DR 1.5X/6X
<b>Magnification</b>	1x/4x	1.5x/6x
<b>Field of View</b>	26°@1x; 6.5°@4x	16°@1.5x; 4°@6x
<b>Eye Relief</b>	70 mm	70 mm
<b>Crosshair and Red Dot illumination</b>	5 settings, night vision compatible	5 settings, night vision compatible
<b>Reticle</b>	Dual-thickness ballistic crosshair with user-selectable red dot	Dual-thickness ballistic crosshair with user-selectable red dot
<b>Battery Type</b>	CR2032	CR2032
<b>Battery Type</b>	382 hrs on max RD/reticle setting	382 hrs on max RD/reticle setting
<b>Dimensions</b>	153 x 68 x 72 mm	183 x 69 x 73 mm
<b>Weight</b>	655 g	715 g





## Tangent Theta Riflescope by Armament Technology

Tangent Theta Rifle Telescope models vary from an intermediate-range to a long-range precision, to an extreme-range precision sighting instrument used by police and security, hunters, and professional marksmen. Elevation and windage mechanisms exhibit precise tactile response and feature a truly TOOL-LESS RE-ZERO® procedure. Tangent Theta rifle telescopes are built in Canada and are specifically designed and function-tested for long lifecycles in the harshest of environmental conditions.



### Features

- Mechanical windage direction indicator
- Eleven reticle illumination settings
- Side parallax adjustment
- TOOL-LESS RE-ZERO® feature
- Non-translating knobs with elevation zero-stop
- Double-turn elevation with revolution and windage direction indicator
- Lockable rapid adjusting diopter

### Specifications

Specifications	TANGENT THETA TT315M	TANGENT THETA TT315P	TANGENT THETA TT525P	TANGENT THETA TT735P
<b>Magnification</b>	3x-15x	3x-15x	5x-25x	7x-35x
<b>Field of View</b>	7.3°@3x; 1.6°@15x	7.3°@3x; 1.6°@15x	4.3°@5x; 0.9°@25x	3.1°@7x; 0.62°@35x
<b>Eye Relief</b>	90 mm	90 mm	90 mm	90 mm
<b>Objective lens diameter</b>	50 mm nominal	50 mm nominal	50 mm nominal	50 mm nominal
<b>Reticle Options</b>	Gen 2XR, MoA, Gen 3XR	Gen 2, Gen 2XR, MoA	Gen 2XR, MoA, Gen 3XR,	Horus Gen 3 XR Fine, JTAC, Tremor3
<b>Battery Type</b>	DL2032 3v lithium	DL2032 3v lithium	DL2032 3v lithium	DL2032 3v lithium
<b>Exterior Finish</b>	Type II Anodized, matte	Type II Anodized, matte	Type II Anodized, matte	Type II Anodized, matte
<b>Dimensions</b>	351 x 84 x 69 mm	356 x 103 x 82 mm	425 x 103 x 86 mm	405 x 103 x 86 mm
<b>Weight</b>	786 g	1025 g	1150 g	1230 g



## EOTECH EXPS3 Holographic Weapon Sight

The EXPS3 offers true 2-eyes-open shooting, and a 7 mm raised base that still allows for iron sight access. It features easy-to-adjust side buttons and an adjustable locking quick-detach lever for easy attachment and removal. The EXPS3 can operate in tandem with Generation I – III+ night vision intensifier tubes. It is also the optic of choice for the technologically advanced modern rifle hunter. Its night vision compatibility makes it a versatile choice for day or night hunting. It also provides the operator superior shooting performance rapid reticle-on-target acquisition full field of view and accurate shot placement. The HWS® can be naturally employed by all levels of users from novice to the most highly trained operator.



### Features

- Night Vision Compatible
- Magnifier Compatible
- Adjustable locking quick-detach lever fits both 1" Weaver and MIL-STD-1913 rail
- Operates on one 123 Lithium battery
- Easy adjust side buttons
- Submersible to 10 m depth

### Specifications

<b>Magnification</b>	1 x
<b>Field of View</b>	28 m @ 8 cm relief
<b>Eye Relief</b>	Unlimited
<b>Adjustment (per click)</b>	Approx 0.5 MOA (12.7mm at 91m) when zeroing
<b>Reticle Option</b>	0-68 min ring and 1 MOA aiming dot
<b>Battery Type</b>	One 123 lithium battery
<b>Battery Type</b>	600 hours at nominal setting 12 and room temp
<b>Colour Options</b>	Black, Tan
<b>Dimensions</b>	96.5 x 58.4 x 73.7 mm
<b>Weight</b>	317.5 g



## EOTECH G45.STS Magnifier

The G45.STS 5X Magnifier has the similar weight and dimensional properties as the existing G33 Magnifier but with an additional 2X magnification for precision aiming at greater distances. The mount provides fast transitioning from 5X to 1X and the optic offers tool-free vertical and horizontal adjustments with a large field-of-view. The G45 works with all EOTECH HWS models.



### Features

- Compact and lightweight
- Additional 2X magnification
- Fog resistant internal optics
- Compatible with all EOTech holographic sights

### Specifications

<b>Magnification</b>	Fixed 5 x
<b>Field of View</b>	4.4°
<b>Eye Relief</b>	67 mm
<b>Weight</b>	363 g



## AO-ALPHACAM Direct Recording Optical System

The Alpha Optics Direct Recording Optical System ALPHACAM allows to effortlessly capture the view from the user's perspective. It records directly through the sight eyepiece and simultaneously projects the view on a screen. ALPHACAM is used by professionals as a tool for debriefing and training. It could be connected directly to surveillance systems, or used by photographers, hunters, or during any other shooting events. Live view helps to analyze shooting activities. Or, it simply captures memorable moments as you see them.



### Features

- Unified system – camera, optics, DVR
- Compatibility with various spotting and night vision devices
- Long operational time
- Lightweight and compact with 5.5" or 7" screen
- Still photos can be taken from the DVR
- Zero effect on field of view and image



### Specifications

<b>Camera</b>	AHD 720P @ 30FPS
<b>Operating Voltage</b>	Monitor device power
<b>Compatibility</b>	Various Day and Night Devices
<b>Eye Relief (ALPHACAM D)</b>	15-19mm/30-32mm/40-45mm
<b>Eye Relief (ALPHACAM NV)</b>	30-32mm
<b>Dimensions</b>	42 x 75 x 52 mm
<b>Weight</b>	~ 170 g



## CADEX Low Profile Flip-up Mount

The Low Profile Flip Up Mount is a ruggedized aluminum NVG mount that combines lightness to low profile design with a maximum range of adjustability.



### Features

- Ergonomic “one touch” height adjustment allows operator to adjust height with one hand.
- Low profile follows helmet contour when folded.
- Six position adjustable mounting plate fits numerous facial profiles and helmet mounting systems.
- Locked in a stowed position
- Force overcome in down/deployed position.
- If the NVG is bumped or impacted the Low Profile Flip Up Mount will fold and lock in upright position protecting the NVG and operator.
- Compatible with Ops-core helmets and universal shrouds

### Specifications

#### Low Profile Flip Up Mount with Bayonet or Dovetail Carriage

<b>Dimensions</b>	7.34 x 11.63 x 8.74 cm
<b>Dimensions (folded)</b>	7.32 x 5.18 x 8.76 cm
<b>Weight</b>	181 g
<b>Material</b>	Aluminum 6061-T6



## TEST EQUIPMENT Nitrogen Purge & Leak Station

Alpha Optics Nitrogen Purge and Leak Station (NPLS) uses nitrogen purging method to remove the moisture/water vapor and oxygen to create a dry environment within optical devices using nitrogen, reliable dry gas, which is economic, safe (when handled properly) and chemically inert with most metals and materials. Nitrogen purging and leak test is required for final assembly and, as a basic maintenance measure, to keep the interior parts dry and clean. With Alpha Optics Nitrogen Purge and Leak Station this operation is fast, simple, and safe. The system control unit performs air and nitrogen extraction, nitrogen fill-up and Leak testing (pressure maintenance). The system operates using a self-contained rechargeable battery with extended operation life. The Station goes through a quality control process to meet high standard manufacturing, performance, and safety regulations.

### Features

- Built-in electrically operated vacuum pump and compressor
- Compatible with variety night vision and daytime optical devices
- Easy to assemble and operate
- Rechargeable battery



### Specifications

<b>Nitrogen supply tank pressure</b>	1500 psi / 100 atm
<b>Pressure regulator</b>	1500-75 psi / 5 atm
<b>Max allowed pressure drop</b>	0.06 psi/min (or consult manufacturer)
<b>Initial nitrogen pressure</b>	3.0 ±0.5 psi
<b>Temperature</b>	22 ± 5°C
<b>Relative Humidity</b>	55% Max

The logo for Alpha Optics features the word "ALPHA" in a blue, serif font. The letter "A" is stylized with three curved lines above it, suggesting motion or light. Below "ALPHA" is a thin horizontal line. Underneath this line, the word "OPTICS" is written in a smaller, black, sans-serif font. The letter "O" in "OPTICS" is replaced by a circle with a vertical line passing through its center, resembling an optical symbol.

ALPHA  
OPTICS



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