



NIGHT VISION

THERMAL IMAGING

DAY TIME OPTICS

ACCESSORIES

TEST EQUIPMENT

PRODUCT CATALOGUE
2023-2024

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Alpha Optics Systems Inc.

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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.



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

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

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

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

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

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

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



NG40



NG51

Specifications

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

Image Intensifier	Gen 2+ or Gen 3
Magnification	1x
Field of View	40°
Objective lens	27 mm
Battery type	AA
Weight	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

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

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

- Binoculars
- Goggles
- Weapon Sights
- Clip-Ons



TB3 / TB6 Thermal Imaging Binoculars

The ALPHA OPTICS TB3 and ALPHA OPTICS TB6 thermal imaging binoculars are one of the most advanced binoculars in their class and intended for use as a handheld device. They are designed with the shutter-less calibration technology enabling quick start and continuous image without stops and delays. One of the novelties of this device is the encoder knob designed to adjust image on the spot depending on the environment. The device has grippy enclosure convenient for both hands and has only four control elements. Relatively large buttons are conventionally located to be used with heavy gloves. The TB3 and TB6 are 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

- High-aperture lenses with fixed focus from 5 m to infinity
- 4 interchangeable lenses from 19 to 100mm (optional)
- Max detection distance up to 2200 m
- Compact and lightweight
- Automatic silent calibration
- Video output
- Option of detachable laser rangefinder
- Waterproof and nitrogen purged



Specifications

ALPHA OPTICS TB3

	TB35	TB37	TB310
Sensor Type	384 x 288, 17μm	384 x 288, 17μm	384 x 288, 17μm
Refresh Rate	50 Hz	50 Hz	50 Hz
NETD	<50 mK	<50 mK	<50 mK
Lens System	52 mm; F/1.2	75 mm; F/1.0	100 mm; F/1.0
Field of View	7.4° × 5.6°	5.0° × 3.7°	3.7° × 2.8°
Magnification	4.2x	6.3x	8.4x
Dioptr Adjustment	-5 to +5 dpt	-5 to +5 dpt	-5 to +5 dpt
Battery Type	CR123A (2)	CR123A (2)	CR123A (2)
Environmental	IPX6	IPX6	IPX6
Dimensions, mm	155 x 95 x 165	155 x 95 x 185	155 x 95 x 200
Weight, g	650	850	1100

ALPHA OPTICS TB6

	TB65	TB67	TB610
Sensor Type	640 x 480, 17μm	640 x 480, 17μm	640 x 480, 17μm
Refresh Rate	25 Hz	25 Hz	25 Hz
NETD	<50 mK	<50 mK	<50 mK
Lens System	52 mm; F/1.2	75 mm; F/1.0	100 mm; F/1.0
Field of View	12.3° × 9.3°	8.3° × 6.2°	6.2° × 4.7°
Magnification	2.5x	3.8x	5.1x
Dioptr Adjustment	-5 to +5 dpt	-5 to +5 dpt	-5 to +5 dpt
Battery Type	CR123A (2pcs)	CR123A (2pcs)	CR123A (2pcs)
Environmental	IPX6	IPX6	IPX6
Dimensions, mm	155 x 95 x 165	155 x 95 x 185	155 x 95 x 200
Weight, g	650	850	1100



TG32 / TG62 Thermal Imaging Goggles

The ALPHA OPTICS TG32 and ALPHA OPTICS TG62 thermal imaging goggles are one of the most advanced goggles and could be mounted on head or helmet or could be intended for use as a handheld device. 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. The goggles are designed with shutterless calibration technology enabling quick start and continuous image without stops and delays. One of the novelties of this device is the encoder knob designed to adjust images on the spot depending on the environment. The device has a grippy enclosure convenient for both hands and has only four control elements. Relatively large buttons are conventionally located to be used with heavy gloves. The ALPHA OPTICS TG32 and TG62 are 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

- High-aperture F/1.0 lens with fixed focus from 5 m to infinity
- Waterproof and nitrogen purged
- Compact and lightweight
- Automatic silent calibration
- User friendly menu
- Max detection distance up to 2200m
- Option of external power supply
- Video output
- Option of detachable laser rangefinder



Specifications

	TG32	TG62
Sensor Type	384 x 288, 17μm	640 x 180, 17μm
Refresh Rate	50 Hz	25 Hz
NETD	<50 mK	<50 mK
Lens System	19 mm; F/1.0	19 mm; F/1.0
Field of View	19.0° x 14.5°	29.8° x 23.2°
Optical Magnification	1.6 x	1 x
Diopter Adjustment	-5 to +5 dpt	-5 to +5 dpt
Battery Type	CR123A (2pcs)	CR123A (2pcs)
Environmental Rating	IPX7	IPX7
Dimensions, mm	155 x 95 x 115	155 x 95 x 115
Weight, g	410	410



TW35 / TW65 Long-Range Thermal Imaging Weapon Sight

The ALPHA OPTICS TW35 and ALPHA OPTICS TW65 multipurpose thermal imaging weapon sights are one of the most advanced scopes in its class. It could be mounted on a head or helmet or could be intended for use as a handheld device. 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. The sight is designed with shutter-less calibration technology enabling quick start and continuous image without stops and delays. Ballistic corrections and four memory slots enable saving zeroing profiles for different distances and different types of ammunition. The ALPHA OPTICS TW35 and TW65 are 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

- Classic design. Compact size
- High aperture germanium lens
- Detection distance up to 1700 m
- Colour HD display
- Comfortable viewing experience
- User friendly menu
- Video output
- Automatic silent calibration
- Withstands the recoil of large caliber weapons
- Connection to external power supply
- Rugged sealed aluminum alloy body
- IPX7 waterproof rated

Specifications

	TW35	TW65
Sensor Type	384 x 288, 17µm	640 x 480, 17µm
Refresh Rate	50 Hz	25 Hz
NETD	<50 mK	<35 mK
Lens System	50 mm; F/1.2	50 mm; F/1.2
Field of View	7.4° x 5.6°	12.3° x 9.3°
Optical Magnification	3.1x	2.1x
Diopter Adjustment	-5 to +5 dpt	-5 to +5 dpt
Battery Type	CR123A (2)	CR123A (2)
Environmental Rating	IP67	IP67
Dimensions	245 x 70 x 65 mm	227 x 70 x 65 mm
Weight	650 g	630 g

TW35 PRO / TW65 PRO Long-Range Thermal Imaging Weapon Sight



The ALPHA OPTICS TW35 PRO and ALPHA OPTICS TW65 PRO multipurpose thermal imaging weapon sights are the next generation of TW35 and TW65 with the extended functionality of electronic parts. 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 a head or helmet or could be intended for use as a handheld device. The sight is designed with shutterless calibration technology enabling quick start and continuous image without stops and delays. Ballistic corrections and four memory slots enable saving zeroing profiles for different distances and different types of ammunition. The ALPHA OPTICS TW35 PRO and TW65 PRO are 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

- Classic design. Compact size
- High aperture germanium lens
- Detection distance up to 1700 m
- Colour HD display
- Comfortable viewing experience
- User friendly menu
- Built-in Photo and Video recording
- Wi-Fi and Bluetooth
- Withstands the recoil of large caliber weapons
- Automatic silent calibration
- Digital compass and inclination sensor
- Battery level indication
- Rugged sealed aluminum alloy body

Specifications

	TW35 PRO	TW65 PRO
Detector Type	384 x 288, 17μm	640 x 480, 17μm
Refresh Rate	50 Hz	25 Hz
NETD	<50 mK	<35 mK
Lens System	50 mm; F/1.2	50 mm; F/1.2
Field of View	7.4° x 5.6°	12.3° x 9.3°
Optical Magnification	3.1x	2.1x
3D Accelerometer	Yes	Yes
Diopter Adjustment	-5 to +5 dpt	-5 to +5 dpt
Battery Type	18650 (2)	18650 (2)
Environmental Rating	IPX7	IPX7
Dimensions	240 x 85 x 62 mm	240 x 85 x 62 mm
Weight	680 g	660 g



TW35 LRF PRO / TW65 LRF PRO Thermal Imaging Weapon Sight

The ALPHA OPTICS TW35 LRF PRO and ALPHA OPTICS TW65 LRF PRO 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 a head or helmet or could be intended for use as a handheld device.

The sight is designed with shutter-less calibration technology enabling quick start and continuous image without stops and delays. Ballistic corrections and four memory slots enable saving zeroing profiles for different distances and different types of ammunition. The TW35 LRF PRO and TW65 LRF PRO are 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

- Classic design. Compact size
- High aperture germanium lens
- Detection distance up to 1700 m
- Colour HD display
- Build-in LRF
- User friendly menu
- Built-in Photo and Video recording
- Wi-Fi and Bluetooth
- Withstands the recoil of large caliber weapons
- Automatic silent calibration
- Digital compass and inclination sensor
- Battery level indication
- Rugged sealed aluminum alloy body

Specifications

	TW35 LRF PRO	TW65 LRF PRO
Detector Type	384 x 288, 17µm	640 x 480, 17µm
Refresh Rate	50 Hz	25 Hz
NETD	<50 mK	<35 mK
Lens System	50 mm; F/1.2	50 mm; F/1.2
Field of View	7.4° x 5.6°	12.3° x 9.3°
Optical Magnification	3.1x	2.1x
Diopter Adjustment	-5 to +5 dpt	-5 to +5 dpt
3D Accelerometer	YES	YES
Wavelength	905 nm	905 nm
Battery Type	18650 (2)	18650 (2)
Environmental Rating	IPX7	IPX7
Dimensions	240 x 105 x 62 mm	240 x 105 x 62 mm
Weight	780 g	760 g



TW67 LRF PRO Thermal Imaging Weapon Sight

The ALPHA OPTICS TW67 LRF PRO multipurpose thermal imaging weapon sights are one of the most advanced scopes in its class. It could be mounted on a head or helmet or could be intended for use as a handheld device. A wide selection of adaptor bars allows to install most of the brackets for subsequent mounting on any type of weapon. With 10 shooting profiles you can save ballistic corrections for different distances and types of ammunition. The location of the sighting mark in the centre of the field of view with digital magnification allows for targeted and comfortable shooting at long distance. The built-in laser rangefinder allows to determine the exact distance to the target. The ability to record to a built-in SD card allows to save successful moments. The ALPHA OPTICS TW67 LRF PRO 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

- Classic design. Compact size
- High aperture germanium lens
- Detection distance up to 2000 m
- Up to 10 shooting profiles
- Digital zoom 2x, 4x, 8x
- Built-in LRF
- B&W and Colour HD display
- Comfortable viewing experience
- User friendly menu
- Video output
- Automatic silent calibration
- Withstands the recoil of large caliber weapons
- Rugged sealed aluminum alloy body

Specifications

TW67 LRF PRO

Sensor Type	640 x 480, 17µm
Refresh Rate	25 Hz
NETD	<35 mK
Lens System	75 mm; F/1.0
Field of View	8.3° x 6.2°
Optical Magnification	2.8x
Diopter Adjustment	-5 to +5 dpt
3D Accelerometer	YES
Wavelength	905 nm
Battery Type	18650 (2)
Environmental Rating	IPX7
Dimensions	292 x 126 x 90 mm
Weight	1100 g



TC35 PRO / TC65 PRO Long-Range Thermal Imaging Clip-On System

The ALPHA OPTICS TC35 PRO and TC65 PRO thermal imaging clip-on system is one of the most advanced systems in its class. 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. The device is designed with shutter-less calibration technology enabling quick start and continuous image without stops and delays. The specially developed control electronics of the device works without complicated menu. Ballistic corrections and four memory slots enable saving zeroing profiles for different distances and different types of ammunition. It 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 1700 m
- User friendly menu
- Colour HD display
- Comfortable viewing experience
- Built-in Photo and Video recording
- Wi-Fi and Bluetooth
- Withstands the recoil of large caliber weapons
- Automatic silent calibration
- Digital compass and inclination sensor
- Battery level indication
- Waterproof and Nitrogen purged

Specifications

	TC35 PRO	TC65 PRO
Detector Type	384 x 288, 17µm	640 x 480, 17µm
Refresh Rate	50 Hz	25 Hz
NETD	<50 mK	<35 mK
Lens System	50 mm; F/1.2	50 mm; F/1.2
Field of View	7.4° × 5.6°	12.3° × 9.3°
Optical Magnification	3.1x	2.1x
Diopter Adjustment	-5 to +5 dpt	-5 to +5 dpt
3D Accelerometer	YES	YES
Battery Type	18650 (2)	18650 (2)
Environmental Rating	IPX7	IPX7
Dimensions	195 x 85 x 62 mm	182 x 85 x 62 mm
Weight	780 g	670 g

TC35 LRF PRO / TC65 LRF PRO Thermal Imaging Clip-On System



The ALPHA OPTICS TC35 LRF PRO and TC65 LRF PRO thermal imaging clip-on system is one of the most advanced systems in its class. 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. The device is designed with the shutter-less calibration technology enabling quick start and continuous image without stops and delays. The build in laser rangefinder allows to determine the exact distance to the target. The specially developed control electronics of the device works without complicated menu. Ballistic corrections and four memory slots enable saving zeroing profiles for different distances and different types of ammunition. It 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 1700 m
- Build in LRF
- User friendly menu
- Colour HD display
- Comfortable viewing experience
- Built-in Photo and Video recording
- Wi-Fi and Bluetooth
- Withstands the recoil of large caliber weapons
- Automatic silent calibration
- Digital compass and inclination sensor
- Battery level indication
- Waterproof and Nitrogen purged

Specifications

	TC35 LRF PRO	TC65 LRF PRO
Sensor Type	384 x 288, 17µm	640 x 480, 17µm
Refresh Rate	50 Hz	25 Hz
NETD	<50 mK	<35 mK
Lens System	50 mm; F/1.2	50 mm; F/1.2
Field of View	7.4° x 5.6°	12.3° x 9.3°
Optical Magnification	1x	1x
Dioptr Adjustment	-5 to +5 dpt	-5 to +5 dpt
3D Accelerometer	YES	YES
Wavelength	905 nm	905 nm
Battery Type	18650 (2)	18650 (2)
Environmental Rating	IPX7	IPX7
Dimensions	195 x 105 x 62 mm	182 x 105 x 62 mm
Weight	880 g	770 g



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

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



ELCAN Specter® Dual Role Weapon Sight

ELCAN Specter® Sights are military optical combat sights that help shooters see better and farther in extreme environments and unpredictable situations. From close-quarters and heavy reflex sights with unlimited eye relief to dual role and digital sights for both man-portable and vehicle mounted missions, our sights deliver a decisive edge for identification and accurate engagement at maximum effective range. These sights provide the right tool, customized for mission requirements to make soldiers more effective and keep them safer.



Features

- Switches instantly between magnifications
- Eye relief and bore sighting remain constant between magnifications
- Generous eye relief and wide viewing angle for rapid target acquisition
- High efficiency broadband coatings
- 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

	Specter DR 1x/4x	Specter DR 1.5x/6x
Magnification	1x/4x	1.5x/6x
Field of View	26°@1x; 6.5°@4x	16°@1.5x; 4°@6x
Eye Relief	70 mm	70 mm
Optical Axis Height	39 mm above the rail	39 mm above the rail
Mount Compatibility	MIL-STD 1913	MIL-STD 1913
Reticle	Illuminated red dot with 5.56 or 7.62 NATO ballistic drop reticle	Illuminated red dot with 5.56 or 7.62 NATO ballistic drop reticle
Battery Type	CR2032	CR2032
Battery Type	600 hrs min, 3000 hrs average	600 hrs min, 3000 hrs average
Dimensions	153 x 62 x 72 mm	184 x 63 x 73 mm
Weight	620 g	700 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

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

Dimensions	7.34 x 11.63 x 8.74 cm
Dimensions (folded)	7.32 x 5.18 x 8.76 cm
Weight	181 g
Material	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

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





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