



The
**NEXT LEVEL OF
IMAGE QUALITY**



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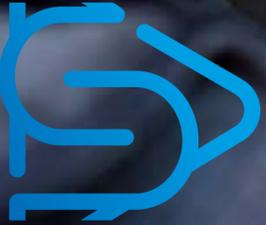


Unique, cutting-edge mobile application that binds together opto-electronics and Android or iOS mobile devices to offer a symbiosis of advanced optic capabilities and the latest digital features. Using standard WiFi, a smartphone or tablet easily connects to Stream Vision compatible Pulsar thermal and digital night vision optics to stream images directly to your personal device, change device settings, view recorded files, update firmware and control the optic remotely.

New digital technologies invade, enhance and raise standards in every aspect and sphere of our lives. Today, with literally billions of people in every corner of the globe engaged in constant virtual contact with each other, developing cross-platform devices is more important than ever. Like a smartphone, once simply a means of verbal and text communications but now a multi-purpose, multi-tasking instrument for business and social relations, Pulsar's innovative line of night vision and thermal optics deliver valuable work and entertainment information.

Pulsar continues to develop feature-rich devices focused on high-resolution image quality, ergonomics and world-class reliability.

We understand that now, more than ever, ease of interface and multi-vector use are equally important. Stream Vision solves this task by providing a symbiosis of software and hardware platforms designed to connect personal Android and iOS devices, i.e. smartphones, tablets, etc. to Pulsar thermal imaging and digital night vision devices via Wi-Fi.

**STREAM
VISION** 

**STREAM YOUR
DISCOVERIES**



⚡ Photo and Video Recording

Photo and video recording can be initiated from your WiFi connected smartphone or tablet without interrupting through-optic observation. Files can be stored in the optic's internal memory or directly to your connected device.

⚡ Live-Stream Platform

Live-stream video content from the thermal or digital night vision device directly to YouTube and Facebook via your WiFi connected smartphone or tablet.



⚡ Continuous Improvement

We work constantly to refine digital night vision and thermal imaging firmware to enhance user experiences. Users with Stream Vision compatible electro-optics can always update firmware and add features.

⚡ Mobile Viewfinder

Watch your device's display in real-time. Stream Vision turns your WiFi connected smartphone or tablet into a mobile viewfinder.



⚡ File Sharing

Download recorded photos and videos with the Stream Vision app and share them with friends via online messaging and cloud services.

⚡ Completely Free

Stream Vision is ad free and FREE, period. We see Stream Vision as a logical, integral, experience-enhancing and functional extension of your compatible device.

⚡ Firmware Update

Stream Vision makes checking for available firmware updates quick and easy. When your smartphone or tablet is connected to a device, Stream Vision even handles installation.

⚡ Remote Control

Stream Vision turns your smartphone or tablet into a fully functional remote control. Adjust settings and execute device commands without operating onboard controls.

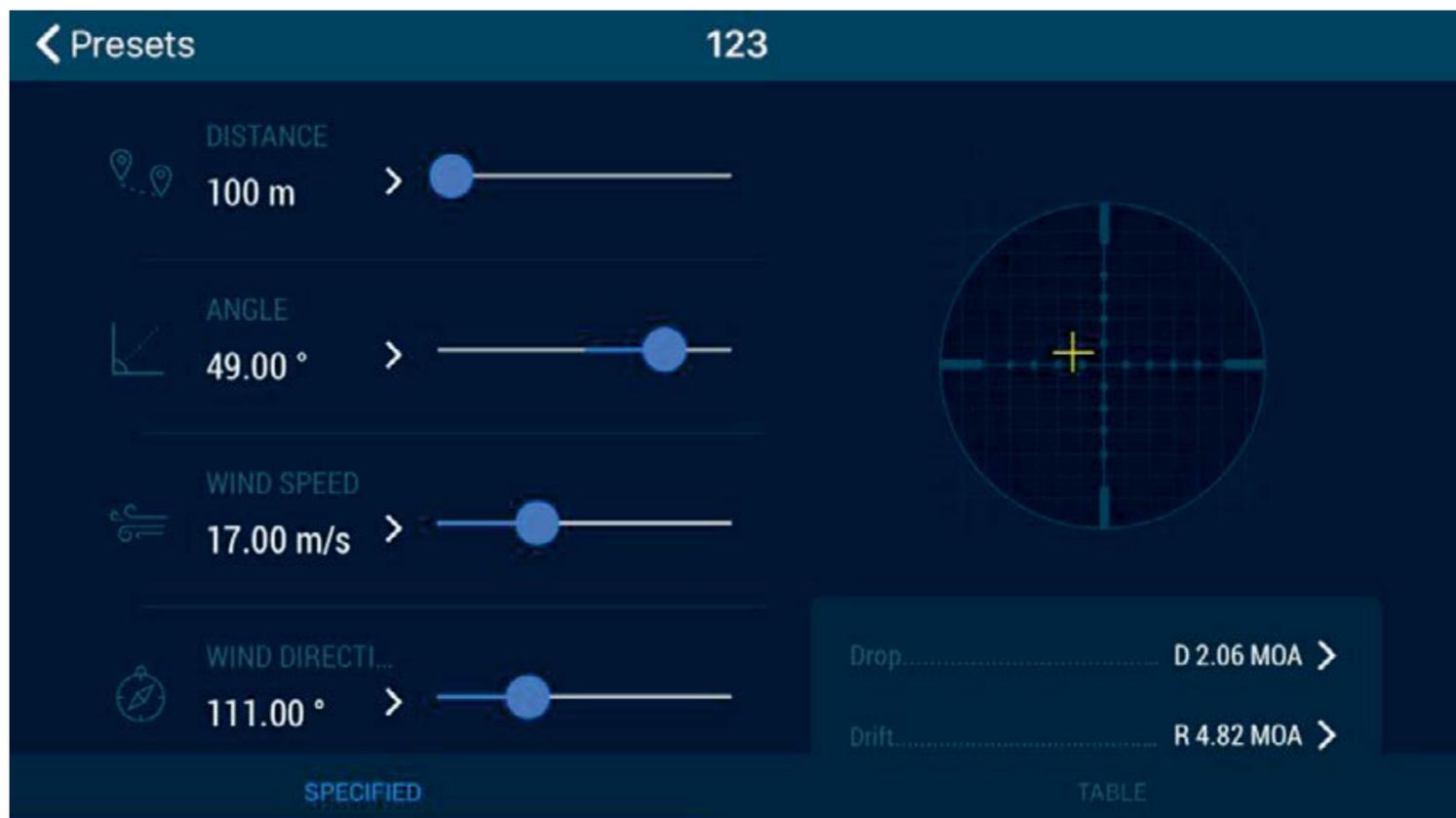
⚡ No Ads

No ads. No distraction. Even with easy user interface we know using Stream Vision and operating electro-optics requires attention and concentration.



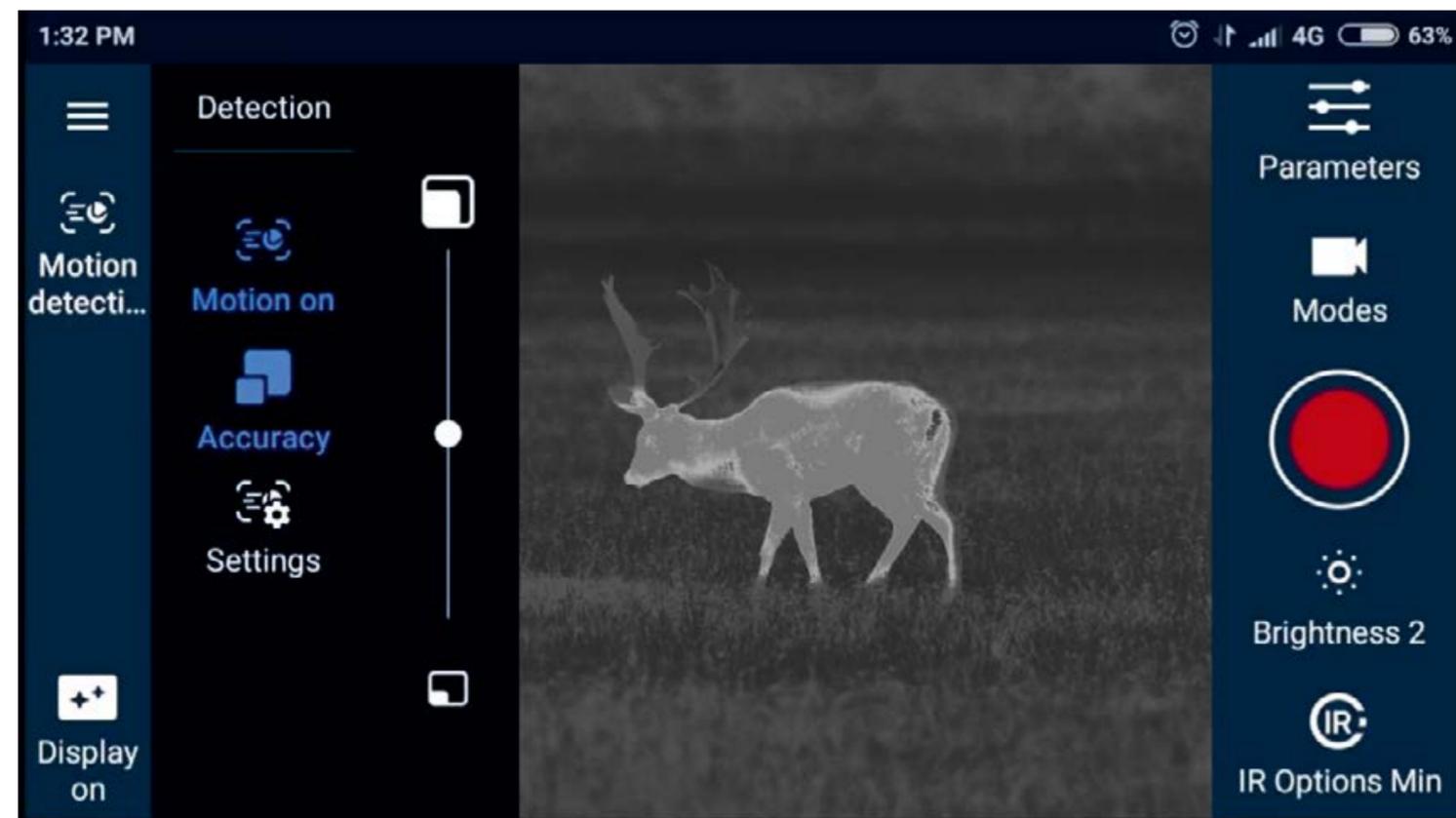
Ballistic Calculator

Stream Vision's onboard ballistic calculator is a powerful tool for precision long-range shooters. Select your ammo from Stream Vision's robust database or create your own ammo profile. Save ballistic profiles, including rifle, optic and cartridge combinations. Stream Vision's proprietary high-precision algorithms, developed by skilled professionals, result in exacting correction calculations based on ballistic parameters, distance to target and real-time environmental conditions like wind speed and direction, temperature, air pressure, humidity, elevation and angle.



Motion Detection

Using your WiFi connected smartphone or tablet with a Stream Vision App compatible thermal or night vision device easily turns your optic into a motion-detecting camera. The optic must be in a fixed position. Users are notified of motion detected in the field of view by sound and vibration alerts, as well as imaging. Settings help avoid false alarms.



True Superiority

Thermal Imaging Riflescopes

THERMION

XQ38 / XQ50 / XM50 / XP50



Mounts on Standard 30 mm Scope Rings

Designed from the ground up for ease of use, Thermion riflescopes mount to standard 30 mm scope rings. No specialized tools or equipment are required.



B-Pack Mini Combined Power System

Thermion riflescopes utilize a dual battery system consisting of internal and external rechargeable batteries. While the external battery offers extended operation time, it can also be replaced in seconds without powering down the device.



THERMION

Highly Sensitive Thermal Imaging Sensor

The Thermion XQ and XP lines feature an advanced NETD <40 mK sensor produces precise detail recognition imaging even in adverse weather conditions like rain and fog. Even when thermal contrast is low, small temperature differences are clearly visible with richly contrasted, high-resolution imaging.



Stream Vision App Supported

Using Wi-Fi and the Stream Vision App, connect the Thermion to a smartphone or tablet for use as a second display or remote control. Also makes transferring recorded files, adjusting settings, upgrading firmware.

STREAM VISION



Extreme Detection Range 2300 m

High quality germanium optics coupled with an advanced thermal imaging sensor ensure an unprecedented detection range of up to 2300 meters, even in complete darkness.



Observation Modes

The Thermion features four operating modes: Rocks (enhanced contrast), Forest (low contrast), Identification (improved rendering of heat signature details) and User Mode (allows to save personal preferences of contrast and brightness in existing observation modes (Rocks, Forest, Identification)). Each mode optimises image based on viewing conditions.



Image Boost Technology

Pulsar's proprietary Image Boost Technology is comprised of software algorithms designed to increase imaging clarity and overall image detail. Image Boost results in a sharper, more detailed field of view and enhanced object identification capabilities.





User Friendly Controls

Thermion operation and adjustments are simple using the three function buttons on the top of the device and left side encoder. The buttons and encoder provide access and management of all device menu options, settings and system functions.



Customizable Reticle Options

Wide array of color-customizable reticles, including scalable ballistic styles. Color options: black, white, red, green, yellow, blue and orange.



Zeroing Profiles Management

Store up to five zeroing profiles, with ten distance coordinates each for varying situations, in internal memory for quick rifle change-outs and on-the-fly adjustments.



Recoil Rated up to .375 H&H, 12-Gauge and 9.3x64

Recoil rated up to 6000 joules for flawless performance on larger calibers up to .375 H&H, 12-gauge and 9.3x64.



Video and Still-Photo Recording

Integrated video (including recoil-activated) and still image recording in MPEG-4 and .jpg makes sharing the thermal action quick and easy. The onboard 16-GB internal memory handles recoil flawlessly and stores hours of video or thousands of photos.



Rugged, Reliable All-Metal Housing

Designed for rugged reliability, Thermion riflescopes boast full, reinforced yet lightweight metal construction. Precision-fabrication of housing elements ensures flawless field performance.



High Definition Image

Sharp, richly contrasted thermal imaging for enhanced identification of animals, their extremities and even the smallest details, i.e. branches, leaves, grass and terrain.



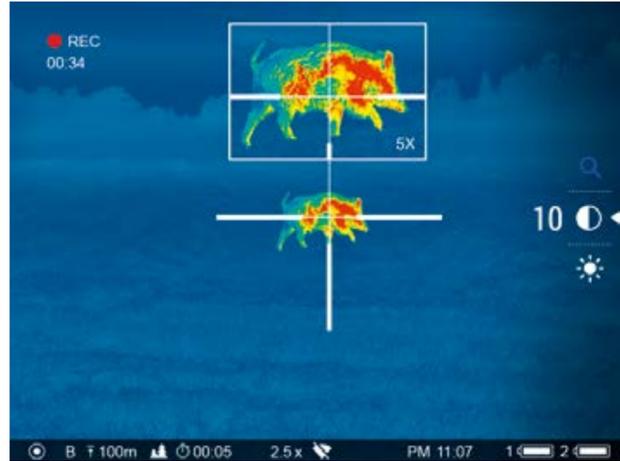
Instant Start-Up

Thanks to advanced electronics, the Thermion can be powered up almost instantly. Rapid start-up conserves device energy and prolongs overall battery life while ensuring you don't miss a shot opportunity when seconds count.



Picture-in-Picture

Picture-in-picture displays a magnified image at the top-center 10% of the overall field of view for precise shot placement.



Full-Color, HD AMOLED Display

While the Thermion's HD AMOLED display delivers crisp, richly contrasted, vividly colored field of view, AMOLED technology ensures flawless, fluid, high-resolution imaging and power saving.



Variable Digital Zoom

Digital zoom, up to 8x, provides improved focus and overall target recognition at significant distances.



Color Palettes

Color palettes offer customized display options. While white hot and black hot are most popular, Red Hot, Rainbow and Ultramarine highlight a heat signature's more intense hot spots. Violet, Red Monochrome and Sepia are optimal palettes for reduced eye fatigue over long periods of observation.



IPX7

Picture-in-picture displays a magnified image at the top-center 10% of the overall field of view for precise shot placement.

	Model	XQ38	XQ50	XM50	XP50
TECHNICAL SPECIFICATIONS	SKU	76522	76523	76526	76543
	Microbolometer, resolution, pixels @ pixel pitch, μm	384x288 @ 17		320x240 @ 12	640x480 @ 17
	Display, type / resolution, pixels	AMOLED 1024x768			
	Objective lens	F38/1.2		F50/1.2	
	Magnification, x	2.5 - 10	3 - 12	5.5 - 22	2 - 16
	Field of view (horizontal), $^{\circ}$	9.8	7.5	4.4	12.4
	Range of detection, m	1350	1800	2300	1800
	Operating temperature, $^{\circ}\text{C}$	-25 to +50			
	Weight, kg	0.75		0.9	



< ^{NETD}40mK

Thermal Imaging Riflescope

NEW

TRAIL 2 LRF

TRAIL 2 LRF XQ50 / XP50

The
NEXT LEVEL
OF THERMAL
PRECISION



Highly Sensitive Thermal Imaging Sensor

An advanced NETD <40 mK sensor produces precise detail recognition imaging even in adverse weather conditions like rain and fog. Even when thermal contrast is low, small temperature differences are clearly visible with richly contrasted, high-resolution imaging.



Shockproof Magnesium Alloy Housing

Rugged and light-weight magnesium alloy housing is designed to withstand recoils of high caliber rifles. Increased structural rigidity reduces vibrations during the shot and leads to enhanced ballistics while properties of magnesium alloy help to ensure better heat dissipation.



Instant Start-Up

Thanks to advanced electronics, the Trail 2 LRF can be powered up almost instantly. Rapid start-up conserves device energy and prolongs overall battery life while ensuring you don't miss a shot opportunity when seconds count.



Full-Color, HD AMOLED Display

Trail 2 LRF's new HD display delivers crisp, richly contrasted, vividly colored field of view, AMOLED technology ensures flawless, fluid, high-resolution imaging and power saving.



High Recoil Resistance Rating: 12 gauge, 9.3x64, .375 H&H Shock Resistance

The Trail features exceptionally high shock resistance, capable of handling high-powered firearm recoil, up to .375-cal., including smoothbore and airsoft.



Observation Modes

Image optimization should be performed depending on the environmental location and conditions. Mountains, fields and forests have different ambient temperatures. In order to achieve the highest possible image quality, certain settings have been optimized and gathered into profiles. As a result, optimized imaging in various conditions is easier. Identification preset is another optimal-imaging option that makes identifying easier, even at longer distances.



Integrated Laser Rangefinder

Precision shooting begins with knowing the distance to your target. The Trail LRF features an integrated laser rangefinder capable of capturing and displaying target distances accurately, within ± 1 m, up to 1000 meters.



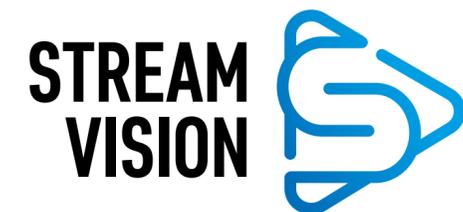
Fully Waterproof

IPX7 waterproof-rated protection ensures the Trail performs perfectly in wet weather, even during intense rain, snowfall and submersion in 1 meter of water for up to 30 min. (IEC 60529).



Mobile-Friendly with Remote Control and Live Internet Streaming

The free Stream Vision App, compatible with both Android and iOS systems, allows users to connect personal smartphones and tablets to Pulsar devices featuring onboard Wi-Fi. When connected, Stream Vision allows users to stream video and images in real time to YouTube, transfer files, update important firmware and control the optic remotely. For more information, refer to the Stream Vision section of our catalog.



50 Hz

⚡ High Image Frequency

At a high refresh rate of 50 Hz, the Trail provides comfortable viewing throughout dynamic, rapid motion.



⚡ B-Pack Power Supply

Trail includes a progressive autonomous B-Pack power supply consisting of a quick-detach, rechargeable IPS7, 6.4 Ah battery pack designed to deliver over 10 hrs. of operation on maximum mode. Higher-powered IPS14 battery pack, as well as AA battery case, also are available and provide a perfect off-the-grid power solution.

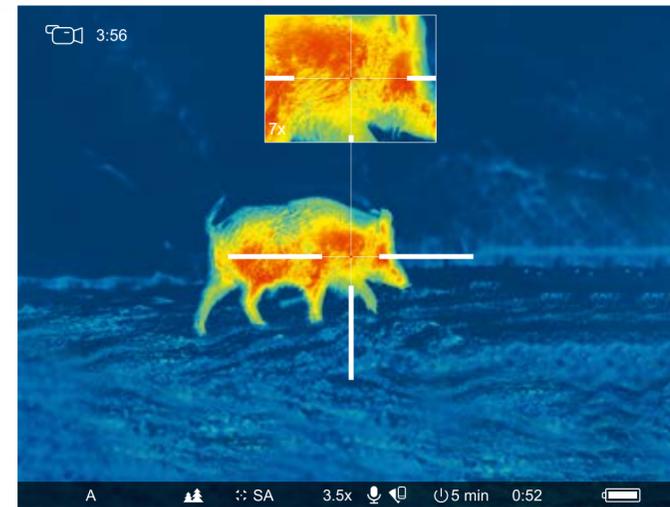
⚡ Variable Magnification

Trail models include variable magnification, up to 8x depending on model, and feature both 2x step-up and smooth, graduated magnification for a truly optimum, customized field of view.

⚡ Built-In Accelerometer / Gyroscope

A built-in accelerometer/gyroscope improves accuracy by precisely identifying cant and angles greater than 5° with an arrow indicating the direction and degree of lateral tilting. Increased angles are denoted with additional arrows. Moreover, the riflescope can be set to auto shutdown when resting in a non-shooting position. Unit operation may be disabled when the vertical angle is greater than 70° or horizontal angle is greater than 30°. The accelerometer feature may be temporarily disabled for continued use at excessive angles.

⚡ Picture-in-Picture Mode



Picture-in-Picture improves accuracy by providing a magnified image of the reticle area at the top of the display. With only 1/10 of the display area reserved for PiP, the field of view remains virtually unobstructed for simultaneous PiP and FOV viewing.

-25°C

⚡ Wide Range of Operating Temperatures

With a frost-resistant AMOLED display, Trail thermal imaging riflescopes are designed to deliver flawless performance at an extreme temperature range of -25°C to +50°C.

⚡ Display Off

During short periods of inactivity and better concealment, Display Off powers down the display without interrupting other operating functions. Using Display Off means a much faster restart time when you need it most.

⚡ Zeroing Profiles Management

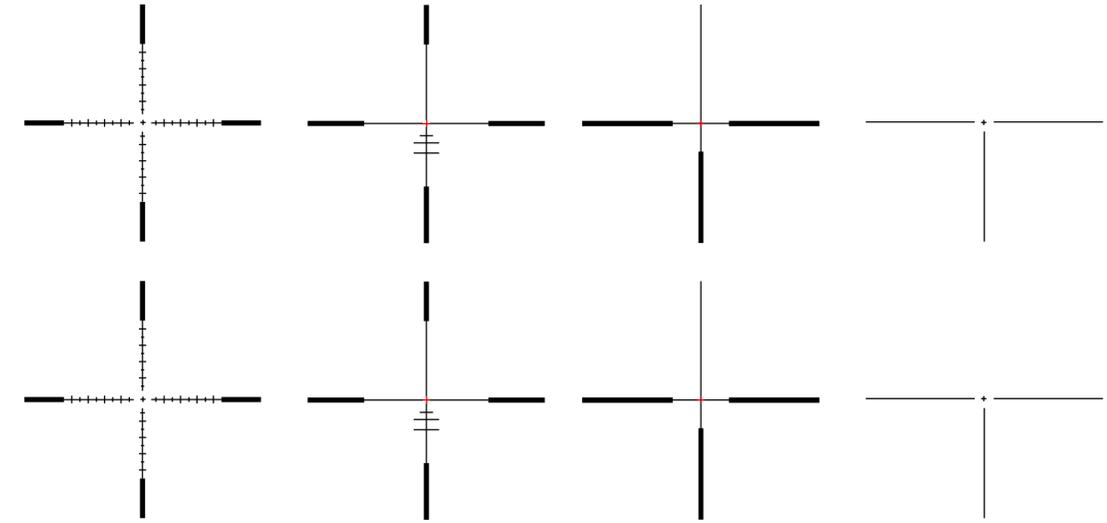
Store up to five zeroing profiles, with ten distance coordinates each for varying situations, in internal memory for quick rifle change-outs and on-the-fly adjustments.

⚡ Built-In Video Recorder

Capturing still images and video is seamless with the Trail's built-in video recorder. Image and video content is stored internally and can easily be transferred to PC / laptop via wired connection or Wi-Fi.

⚡ Selectable Reticles

A full complement of digitally displayed reticle solutions ensures quick target acquisition and a richly contrasting sight picture. Choose from an array of reticle patterns, colors and brightness settings.



TECHNICAL SPECIFICATIONS	Model	2 LRF XQ50	2 LRF XP50
	SKU	76558	76559
	Microbolometer, resolution, pixels @ pixel pitch, μm	384x288@17	640x480@17
	Objective lens	F50/1.2	
	Display, type & resolution	Full-color AMOLED1024x768	
	Magnification, x	3.5 - 14	2 - 16
	Field of view (horizontal & vertical without zoom), $^{\circ}$	7.5x5.6	12.4x9.3
	Integrated laser rangefinder	yes	
	Range of detection, m	1800	
Weight (without mount), kg	0.8		



Digital Night Vision Riflescopes

NEW

DIGEX

Digital Excellence



⚡ **Supplied Powerful Long-Range IR Illuminator**

Digex riflescopes are supplied with a detachable, high-power, 850-nm or 940-nm IR illuminator. While an 850-nm is built for distance, the 940-nm is completely stealth, ensuring you remain undetected no matter the species of game you pursue.

⚡ **Easy Mounting on a Rifle**

The middle part of the Digex body is a 30 mm tube, standard for daylight optical sights. This form-factor enables the Digex to be flexibly mounted on various types of hunting weapons using proven solutions.

⚡ **User Friendly Controls**

Digex is easy to use. Turn on-off, video recording, zoom setup and PiP mode are activated by dedicated buttons easily accessible on the upper part of riflescope's housing. Other functions are managed by the controller, which operates as both a wheel and button.

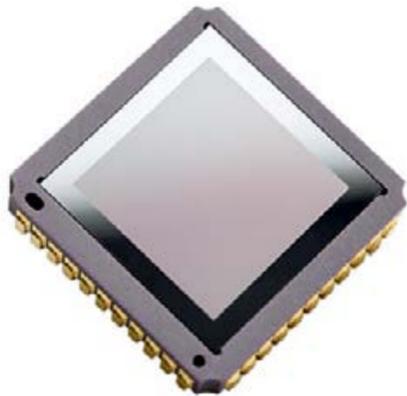


⚡ **Integrated Video and Sound Recorder**

Digex riflescopes feature a built-in recorder to capture still images and HD quality videos with sound. Footage can be transferred to PC/laptop or mobile device via a wired connection or via Wi-Fi.

⚡ **HD-sensor**

The highly sensitive 1280x720 HD CMOS sensor ensures that Digex delivers a high definition image with precise detail rendering.



⚡ **IPX7**

Fully Waterproof

IPX7 waterproof-rated for protection from rainfall, snow or other precipitation. The Digex is designed to run flawlessly in rain of any intensity, including submersion in up to 1 meter of water for up to 30 minutes.

⚡ **Robust All-Metal Housing**

Designed for rugged reliability, Digex riflescopes boast full, reinforced yet lightweight metal construction. An anti-wear coating and precision fabrication of housing elements ensure the Digex looks good through years of flawless performance.

⚡ **Compound Continuous Power System**

Digex riflescopes are powered with two rechargeable batteries: one built-in and the other replaceable located in the battery compartment. Upon discharge of the battery in the battery compartment, the riflescope switches automatically to the built-in battery. The replaceable battery can be removed and replaced in a matter of seconds. Then the riflescope switches to the replaceable battery without intermediate shutdown.



Over 500 m Nighttime Detection Range

Digex's combination of best-in-class nighttime sensitivity, HD-resolution display and sensor, rapid frame rate, high magnification power, wide selection of brightness and contrast settings, powerful built-in IR illuminator and long detection range (450 – 550 m) make it the perfect tool for detecting wildlife in low-light/no-light environments.



Software Sensitivity Enhancement Algorithm SumLight

SumLight function increases sensor sensitivity which allows passive observation (without IR) in low light conditions and at night. The software automatically activates algorithms (such as summing adjacent pixel signals, frame addition), thus increasing sensitivity while preserving good image quality.

Over 10 Different Reticle Types in Various Color Options

Digex riflescopes are equipped with ten reticle options in nine colors for a customized shooting experience. Options include scalable and standard ballistic and shot-type reticles.





**STREAM
VISION**



Available on the
App Store

ANDROID APP ON
Google play

Remote Firmware Update

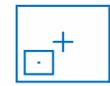
A smartphone or tablet, free Stream Vision app and internet access are all one needs to check updates and install the latest firmware. Firmware updates equip the device with the latest features and functions without the need of sending it to a support center.



Stream Vision App. Remote Review, operation and live YouTube streaming Using Smartphone



More Features:



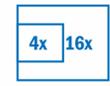
Picture-in-Picture Mode



**Operating Temperatures
-25°C to +50°C**



**5 Individual Shooting Profiles /
50 Zeroing Distances**



4x-16x Variable Magnification



Stadiametric Rangefinder



**High Caliber Recoil Resistance:
12 Gauge., 9.3x64, .375H&H**



Side Incline Indication



Customizable Automatic Shut-Down



Scalable Ballistic Reticles



**Instant Start-up
(3 sec)**



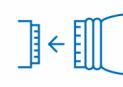
**Accurate Zoom Zeroing
(click value less than 0,1 MOA)**



**Wide-angle Eyepiece
(29.5°)**



Enhanced Nighttime Sensitivity



Removable Eye Cup with Magnet Fixing

	Model	N450	N455
TECHNICAL SPECIFICATIONS	SKU	76641	76642
	Sensor type / resolution, pixels	HD CMOS 1280x720	
	Display type / resolution, pixels	AMOLED 1024x768	
	Magnification, x	4 - 16	
	Field of view (horizontal), °	6.5 (at 4x)	
	IR illuminator, type / wavelength, nm	850 (long-range)	940 (invisible)
	Detection range, m	550	500
	Dimensions, mm	388 x 78 x 78	
	Weight, kg	0.95	



DIGITAL
NIGHT VISION

⚡ **Enhanced Nighttime Sensitivity**

The Digsight Ultra uses proprietary software, cutting-edge electronic components and signal-processing algorithms to deliver one of the industry's highest values of sensitivity in infrared spectrum (nighttime sensitivity). The result is a device offering flawless passive-mode performance in deep twilight, even night, without switching on IR illumination. High sensitivity in the range of 900-950 nm makes it possible to use Digsight Ultra riflescopes with invisible IR illuminators.

⚡ **Over 500 m Nighttime Viewing Range**

High nighttime sensitivity, high-resolution display and sensor, wide selection of brightness and contrast settings, robust magnification and a powerful IR illuminator combine to provide the perfect tool for hunting in complete darkness and detection of mid- to large-size predators and game animals at distances up to 450 – 550 meters.

DIGISIGHT ULTRA

Digital Night Vision Riflescopes

N450 / N450 LRF /
N455 / N455 LRF



Instant Start-Up

Digisight Ultra starts up within three seconds after ON button is pressed.



Picture in Picture Mode

Picture-in-Picture improves accuracy by providing a magnified image of the reticle area at the top of the display. With only 10% of the display area used by PiP, the field of view remains virtually unobstructed for simultaneous PiP and FOV viewing.



Scalable Ballistic Reticles

Like first focal plane reticles, Digisight Ultra reticles scale proportionally with device magnification changes. Reticle subtension values remain unchanged throughout the Digisight's full range of magnification, allowing for quick, easy ranging and adjusting at varying distances.



Variable Magnification from 4.5x to 18x

The Digisight Ultra features both optical magnification and 4x digital zoom ranging from 4.5x to 18x. The zoom changes in 2x steps or continuously for a truly optimum, customized field of view.



Integrated Video and Sound Recorder

Capturing still images and video is seamless with the Digisight Ultra's built-in video recorder. Image and video content is stored internally and can easily be transferred to PC/laptop via wired connection or wirelessly to your smartphone or tablet with the iOS and Android compatible Stream Vision App.



Wide-Angle Eyepiece

While complex in design, the Digisight Ultra's six-lens eyepiece increases your field of view by 20% over previous Digisight Ultra models. The eyepiece, combined with an HD AMOLED display, delivers a richly contrasted high-resolution image.



HD-Sensor

The highly sensitive CMOS sensor featuring 1280x720 HD resolution delivers a high definition image with precise detail rendering.



Digisight Ultra N450/N455 LRF. Integrated Laser Rangefinder

Extra precise shooting requires an exact knowing of distance. Integrated laser rangefinder allows to measure distance in single measuring mode and in scanning mode with precision up to ± 1 meter. In the conditions of changeable landscape, when shooting from high stands it is recommended to use THD (True Horizontal Distance) measuring mode – in this mode rangefinder, taking into account angle of shooter's elevation relative to a target (AoE; its value is also displayed on the screen) calculates true horizontal distance to an object.

— Digisight Ultra N450 / N455 models (without integrated laser rangefinder) feature a stadiametric rangefinder function



5 Individual Shooting Profiles / 50 Distances

Create up to five shooting profiles for multiple rifles and cartridges, with up to ten zeroing distances.



Accurate Zoom Zeroing

Digisight riflescopes can be zeroed at base magnification or while zoomed in on your target without worrying about reticle shift. Note: Windage and elevation click values decrease as zoom increases. At maximum magnification, adjustments are at 0.1 MOA.



High Caliber Recoil Resistance: 12 gauge., 9.3x64, .375H&H

Recoil rated for high-powered calibers such as 12-gauge, 9.3x64, .30-06, .300 and .375 H&H, as well as smooth-bore and airsoft systems.



Quick-Change Long-Life Rechargeable Battery Packs

Digisight Ultra uses an advanced self-contained autonomous B-Pack power supply system. The rechargeable battery IPS7 (6.4 Ah) fits into a special slot in the riflescope's body without protruding and delivers over 6 hrs. of operation from a single charge in the maximum consumption mode. High-powered IPS14 (13.2 Ah) battery packs also are available. Quick-release and wireless designs, as well as longer operating time are major IPS14 power system highlights.





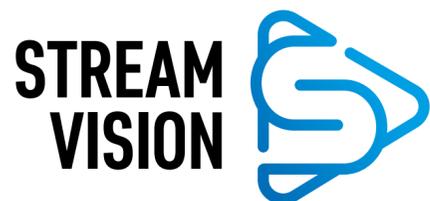
Additional Features:

- Powerful Long-range / Invisible IR Illuminator
- 10 Reticle Shapes in Various Color Options
- Extreme Operating Temperatures (-25°C to +50°C)
- Fully Waterproof IPX7
- Side Incline and Elevation Angle Sensor
- Stadiametric Rangefinder (except LRF models)
- Software Sensitivity Enhancement Algorithm SumLight
- Updatable Software



Stream Vision App. Remote Review, Operation and Live YouTube Streaming Using Smartphone

Using the free, high-tech, iOS and Android compatible Stream Vision app, the Digsight Ultra connects via Wi-Fi to allow transfer of images and video to smartphones and other wireless devices in real time, stream footage to YouTube and other online video platforms (depending on model), and even use your personal device as a wireless remote control.



Model	N450	N450 LRF	N455	N455 LRF
SKU	76617	76627	76618	76628
Sensor type / resolution, pixels	CMOS 1280x720			
Display type / resolution, pixels	AMOLED 1024x768			
Magnification, x	4.5 – 18			
Field of view (horizontal), °	6.2 (at 4.5x)			
IR illuminator, type / wavelength, nm	LED / 850 (long-range)		LED / 940 (invisible)	
Integrated laser rangefinder	no	yes	no	yes
Detection range, m	550		500	
Dimensions (without mount), mm	370 x 73 x 74	370 x 142 x 74	370 x 73 x 74	370 x 142 x 74
Weight (without mount), kg	0.97	1.1	0.97	1.1

TECHNICAL SPECIFICATIONS



NEW

Thermal Imaging Front Attachment

KRYPTON

Thermal Upgrade



Highly Sensitive 640x480/12 μ m Thermal Imaging Sensor

For image acquisition KRYPTON uses high quality 12 μ m VOx thermal imaging sensor with 640x480 pixel resolution that offers exceptionally crisp, contrast image and excellent thermal sensitivity in all weather conditions.



High Definition Image

Sharp, richly contrasted thermal imaging for enhanced identification of animals, their extremities and even the smallest details, i.e. branches, leaves, grass and terrain.



Quick-release Adaptor with Precise Screen Positioning Mechanism in the Field of View of Day Optics

The attachment docks with front quick-release PSP adaptor * mount and can be easily put on the riflescope and taken off. The mount allows to perform precise alignment of attachment's field of view with central point of riflescope's field of view in order to achieve the optimal viewing position.

* bought separately



Detection Range Exceeding 2000m

Powerful objective lens in combination with professional grade 12 μm sensor thermal imaging sensor provides exceptional detection capabilities. A standard 1,8m tall object can be detected at a 2300 m) distance in complete darkness.



Point-of-Impact Stability

Krypton allows shooters to focus on quick target acquisition and shot placement in low-light environments without stressful, complex adjustments by utilizing a sequential layout of optical and electronic components designed to provide precise sight alignment and ultra-easy adjustability. Attachment's design ensures stability of the point-of-impact when re-focusing the attachment at various distances.



Benefits of daylight optics in the nighttime

Krypton Attachment allows users to maintain the benefits of day optics in the nighttime. Advantages include: longer eye relief as compared to that in the night vision riflescopes, conventional shape of the aiming reticle, continuous zoom, quick conversion from day to thermal hunting mode, preserving shooting style.



⚡ **Shockproof Magnesium Alloy Housing**

Rugged and light-weight magnesium alloy housing is designed to withstand recoils of high caliber rifles. Increased structural rigidity reduces vibrations during the shot and leads to enhanced ballistics while properties of magnesium alloy help to ensure better heat dissipation.

⚡ **HD AMOLED Display**



Quality HD AMOLED display delivers crisp, richly contrasted, vivid image. AMOLED technology ensures flawless, fluid, high-resolution imaging and power saving.

⚡ **Recoil Rated up to .375 H&H, 12-Gauge and 9.3x64**

Recoil rated up to 6,000 joules for flawless performance on larger calibers up to .375 H&H, 12-gauge and 9.3x64.

⚡ **Long Operation Time**

Quick-change rechargeable battery packs provide enough power for non-stop operation up to 8 hours. On one battery pack the unit can run the whole night without the need to be replaced. Any ordinary power bank connected via Micro USB can be used as external power supply.

⚡ **Wide Range of Operating Temperatures (-25 to +50°C)**

Housing, power unit, optics and electronics of Krypton are designed with regard to applications in wide range of temperatures.

Krypton ensures reliable and effective performance in freezing cold up to -25°C.

⚡ **IPX7**

IPX7 Waterproof Rated

IPX7 waterproof-rated for protection from heavy rainfall, snow or other precipitation. KRYPTON is designed to run flawlessly, even after submersion in up to 3 feet of water for up to 30 minutes.



⚡ Built-in Photo and Video Recorder with 16 GB Memory

The Built-in video recorder is a great asset when it comes to filming or taking photos of once-in-a-lifetime experiences. One press of the REC button captures footage that can be shared easily with colleagues, friends and family. 16 Gb of internal memory provide many hours of recorded video and tons of photos. Recorded files can be later downloaded to PC or smartphone.

⚡ Software Evolution Support

A smartphone, free mobile application Stream Vision and Internet access is all one needs to check updates and to install new firmware. This allows a hunter to receive new features for Krypton he/she already owns.

⚡ Wi-Fi. Integration with IOS and Android devices with the help of free Stream Vision app

Built in Wi-Fi module provides connectivity of Krypton FXG50 attachment with Android or iOS smartphones and tablets with the help of free Stream Vision application. In combination with smartphone thermal imager offers a set of unique features such as live image streaming to smartphone, motion detection, transfer and sharing of multimedia files, firmware update, remote control of unit's settings and many other.



⚡ Krypton XG as Observation Device

The Krypton XG50 is a modular thermal imaging monocular consisting of a thermal imaging unit and a Pulsar 5x30B quick-release daylight monocular used as an eyepiece. With just one turn the hunter is able to release a fully-featured monocular of 5x magnification for natural daytime observation.

TECHNICAL SPECIFICATIONS	Model	FXG50	XG50
	SKU	76655	77375
	Objective lens	F50/1.2	
	Microbolometer resolution, pixels @ pixel pitch, μm	640x480 @ 12	
	Display, type & resolution, pixels	AMOLED 1746x1000	
	Magnification, x	-	5
	Field of view, °	8.7	8.7
	Range of detection, m	2300	
	Recommended magnification of the day scope / sight, x	1.5 – 6	-
	Power supply, V / Battery type	3.0 – 4.3 / IPS Battery Pack	
Dimensions, mm	143 x 93 x 76	260 x 93 x 76	

CORE

Thermal Imaging Monoculars & Front Attachments

FXQ50 BW / FXQ55 BW

⚡ Point-of-Impact Stability

The Core's precision build quality, cutting-edge design and advanced software deliver reliable, repeatable point-of-impact stability without requiring any windage or elevation adjustments from the day optic.

⚡ Compatible with Various Day Optics

The Core is designed to turn most traditional rifle scopes, with objective lens diameters of 40 mm – 56 mm, into thermal imaging devices without effecting point-of-impact. Attach and detach the Core in seconds, without losing zero, using the Core's quick-release bayonet mount.

⚡ Quick Transformation

Core FXQ50 includes a detachable eyepiece for lightning-quick transitions from thermal riflescope attachment to monocular. Mount and dismount the Core without losing zero!

⚡ Core as an Alternative to Thermal Riflescopes

With minimal effect to the overall balance of your rifle, the compact, lightweight Core attaches to the front of your riflescope to add thermal imaging capability. The advantage of a Core Front Attachment is the ability to quickly, repeatedly mount and dismount the Core without losing zero or adjusting your shooting position.

⚡ Nighttime Shooting Advantages

Using the Core Front Attachment includes several benefits over night hunting with traditional optics or even thermal or night vision devices. Attaching the Core to a traditional scope delivers the same creature comforts of shooting with day optics you are accustomed to, including your existing reticle and eye relief. The Core Front Attachment even allows you to continue utilizing your riflescope's variable magnification.



⚡ External Power Supply

The Core FXQ includes a universal power adapter. Operation time can be significantly prolonged by using high-capacity external power supply units, which can be attached via a weather-resistant micro-USB port and DC 2.1 x 5.5 mm.

⚡ Wide Range of Operating Temperatures

With a frost-resistant AMOLED display, the Core Thermal Imaging Scope is designed to deliver flawless performance at an extreme temperature range of -25°C to +50°C.

⚡ Fully Waterproof

IPX7 waterproof-rated protection ensures the Core Front Attachment performs perfectly in wet weather, even during intense rain, snowfall and submersion in 1 meter of water for up to 30 minutes (IEC 60529).

⚡ Wireless Remote Control

An ergonomic, wireless remote control puts basic Core controls at your fingertips for comfortable, convenient, hands-off operation.

⚡ Core FXQ55BW as Observation Device

The Pulsar 5x30 Monocular (#71011) included in the package can be attached to the Core FXQ35/55 thermal module and used as a 5x power thermal imaging scope. Along with this, the Pulsar 5x30 is a fully-functional daylight observation device.

⚡ Calibration

The Core offers three calibration modes: Silent Manual (“M”), Automatic (“A”) and Semi-Automatic (“H”). “A” mode implies calibration without user participation (process initiation, actuation of the shutter takes place automatically). In “H” mode, the user determines if calibration is required based on image quality. If calibration is needed, the operator uses the “Cal” button. In “M” mode, manual calibration is accomplished by pressing the “Cal” button when the lens cap is closed. “M” mode is recommended for hunting due to silent operation.



⚡ Operating Modes

The Core features three operating modes: Rocks (enhanced contrast), Forest (low contrast) and Identification (improved rendering of heat signature details). Each mode optimizes imaging based on viewing conditions.

TECHNICAL SPECIFICATIONS	Model	FXQ50 BW	FXQ55 BW
	SKU	76459 BW	76372 BW
	Objective lens	F50/1.2	F50/1.2
	Microbolometer resolution, pixels @ pixel pitch, μm	384x288 @ 17	384x288 @ 17
	Frame rate, Hz	50	50
	Magnification in monocular mode / attachment mode, x	4.1 – 8.2 / -	5 / -
	Range of detection, m	1800	1800
	Recommended magnification of the day scope / sight, x	2 – 5	-
	Power supply, V / Battery type	6 / 2xCR123A	6 / 2xCR123A
	Dimensions, mm	190x65x60	315x70x65
Weight, without batteries, kg	0.4	0.58	

⚡ Nighttime Shooting Advantages

Using the Forward F Attachment includes several benefits over night hunting with traditional optics or even night vision devices. Attaching the Forward F to a traditional scope delivers the same creature comforts of shooting with day optics you are accustomed to, including your existing reticle and eye relief. The Forward F even allows you to continue utilizing your riflescope's variable magnification.

FORWARD

Digital NV Scopes & Front Attachments

F455 / FN455

⚡ Simple Mounting

To install the Forward F onto the front optical bell of a day telescopic sight or spotting scope, specially designed mounting assemblies (bought separately) are used. The assemblies are the adapters with various diameters with a set of reducing rings (the rings can be used as necessary depending on the diameter of the optical bell). The adapter is permanently attached to the optical bell of a telescopic sight. This allows the Forward F attachment to be quickly installed in front of the lens for nighttime shooting. When the attachment is not used, the adapter accommodates a protective cap that covers the lens of an optical sight in the daytime.



Point-of-Impact Stability

Forward F allows shooters to focus on quick target acquisition and shot placement in low-light environments without stressful, complex adjustments by utilizing a sequential layout of optical and electronic components designed to provide precise sight-alignment and ultra-easy adjustability.



External Power Supply

Forward F makes charging from external sources, such as power banks, fast and easy with a micro USB jack. The convenience of power-bank charging even enhances the ability to power up the Forward F during extremely cold weather while also protecting the source from rapid discharge.



Built-In Video Recorder

Capturing still images and video is seamless with the Forward F's built-in video recorder. Image and video content is stored internally and can easily be transferred to PC/laptop via wired connection or Wi-Fi.



High Shock Resistance

The Forward F features exceptionally high shock resistance, capable of handling high-powered firearm recoil, up to .375-cal., including smoothbore and airsoft.



HD-Sensor

The highly sensitive CMOS sensor featuring 1280x720 HD resolution delivers a high definition image with precise detail rendering.



B-Pack Power Supply

Forward F includes a progressive autonomous B-Pack power supply consisting of a quick-detach, rechargeable IPS7, 6.4 Ah battery pack designed to deliver over 7 hrs. of operation on maximum mode. Higher-powered IPS14 (13.2 Ah) Battery Pack is also optionally available. Quick-release and wireless design, long operating time are the major highlights of this power system.



Forward FN as Observation Device

The Pulsar 5x30 monocular (#71011) included in the package can be attached to the Forward FN digital module and used as a 5x power NV device. Along with this, the Pulsar 5x30 is a fully-functional observation device.



Stream Vision App. Remote Review, Operation and Live YouTube Streaming Using Smartphone

Using the free, high-tech, iOS and Android compatible Stream Vision app, the Forward connects via Wi-Fi to allow transfer of images and video to smartphones and other wireless devices in real time, stream footage to YouTube and other online video platforms (depending on model), and even use your personal device as a wireless remote control.



	Model	F455	FN455
	SKU	78186	78196
TECHNICAL SPECIFICATIONS	Sensor type / resolution, pixels	CMOS 1280x720	
	Objective lens	F50/1.0	
	Magnification, x	-	5
	Spectral sensitivity at a wavelength of 780 / 915 nm, mW	1.5·10 ⁻⁵ / 5.5·10 ⁻⁵	
	Field of view, °	6.3	
	Recommended magnification of the day sight / scope, x	2 – 8	-
	IR Illuminator type / wavelength, nm	LED / 940 (invisible)	
	Weight (with IPS7 battery pack), kg	0.83	1.03 (with Pulsar 5x30 scope)



 **Highly Sensitive Thermal Imaging Sensor**

An advanced NETD <math><40\text{ mK}</math> sensor produces precise detail recognition imaging even in adverse weather conditions like rain and fog. Even when thermal contrast is low, small temperature differences are clearly visible with richly contrasted, high-resolution imaging.

<math><40\text{mK}</math>^{NETD}

Thermal Imaging Monoculars
NEW HELION 2

The
NEXT LEVEL
OF THERMAL
SPOTTING

XQ38F / XQ50F / XP50

⚡ Image Boost Technology

Pulsar's proprietary Image Boost Technology is comprised of software algorithms designed to increase imaging clarity and overall image detail. Image Boost results in a sharper, more detailed field of view and enhanced object identification capabilities.

⚡ Observation Modes

Image optimization should be performed depending on the environmental location and conditions. Mountains, cities and forests have different ambient temperatures. In order to achieve the highest possible image quality, certain settings have been optimized and gathered into profiles. As a result, optimized imaging in various conditions is easier. Identification preset is another optimal-imaging option that makes identifying easier, even at longer distances.



Rocks Mode



Forest Mode



Identification Mode



User Mode

⚡ Detects up to 1800 m Away

Depending on model, the Helion is capable of detecting an average human-size target, dressed in outerwear, against a forest backdrop, at a range up to 1800 meters.



⚡ Mobile-Friendly with Remote Control and Live Internet Streaming

The free Stream Vision App, compatible with both Android and iOS systems, allows users to connect personal smartphones and tablets to Pulsar devices featuring onboard Wi-Fi. When connected, Stream Vision allows users to stream video and images in real time to YouTube, transfer files, update important firmware and control the optic remotely. For more information, refer to the Stream Vision section of our catalog.

STREAM VISION



⚡ IPX7 Fully Waterproof

IPX7 waterproof-rated protection ensures Helion Thermal Imaging Scopes perform perfectly in wet weather, even during intense rain, snowfall and submersion in 1 meter of water for up to 30 minutes (IEC 60529).



⚡ Updatable Software

For initial setup and additional updates, the iOS and Android compatible Stream Vision App ensures the most recent Helion software versions are available.



8 Custom Color Modes

In addition to user-favorite “white hot” and “black hot” imaging, Helion scopes offer a robust array of color palettes for true colorized temperature mapping. Transitioning from color to default “white hot” during operation is also fast and easy.

Wide Range of Operating Temperatures

With a frost-resistant AMOLED display, the Helion Thermal Imaging Scope is designed to deliver flawless performance at an extreme temperature range of -25°C to +50°C.

50 Hz High Image Frequency

At a high refresh rate of 50 Hz, the Helion provides comfortable viewing throughout dynamic, rapid motion.



Frost Resistant AMOLED Display



The device is designed for flawless operation in extreme weather and temperature conditions. Whether the environment is freezing cold or blistering hot, the image retains its contrast and vivid colors without loss of frame rate. The high-contrast, color AMOLED display uses top technology to ensure stable, high-quality imaging in virtually any weather conditions.



Built-In Photo and Video Recorder



Capturing still images and video is seamless with the Helion's built-in video recorder. Image and video content is stored internally and can easily be transferred to PC/laptop via wired connection or wirelessly to your smartphone or tablet with the iOS and Android compatible Stream Vision App.



Stadiametric Rangefinder

Based on estimated heights of observed objects, the stadiametric rangefinding reticle makes determining precise distances fast, easy, reliable and repeatable.



B-Pack Power Supply

Helion includes a progressive autonomous B-Pack power supply consisting of a quick-detach, rechargeable IPS7, 6.4 Ah battery pack designed to deliver over 10 hrs. of operation on maximum mode. Higher-powered IPS14 battery packs, as well as AA battery cases, also are available and provide a perfect off-the-grid power solution.



Variable Magnification

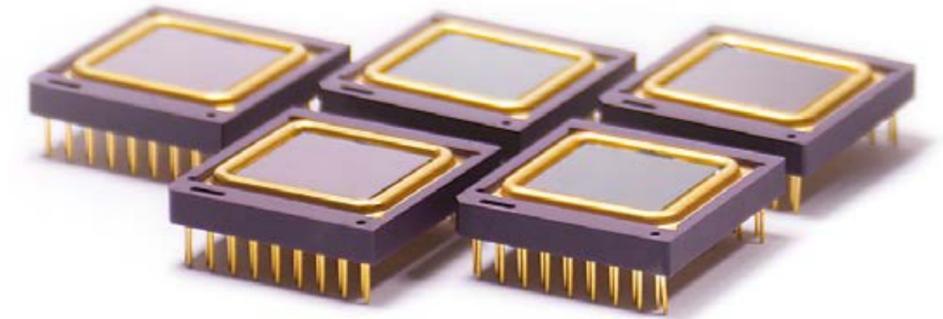
Helion models include variable magnification, up to 8x depending on model, and feature both 2x step-up and smooth, graduated magnification for a truly optimum, customized field of view.



High Resolution

The Helion XP boasts an uncooled, 640x480px micro-bolometric matrix, at 17 μm , for highly detailed imaging.

640x480



Model	XQ38F	XQ50F	XP50
SKU	77396	77397	77402
Microbolometer, resolution, pixels @ pixel pitch, μm	384x288 @ 17		640x480 @ 17
Display, type / resolution, pixels	AMOLED 1024x768		AMOLED 640x480
Objective lens	F38/1.2	F50/1.2	
Magnification, x	3.5 - 14	4.5 - 18	2.5 - 20
Field of view (horizontal), $^{\circ}$	9.8	7.5	12.4
Range of detection, m	1350	1800	
Operating temperature, $^{\circ}\text{C}$	-25 to +50		
Dimensions, mm	226 x 55 x 58	234 x 55 x 58	
Weight, kg	0.45	0.5	

TECHNICAL SPECIFICATIONS



< 40^{NETD} mK

Thermal Imaging Monoculars
NEW AXION XQ

The
NEXT LEVEL
OF THERMAL
SPOTTING

XQ38 / LRF XQ38

⚡ Built-In Precision Laser Rangefinder

Integrated, precision laser rangefinder provides accurate ranging in two modes – Single Time Measurement and Scanning mode with ± 1 m accuracy up to 1 km distance. Accurate distance readings help to quickly assess the size of territory, distance and relief.



AXION XQ LRF

Thermal Imaging Monoculars **Axion**

⚡ Highly Sensitive Thermal Imaging Sensor

The Axion XQ's 384x288 @ 17 μ thermal imaging sensor with NETD <40 mK ensures perfect detail recognition even in the hardest weather conditions when thermal contrast is low. The smallest temperature differences will be clearly visible during the rainfall, fog or cold mornings in the most difficult conditions for thermal imager.

⚡ Long Detection Range

A powerful objective lens combined with a 17 μ m professional-grade thermal imaging sensor provides exceptional detection capabilities. A standard 1.8 m tall object can be detected up to 1350 m away in complete darkness.

⚡ Observation Modes

Image optimization should be performed depending on the environmental location and conditions. Mountains, cities and forests have different ambient temperatures. In order to achieve the highest possible image quality, certain settings have been optimized and gathered into profiles. As a result, optimized imaging in various conditions is easier. Identification preset is another optimal-imaging option that makes identifying easier, even at longer distances.

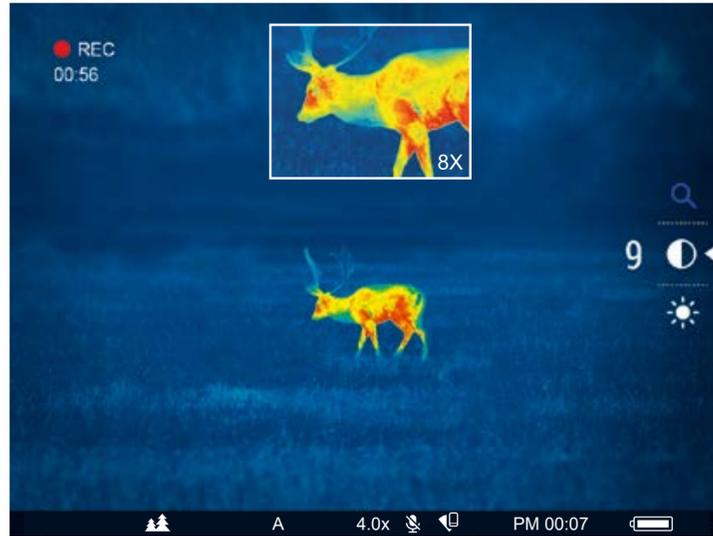
⚡ Image Boost Technology

Pulsar's proprietary Image Boost Technology is comprised of software algorithms designed to increase imaging clarity and overall image detail. Image Boost results in a sharper, more detailed field of view and enhanced object identification capabilities.

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Picture in Picture Function



Upon activation Picture in Picture function displays second small image with magnification in the top part of the screen. Small image helps to zoom in on a target while retaining the rest of the field of view visible.



Color Palettes

The 8-color palette enhances viewing in varying conditions. While the classic White Hot mode is exceptionally versatile, Hot Black is often favored for detecting wildlife at night. Red Monochrome helps to reduce or prevent bright backlight from exiting the eyepiece. Sepia often improves long-range observation while Red Hot, Rainbow and Ultramarine enhance temperature differences of various object attributes. Violet helps to identify objects faster.



B-Pack Mini Power System

Miniature power elements used in Axion models provide sufficient operation time and can be quickly replaced. B-Pack mini batteries can be quickly charged either with included charger station or in the unit connected to USB.



Video and Still-Photo Recording

The Built-in video recorder is a great asset when it comes to filming or taking photos of once-in-a-lifetime experiences. One press of the REC button captures footage that can be shared easily with colleagues, friends and family. 16 GB of internal memory provide many hours of recorded video and tons of photos.



Instant Start-up

Thanks to revolutionary electronics, the Axion can be powered up almost instantly. Quick start-up increases battery life and prolongs overall operation time. With instant start-up capability, the unit can be powered rapidly activated when seconds count.



IPX7 Waterproof Rated

IPX7 waterproof-rated for protection from heavy rainfall, snow or other precipitation. The Axion is designed to run flawlessly, even after submersion in up to 1 meter of water for up to 30 minutes.



HD AMOLED Microdisplay

New HD display delivers crisp, richly contrasted, vividly colored field of view, AMOLED technology ensures flawless, fluid, high-resolution imaging and power saving.



Stream Vision App Supported

Built in Wi-Fi module provides connectivity of Axion with Android or iOS smartphones or tablets. The smartphone and thermal imager combination offers a set of unique features such as direct image streaming, downloading and sharing recorded files, firmware update capabilities and many others.



 **PULSAR**
IMAGE QUALITY

THERMAL
IMAGING

AXION

XM30S / KEY XM22 / KEY XM30

Thermal Imaging Monoculars





**AXION XM30S.
High Optic Magnification**

Axion XM30S offers the highest magnification in the class of compact thermal imagers. Considerable optic magnification can be increased by means of digital zoom to provide the best identification of observed objects.

AXION XM30S Main Features

- 12 µm Thermal Imaging Sensor
- HD AMOLED Microdisplay
- Detection Range up to 1300 m
- Smooth Zoom from 4.5x to 18x
- Rugged Magnesium Alloy Housing
- Four-second Start-up Time
- Video and Still-Photo Recording
- Preset Viewing Modes
- WiFi. Integration with iOS and Android Devices
- IPX7 Waterproof Rated
- B-Pack Mini Power System
- Operating Temperatures -25 °C to +40 °C
- Remote Firmware Update
- Compact & Lightweight

AXION KEY XM22 / KEY XM30. Light Weight

Small weight becomes important when outdoor trip is long and each piece of equipment adds to a total load that has to be carried on the back. Axion XM weighs around 250 grams not more than a regular rangefinder unit but offers far more significant capabilities.

AXION KEY XM22 / KEY XM30 Main Features

- 12 µm Thermal Imaging Sensor
- Rugged Magnesium Alloy Housing
- Compact & Lightweight
- Easy in Operation
- Preset Viewing Modes
- Color Palettes
- IPX7 Waterproof Rated
- B-Pack Mini Power System

Model	XQ38	LRF XQ38	XM30S	KEY XM22	KEY XM30
SKU	77422	77428	77423	77424	77425
Microbolometer, resolution, pixels @ pixel pitch, µm	384x288 @ 17		320x240 @ 12		
Display, type / resolution, pixels	AMOLED 1024x768			LCOS / 960x720	
Objective lens	F38/1.2		F30/1.2	F22/1.2	F30/1.2
Magnification, x	3.5 – 14		4.5 – 18	2 – 8	2.5 – 10
Range of detection, m	1350		1300	950	1300
Built-in video & sound recorder	yes	no	yes	no	no
Stream Vision compatibility	yes	no	yes	no	no
Integrated laser rangefinder	no	yes	no	no	no
Operating temperature, °C	-25 to +40			-10 to +40	
Weight, kg	0.35	0.45	0.25	0.23	0.25

NEW

Thermal Imaging Binoculars

ACCOLADE

2

LRF

The
**NEXT LEVEL OF
THERMAL IMAGING**



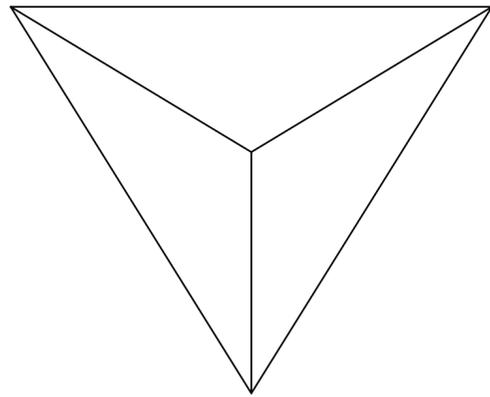
< **40**^{NETD} **mK**



Highly Sensitive Thermal Imaging Sensor

An advanced NETD <40 mK sensor produces precise detail recognition imaging even in adverse weather conditions like rain and fog. Even when thermal contrast is low, small temperature differences are clearly visible with richly contrasted, high-resolution imaging.

XP50



⚡ Image Boost Technology

Pulsar's proprietary Image Boost Technology is comprised of software algorithms designed to increase imaging clarity and overall image detail. Image Boost results in a sharper, more detailed field of view and enhanced object identification capabilities.

⚡ Long Detection Range

Detecting objects at long distances is an important feature for optics users in outdoor environments. Optic quality and the best thermal imaging sensor available make a unique combination designed to deliver the longest detection range possible.

⚡ Built-in Precise Laser Rangefinder

Integrated, precision laser rangefinder provides accurate rangefinding in two modes – Single Time Measurement and Scanning mode with ± 1 m accuracy up to 1 km distance. Accurate distance readings help to quickly assess the size of territory, distance and relief.

⚡ Comfortable for Long Observation

The dual eyepiece configuration reduces eye fatigue during longer viewing and enhances the natural look of objects. The human brain is pre-conditioned to receive visual information from two channels simultaneously. The brain then combines the information into a single image. When one eye is used to observe, the brain only receives information a single input. The increased effort from the brain to override the standard algorithm of visual perception can quickly lead to the observer feeling fatigued and uncomfortable.



⚡ Fully Waterproof

Rain, snow, fog, high waves or waterways, the IPX7 waterproof rating ensures the device won't fail in even the toughest wet weather conditions. The IPX7 rating means the device has been manufactured and rigorously tested to withstand extreme natural weather conditions, even submersion to a depth of 1 meter for up to 30 minutes.



640x480 High Definition Image

Sharp, richly contrasted thermal imaging for enhanced identification of animals, their extremities and even the smallest details, i.e. branches, leaves, grass and terrain.



⚡ 50 Hz High Image Frequency

At a high refresh rate of 50 Hz, the Accolade provides comfortable viewing throughout dynamic, rapid motion.

⚡ Smooth and Incremental Digital Zoom

Incremental zoom is a perfect solution to quick, on-the-fly zooming. When time is not a limiting factor but slight details are, the device's smooth zoom is the better option.



Variable Interpupillary Distance

The ability to adjust the distance between eyepieces allows the user to best position the optic for individual needs. Interpupillary distance differs from person to person. Adjusting for individual fit dramatically improves viewing comfort and quality, and eliminates the potential for double-imaging.

Calibration Modes (Non-Uniformity Correction)

A thermal imaging sensor requires calibration or non-uniformity correction (NUC) from time to time. Calibrating reduces or eliminates remaining redundant signals and improves overall image quality. Accolade offers 3 modes of calibration: Automatic, Semi-automatic and Manual. In Automatic mode, the shutter closes and calibration is performed automatically within defined time intervals and without user participation. In Semi-automatic mode the shutter closes and calibration is done only when the user presses the calibration button. In Manual mode, also called “silent”, the shutter remains open but the user has to close the objective cap and press the calibration button.

Quick-Change Long-Life Rechargeable Batteries

Long-life rechargeable IPS7 batteries provide up to 9 hours of continuous operation. Innovative battery-release mechanism ensures fast, flawless battery replacement.





Observation Modes

Image optimization should be performed depending on the environmental location and conditions. Mountains, cities and forests have different ambient temperatures. In order to achieve the highest possible image quality, certain settings have been optimized and gathered into profiles. As a result, optimized imaging in various conditions is easier. Identification preset is another optimal-imaging option that makes identifying easier, even at longer distances.

Built-in Photo and Video Recorder

The Built-in video recorder is a great asset when it comes to filming or taking photos of once-in-a-lifetime experiences. One press of the REC button captures footage that can be shared easily with colleagues, friends and family.

Built-In Wi-Fi Module

Observation devices are no longer just optics. Today's devices are increasingly designed to meet multi-tasking requirements dictated by a wider array of scenarios. Turning the unit into a hot spot, complete with ability to connect directly to a smartphone or tablet, increases and enhances features, including the ability to control the device remotely.

Wi-Fi Video Transmission

Broadcasting a video signal directly to a smartphone or tablet makes remote observation significantly easier. When two people are in the field, both can see the image – one on the device's display, the other on their smartphone or tablet screen. When a situation requires covert operation, the observer does not have to hold the unit by hand. Depending on the situation, viewing from a tablet or smartphone may be safer or more convenient.

Live Internet Video Sharing

Connecting the device with a smartphone or tablet allows a user to access the internet and live-stream video directly to YouTube.

STREAM VISION 

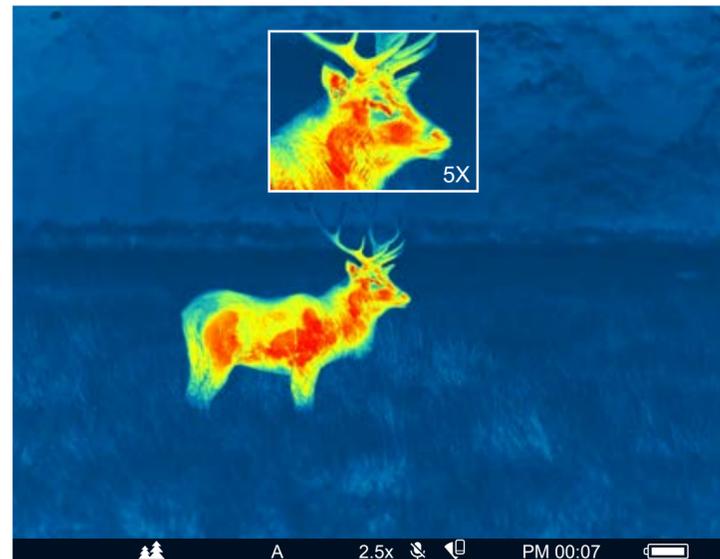
Available on the  **App Store**  **Google play**

⚡ Frost Resistant AMOLED Display



The device is designed for flawless operation in extreme weather and temperature conditions. Whether the environment is freezing cold or blistering hot, the image retains its contrast and vivid colors without loss of frame rate. The high-contrast, color AMOLED display uses top technology to ensure stable, high-quality imaging in virtually any weather conditions.

⚡ Picture in Picture Function



Picture-in-picture displays a magnified image at the top-center 10% of the overall field of view for precise zooming on an object of interest.

⚡ 8 Custom Color Modes



The 8-color palette enhances viewing in varying conditions. While the classic White Hot mode is exceptionally versatile, Hot Black is often favored for detecting wildlife at night. Red Monochrome helps to reduce or prevent bright backlight from exiting the eyepiece. Sepia often improves long-range observation while Red Hot, Rainbow and Ultramarine enhance temperature differences of various object attributes. Violet helps to identify objects faster.



	Model	2 LRF XP50
TECHNICAL SPECIFICATIONS	SKU	77410
	Microbolometer, resolution, pixels @ pixel pitch, μm	640x480 @ 17
	Display, type / resolution, pixels	AMOLED 640x480
	Objective lens	F50/1.2
	Magnification, x	2.5 – 20
	Integrated laser rangefinder	yes
	Field of view, horizontal x vertical without zoom, $^{\circ}$	12.4 x 9.3
	Range of detection, m	1800
	Weight, kg	0.7



PULSAR
IMAGE QUALITY

ACCESSORIES

Thermal Imaging Lenses

Interchangeable objective lenses for Helion XP series.



79054 F38 Thermal Imaging Lens

F38/1.2. Provides magnification 1.9 - 15.2x and detection distance up to 1350 m. Quick bayonet mounting. Waterproof.



79055 F50 Thermal Imaging Lens

F50/1.2. Provides magnification 2.5 - 20x and detection distance up to 1800 m. Quick bayonet mounting. Waterproof.

Attachable Infrared Illuminators

Powerful interchangeable infrared flashlights for digital night vision riflescopes Digisight Ultra N450/N455, Digisight Ultra N450/N455 LRF, digital NV attachments Forward F455 with adjustable power and precise setting of spot position in the field of view.



79135 Pulsar Ultra-X850

LED 850 nm. Long range.

79136 Pulsar Ultra-X940

LED 940 nm. Invisible range.

External Infrared Illuminators



79071 Pulsar-805

LED 805 nm. Effective use with NV devices of all types.

79076 Pulsar - 940

LED 940 nm (invisible). For the use with digital NV devices.

Interchangeable infrared illuminators for Digex digital night vision riflescopes. Smooth power adjustment. Adjustable IR spot position. Mounting diameter 30 mm.



79077 Pulsar Digex-X850

LED 850 nm. Long range.

79078 Pulsar Digex-X940

LED 940 nm. Invisible range.

Pulsar Riflescopes Rifle Mounts

The mounting holes in the base of Pulsar riflescopes enables the mount to be installed in multiple positions for a customized fit and improved eye relief.



79045 Weaver Rifle Mount

Designated for installation on riflescopes utilizing Weaver or Picatinny rails. Total length 173 mm. Length of mounting part 112 mm. Distance between the centers of locking screws 87 mm.



79046 MAK Adapter

Enables installation compatibility with monoblock MAK mounts (MAK Milmont, MAK Flex and others).



79047 Prism 14/200 Rifle Mount

Enables installation compatibility with monoblock MAK mounts (MAK Milmont, MAK Flex and others).



79048 Los/Dovetail Rifle Mount

Allows installation of riflescopes on carbines "Los 7-1", "Los 4", "Bars 4-1" and other weapons manufactured in Russia and Europe, that have upper mount "dovetail".

Pulsar Riflescopes Rifle Mounts

The mounting holes in the base of Pulsar riflescopes enables the mount to be installed in multiple positions for a customized fit and improved eye relief.



79177 Weaver SQD Rifle Mount

Secure quick-release mount with additional locking screws for installation on riflescopes utilizing Weaver or Picatinny rails. Total length 204 mm. Length of mounting part 145 mm. Distance between the centers of locking screws 120 mm.



79129 CZ550 Rifle Mount

Quick-release mount. Allows the installation of a device on a CZ-550 carbine.

DN / FN Cover Ring Adapters

Cover ring adapters enable installation of Forward F / Core FXQ attachments in front of traditional optics (riflescopes, spotting scopes and binoculars). Adapters are supplied with a set of insert rings (choice of appropriate rings is determined by the outer diameter dimension of the day optic's objective housing). Once installed, the ring adapter remains on the day optic's bell for quick installation and removal of Forward F / Core FXQ devices. When Forward F / Core FXQ device is not in use the attached adapter also holds an included lens cover to protect your day optics.



79124 DN 42 mm Cover Ring Adapter

2-point quick bayonet mounting. Compatible with a wide range of day optics with the 40 - 42 mm objective lens. 45.5 mm, 46 mm, 46.5 mm, 47 mm, 48 mm, 49 mm, 50 mm insert rings included. For use with Core FXQ models.



79125 DN 50 mm Cover Ring Adapter

2-point quick bayonet mounting. Compatible with a wide range of day optics with the 50 mm objective lens diameter. 51.6 mm, 53.4 mm, 55 mm, 56 mm, 57 mm, 58 mm, 59 mm insert rings included. For use with Core FXQ models.



79126 DN 56 mm Cover Ring Adapter

2-point quick bayonet mounting. Compatible with a wide range of day optics with the 56 mm objective lens diameter. 60 mm, 61 mm, 62 mm, 63 mm, 64 mm, 65 mm insert rings included. For use with Core FXQ models.



79127 FN 42 mm Cover Ring Adapter

4-point quick bayonet mounting. Compatible with a wide range of day optics with the 40 - 42 mm objective lens. 45.5 mm, 46 mm, 46.5 mm, 47 mm, 48 mm, 49 mm, 50 mm insert rings included. For use with Forward F models.



79128 FN 50 mm Cover Ring Adapter

4-point quick bayonet mounting. Compatible with a wide range of day optics with the 50 mm objective lens diameter. 51.6 mm, 53.4 mm, 55 mm, 56 mm, 57 mm, 58 mm, 59 mm insert rings included. For use with Forward F models.



79129 FN 56 mm Cover Ring Adapter

4-point quick bayonet mounting. Compatible with a wide range of day optics with the 56 mm objective lens diameter. 60 mm, 61 mm, 62 mm, 63 mm, 64 mm, 65 mm insert rings included. For use with Forward F models.

PSP Ring Adapters

PSP Ring Adapters enable installation of Krypton XG / FXG thermal devices in front of daylight optics (sights, spotting scopes and binoculars). Thermal imaging attachment mounted on daylight optics using a quick release PSP adapter can be removed and installed within seconds. The precise screen positioning mechanism enables the perfect alignment of the thermal or night vision image in the field of view of daylight optics for maximum viewing comfort.



79174 PSP-42 Ring Adapter

Compatible with a wide range of day optics with the 40 - 42 mm objective lens. 45.5 mm, 46 mm, 46.5 mm, 47 mm, 48 mm, 49 mm, 50 mm insert rings included.

79175 PSP-50 Ring Adapter

Compatible with a wide range of day optics with the 50 mm objective lens diameter. 51.6 mm, 53.4 mm, 55 mm, 56 mm, 57 mm, 58 mm, 59 mm insert rings included.

79176 PSP-56 Ring Adapter

Compatible with a wide range of day optics with the 56 mm objective lens diameter. 60 mm, 61 mm, 62 mm, 63 mm, 64 mm, 65 mm insert rings included.

APS Power Supplies

Interchangeable standard power supplies for Axion, Thermion and Digex.



79162 Battery Pack APS 2

Capacity 2 A·h.
Compatible with Thermion / Digex / Digex IR illuminators.

79161 Battery Pack APS 3

Capacity 3.2 A·h.
Compatible with Axion XM / Thermion / Digex.

79181 Battery Pack APS 5

Capacity 4.8 A·h.
Compatible with Axion XQ.

79165 APS Battery Charger

Intended for charging the APS2 / APS3 battery packs.

79182 APS5 Battery Charger

Intended for charging the APS5 battery packs.

External Power Supplies

Compared to standard batteries, external power supplies feature greater capacity and dramatically increase operation times.



79110 Pulsar PB8I Power Bank

Capacity 8 A·h, Weaver mount, waterproof (IPX7), output voltage 5 V, battery level indicator.
Compatible with Thermion / Trail / Core (via Core External Power Adapter) / Axion XM / Helion / Accolade / Digex / Digisight Ultra.

IPS Power Supplies

Interchangeable standard power supplies for Trail / Helion / Accolade / Digisight Ultra.



79166 Battery Pack IPS 7

Capacity 6.4 A•h.
Operating time 10-13 h (with Helion).



79169 Battery Pack IPS 7A

Capacity 6.4 A•h.
Operating time 5-7 h.
Only for use with Digisight Ultra LRF.



79168 Battery Pack IPS 14

Capacity 12.8 A•h.
Operating time 21-26 h (with Helion).



79119 BPS 3xAA Battery Holder

Capacity 1.5 - 2 A•h (rechargeable batteries).
Operating time 2 - 3 h.
Not for use with Digisight Ultra / Forward F.



79164 IPS Battery Charger

Intended for charging the
IPS5 / IPS7 / IPS7A / IPS10 / IPS14 battery
packs.

Other Accessories



79163 Core External Power Adapter

The Core external power adapter is designed to power the thermal imaging devices of the Core series from external power sources such as power banks (i.a. Pulsar PB8I) or Pulsar EPS3I/EPS5 rechargeable batteries via MicroUSB and DC 2.1x5.5 mm. External power sources significantly prolong operation time of device compared to the time provided by standard batteries.



79032 NV Compact Head Mount

The NV Compact Head Mount allows hands-free operation of your night vision device and ensures stable positioning, even during rapid activity, i.e. pacing, running and abrupt movements. All head-mount adjustments, including the ability to raise your device 90 degrees and set your NV device in forward and backward positions, can be accomplished single-handed.



79081 Pulsar Neck Strap

Designed for use with Pulsar devices with ¼-inch tripod sockets, the Pulsar Neck Strap keeps your hands free and optic at the ready, and provides the peace-of-mind you want in case you lose your grip during operation. The neck strap is adjustable for more comfortable carry on the neck or shoulder.

79082 Pulsar Single-point neck strap

Strap for carrying optical devices having an eyelet for attaching the strap (Axion, Helion thermal imaging monoculars). A steel carabiner is used to fasten the strap to the device.

79152 Pulsar Flat Glass Mount

The Flat Glass Mount enables devices equipped with a ¼" tripod mount to be installed securely to flat surfaces, including automobile windows, glass, tile, polished metal, plastic, etc. The Flat Glass Mount can be mounted vertically or horizontally. The swiveling tripod head includes a quick-release plate with a standard ¼" mounting screw.



79155 Pulsar Tree Mount

Pulsar optics weighing under 1 kg are safe and secure, even when mounted on a tree. The Pulsar Tree Mount includes a swiveling tripod head with ¼-inch mounting screw, quick-release plate and a strap-attachment system, perfect for trees with a diameter under 50 cm.



79156 Pulsar Window Frame Mount

The Pulsar Window Frame mount enables quick, easy mounting of optics on outside surfaces, including PVC and standard windows. The Window Frame Mount includes a swiveling tripod head with ¼-inch mounting screw and a quick-release plate.



79154 Pulsar C-clamp Mount

Attached to your optic via a ¼-inch mounting screw and quick-release plate, the Pulsar C-clamp Mount enables tripod head convenience on less traditional surfaces like crossbars, beams, handrails, etc.



79151 Helion Flip-Up Phone Mount

Our Flip-Up Phone Mount allows your WiFi-connected smartphone to attach to the Helion as an outer display.



71013 Monocular Pulsar 5x30B

The Pulsar 5x30B monocular can be attached to the Krypton XG / FXG thermal unit and used as a 5x power thermal monocular. Along with this, the Pulsar 5x30B is a fully-functional daylight observation device.



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