





Stream Vision

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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.



STREAM YOUR DISCOVERIES

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.

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.





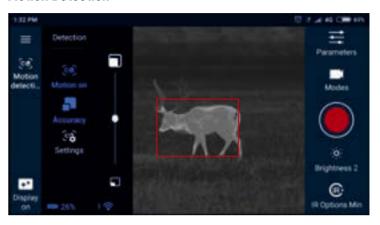


Ballistic Calculator



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.

Mohile 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.

No Ads

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

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.



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.



Thermal Imaging Riflescopes

New True Superiority





XM30 / XM38 / XM50 / XP38 / XP50

Mounts on Standard 30mm Scope Rings

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

Extreme Detection Range 2,500 Yds

High quality germanium optics coupled with an advanced thermal imaging sensor ensure an unprecedented detection range of up to 2,500 yards in, even in complete darkness.

B-Pack Mini Combined Power System

Thermion riflescopes have dual battery system which consists of two batteries internal and external. External battery ensures additional operation time and can be replaced in a matter of seconds.

Customizable Reticle Options

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

User Friendly Controls

Thermion operation and adjustments are simple using the 3 function buttons on the top of the device and left side encoder. The 3 buttons and encoder provide access and management of all device menu options, settings and system functions.



Video and Still-Photo Recording

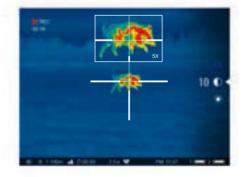
Integrated video (including recoil-activated) and still image recording in MPEG-4 and .jpg makes sharing the thermal action quick and easy. The onboard 16-GB internal memory handles recoil flawlessly and stores hours of video or thousands of photos.

Rugged, Reliable All-Metal Housing

Designed for rugged reliability, Thermion riflescopes boast full, reinforced yet lightweight metall construction. Precisionfabrication of housing elements ensures flawless field performance.

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.



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.

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.





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

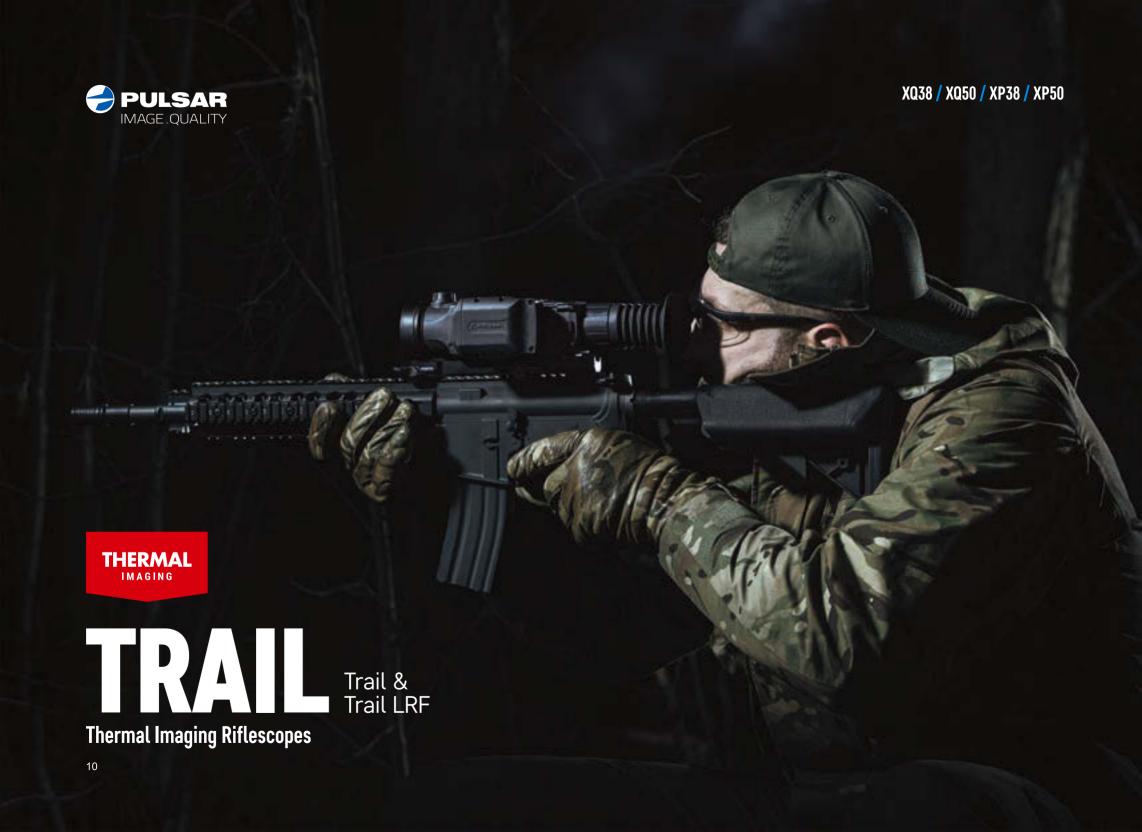
Recoil rated up to 6,000 joules for flawless performance on larger calibers up to .375 H&H, 12-gauge and 9.3x64.

IPX7 Waterproof Rated

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



SKU	76524	76525	76526	76542	76543
Model	XM30	XM38	XM50	XP38	XP50
Microbolometer, resolution, pixels @ pixel pitch, μm	320x240 @ 12	320x240 @ 12	320x240 @ 12	640x480 @ 17	640x480 @ 17
Display, type / resolution, pixels	AMOLED 1024x768				
Objective lens	F30/1.25	F38/1.2	F50/1.2	F38/1.2	F50/1.2
Frame rate, Hz	50	50	50	50	50
Magnification, x	3.5 - 14	4 – 16	5.5 – 22	1.5 - 12	2 - 16
Range of detection, yds	1450	1850	2500	1500	2000
Windage & Elevation, 1 click , mm@100m	12	10	7	28	21
Operating Temperature, °F	- 13 ÷ +122	- 13 ÷ +122	- 13 ÷ +122	- 13 ÷ +122	- 13 ÷ +122
Weight, oz	26.45	26.45	31.7	26.45	31.7



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 yd, up to 1000 yds.

High Resolution

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

Fully Waterproof

IPX7 waterproof-rated protection ensures the Trail performs perfectly in wet weather, even during intense rain, snowfall and submersion in 3 ft. 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.





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

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

Detects up to 2000 Yards Away

Depending on model, Trail thermal imaging riflescopes detect big-game-size heat signatures up to 2000 yds away.



4

B-Pack Power Suply

Trail includes a progressive autonomous B-Pack power supply consisting of a quick-detach, rechargeable IPS5, 5 A-h battery pack designed to deliver over 8 hrs. of operation on maximum mode. Higher-powered IPS7, IPS10 and IPS14 battery packs, as well as AA battery cases, also are available and provide a perfect off-the-grid power solution.

4

Wireless Remote Control

The ergonomic, wireless remote control, with encoder wheel, puts the full range of the Trail's capabilities at your fingertips for comfortable, convenient, hands-off operation.

4

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.

1

Effective Temperature Sensor Stabilization

A heat sink, located on the device's body, effectively prevents heat build-up from the sensor and other components while also significantly reducing temperature and noise sensitivity, especially between calibrations.

4

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.

50Hz

4

High Image Frequency

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

-13°F

4

Wide Range of Operating Temperatures

With a frost-resistant AMOLED display, the Trail thermal imaging riflescopes are designed to deliver flawless performance at an extreme temperature range of -13°F – 122°F.



Updatable Software

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

3 Zeroing Profiles / 15 Distances

Save three individual firearm/ammunition zeroing profiles, including different reticles, at up to five distances, in the Trail's memory. Zoom zeroing support ensures precise zeroing accuracy.



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.



Stadiametric Rangefinder

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

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.

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.

SKU	76501	76516	76503	76518	76507	76517	76509	76519
Model	XQ38	LRF XQ38	XQ50	LRF XQ50	XP38	LRF XP38	XP50	LRF XP50
Microbolometer, resolution, pixels @ pixel pitch, μm	384x288@17	384x288@17	384x288@17	384x288@17	640x480@17	640x480@17	640x480@17	640x480@17
Objective lens	F38/1.2	F38/1.2	F50/1.2	F50/1.2	F38/1.2	F38/1.2	F50/1.2	F50/1.2
Frame rate, Hz	50	50	50	50	50	50	50	50
Magnification, x	2.1 - 8.4	2.1 - 8.4	2.7 -10.8	2.7 -10.8	1.2 - 9.6	1.2 - 9.6	1.6 - 12.8	1.6 - 12.8
Field of view, horizontal & vertical without zoom, deg	9.8x7.4	9.8x7.4	7.5x5.6	7.5x5.6	16.3x12.3	16.3x12.3	12.4x9.3	12.4x9.3
Integrated Laser Rangefinder	no	yes	no	yes	no	yes	no	yes
Range of detection, yds	1500	1500	2000	2000	1500	1500	2000	2000
Weight (without mount), oz	18.3	21.9	19.7	23.3	21.1	24.7	21.8	25.4





Picture-in-Picture Function

Picture-in-Picture improves accuracy by providing a 2x 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.



External Power Supply

The Core RXQ30V 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.



Operating Modes

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



High Shock Resistance

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

One-Shot Zeroing with "Freeze" Function

While one-shot zeroing is a standard on all Pulsar digital riflescopes, the Core adds an additional "Freeze" feature. After the initial zeroing shot, a freeze-frame of the display can be used to align the reticle with the point of impact without requiring the firearm to remain still.

4

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.



3 Types of Zeroing Parameters Memorization

Save three individual firearm/ammunition zeroing profiles, including different reticles, at up to three distances, in the Core's memory.



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 and applications stored in the Core RXQ's internal memory.

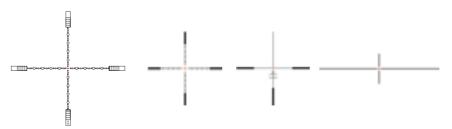


With a frost-resistant AMOLED display, the Core Thermal Imaging Scope is designed to deliver flawless performance at an extreme temperature range of -13° - 122°F.



Wireless Remote Control

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



SKU	76483
Model	RXQ30V
Microbolometer, resolution, pixels @ pixel pitch, μm	384x288(
Objective lens	F30/1.6
Frame rate, Hz	50
Magnification, x	1.6-6.4
Field of view, horizontal & vertical without zoom, deg	12.4x9.3
Range of detection, yds	1000
Dimensions, in	9.2x2.6x2
Weight (without mount), oz	11.3





Core: An Alternative to Thermal Riflescopes

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

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.

Thermal Imaging Monoculars & Front Attachments



Point-of-Impact Stability

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

Quick Transformation

Core FXQ38 and FXQ50 devices include a detachable eyepiece for lightning-quick transitions from thermal riflescope attachment to monocular. Mount and dismount the Core without losing zero!



Operating Modes

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

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 -13°F - 122°F.



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 pointof-impact. Attach and detach the Core in seconds, without losing zero, using the Core's quick-release bayonet mount



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.

	SKU	76453	76459
S	Model	FXQ38	FXQ50
T 1 0	Objective lens	F38/1.2	F50/1.2
: I C A	Microbolometer resolution, pixels @ pixel pitch, $\boldsymbol{\mu}$	384x288 @ 17	384x288 @ 17
ECIF	Frame rate, Hz	50	50
SPE	Magnification in monocular mode / attachment mode, x	3.1 - 6.2 / -	4.1 - 8.2 / -
AL	Range of detection, yds	1500	2000
NIC	Recommended magnification of the day scope / sight, x	1 - 3	2 - 5
СН	Power supply, V / Battery type	6 / 2xCR123A	6 / 2xCR123A
TE	Dimensions, in	7.3x2.6x2.4	7.5x2.6x2.4
	Weight, without batteries, oz	11.2	14.1



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.



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



Thermal Imaging Monoculars

New

AXION

Adventure in the world of Darkness

Designed to fit perfectly in one hand or in a standard-size pocket, Axion ensures comfortable grip and handling, as well as easy carrying. The compact design also makes Axion the perfect thermal imaging monocular for scouting and spotting.





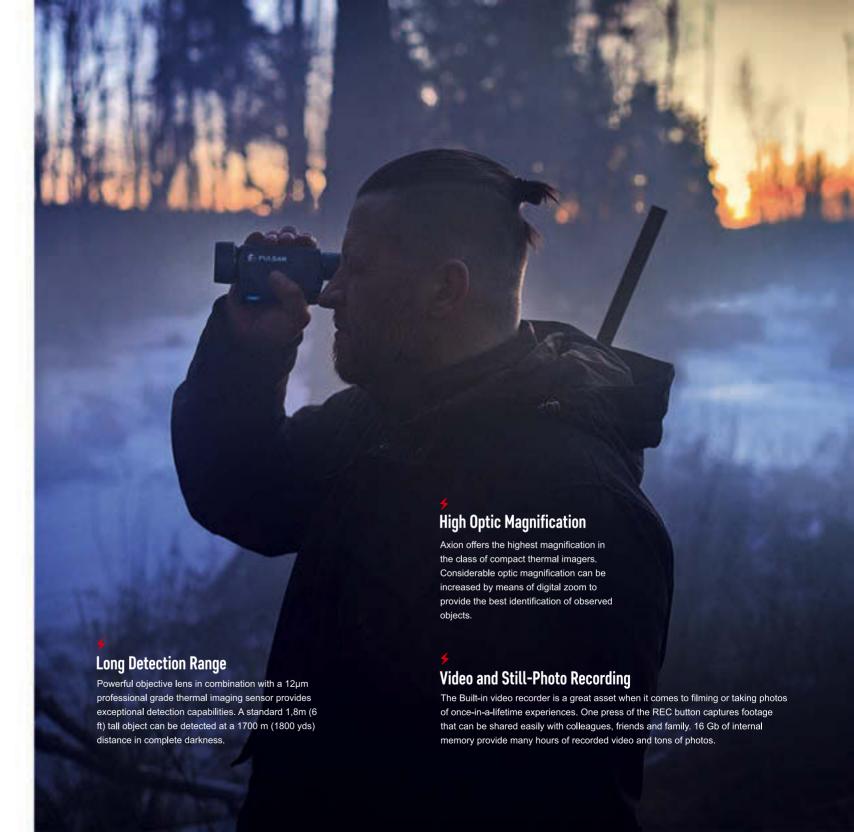
XM30 / XM38 / KEY XM23 / KEY XM30



Stream Vision App Supported

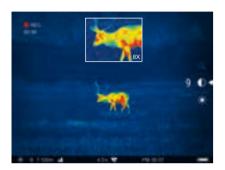
Built in Wi-Fi module provides connectivity of Axion with Android or iOS smartphones or tablets. The smartphone and thermal imager combination offers a set of unique features such as direct image streaming, downloading and sharing recorded files, firmware update and many other.





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.



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.



High contrast AMOLED micro display of HD resolution offers crisp image and vivid colours. Display ensures excellent image quality and flawless performance even in freezing temperatures.

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 3 feet of water for up to 30 minutes.

Lightweight

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 weighs around 300 grams not more than a regular rangefinder unit but offers far more significant capabilities.

Instant Start-Up

Thanks to the new revolutionary electronics unit can be started almost instantly. Quick start-up helps to save energy and thus prolongs time of operation. The unit can be kept in a pocket and then rapidly activated when the right time comes.

B-Pack Mini Power System

Miniature power elements used in

Axion models provide sufficient

be quickly charged either with

connected to USB.

operation time and can be quickly

replaced. B-Pack mini batteries can

included charger station or in the unit



Rugged Magnesium Alloy Housing

Housing made from light weight magnesium alloy ensures high structural rigidity and ruggedness while retaining small weight and ergonomics.



12 µm Thermal Imaging Sensor

New thermal imaging sensor with 12 µm pixel pitch helps to achieve higher optic magnification and observation distance and simultaneously helps to make the unit more compact.



SKU	77424	77425	77421	77422
Model	Key XM22	Key XM30	XM30	XM38
Microbolometer, resolution, pixels @ pixel pitch, µm	320x240 @ 12	320x240 @ 12	320x240 @ 12	320x240 @ 12
Display, type / resolution, pixels	LCOS / 960x720	LCOS / 960x720	AMOLED 1024x768	AMOLED 1024x768
Objective lens	F22/1.2	F30/1.2	F30/1.2	F38/1.2
Frame rate, Hz	50	50	50	50
Magnification, x	2 - 8	2.5 - 10	4 - 16	5.5 - 22
Range of detection, yds	1000	1450	1450	1850
Built-in Video & Sound Recorder	no	no	yes	yes
Stream Vision Compatibility	no	no	yes	yes
Operating Temperature, °F	+14 ÷ +104	+14 ÷ +104	-13 ÷ +104	-13 ÷ +104
Weight, oz	8.8	8.8	8.8	9.5



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.





IPX7 waterproof-rated protection ensures Helion Thermal Imaging Scopes perform perfectly in wet weather, even during intense rain, snowfall and submersion in 3 ft of water for up to 30 minutes (IEC 60529).

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.





High Resolution

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

640x480

50Hz

High Image Frequency

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



B-Pack Power Supply

Helion includes a progressive autonomous B-Pack power supply consisting of a quick-detach, rechargeable IPS5, 5 A-h battery pack designed to deliver over 8 hrs. of operation on maximum mode. Higher-powered IPS7, IPS10 and IPS14 battery packs, as well as AA battery cases, also are available and provide a perfect off-the-grid power solution.



Effective Temperature Sensor Stabilization

A heat sink, located on the device's body, effectively prevents heat build-up from the sensor and other components while also significantly reducing temperature and noise sensitivity, especially between calibrations.





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.









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 -13°F - 122°F

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.

Build-In 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.

SKU		77394	77395	77395	77405
Model		XQ38F	XQ50F	XP38	XP50
Objective lens		F38/1.2	F50/1.2	F38/1.2	F50/1.2
Microbolometer, re	solution, pixels @ pixel pitch, μm	384x288@17	384x288@17	640x480@17	640x480@17
Frame rate, Hz		50	50	50	50
Magnification, x		3.1 - 12.4	4.1 - 16.4	1.9 - 15.2	2.5 - 20
Field of view, horiz	ontal & vertical without zoom, deg	9.8x7.4	7.5x5.6	16.3x12.3	12.4x9.3
Range of detection	, yds	1500	2000	1500	2000
Dimensions, inch		8.9x2.2x2.3	9.2x2.2x2.3	8.9x2.2x2.3	9.2x2.2x2.3
Weight, oz		15.9	17.6	15.9	17.6



Integrated Laser Rangefinder

Some models include laser rangefinding (LRF) technology. Integrated, precision LRF provides precise distancing in two modes: Single Time Measurement and Scanning. Scanning mode allows the shooter to adjust quickly to changing distances for better shot placement.

THERMAL IMAGING

ACCOLADE Accolade & Accolade LRF

Thermal Imaging Binoculars

XQ38 / XP50 / LRF XQ38 / LRF XP50



Comfortable for Long Observation

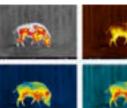
The dual eveniece configuration reduces eve fatigue during longer viewing and enhances the natural look of objects. The human brain is pre-conditioned to receive visual information from two channels simultaneously. The brain then combines the information into a single image. When one eye is used to observe, 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.

High Resolution Thermal Imaging Sensor

The high 640x480 pixel resolution ensures all objects within the field of view have the highest level of detail. High sensor resolution makes the smallest objects, i.e. branches, leaves, body extremities of an animal, appear exceptionally crisp and clear against the background.

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.















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.



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.

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 3 ft for up to 30 minutes.





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.

High Image Frequency

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



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.

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 highcontrast, color AMOLED display uses top technology to ensure stable, high-quality imaging in virtually any weather conditions.

Quick-Change Long-Life Rechargeable Battery Packs

The device's innovative battery-release mechanism ensures fast, flawless battery changes. Rechargeable IPS5 battery packs provide up to 8 hours of continuous operation in Wi-Fi mode.





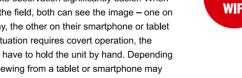
Stadiametric Rangefinder

The stadiametric rangefinder helps to estimate range to an object based on its size. The device's advanced. proprietary, rangefinding interface provides important ranging information within seconds.



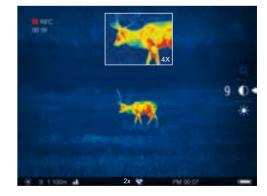
Wi-Fi Video Transmission

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.





"Picture-in-Picture" Mode



Picture-in-Picture provides a second, magnified reticlearea image to help the observer see magnified target details without loss of the field of view.





≯ 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.



Built-In 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.

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.

S	sкu	77411	77415	77414	77418
0	Model	XQ38	LRF XQ38	XP50	LRF XP50
ΑT	Microbolometer, resolution, pixels @ pixel pitch, μm	384x2	88@17	640x4	80@17
IFIC.	Objective lens	F38	/1.2	F50	/1.2
PEC	Frame rate, Hz	50		50	
S	Magnification, x	3.1 -	12.4	2.5	- 20
CAL	Integrated laser rangefinder	no	yes	no	yes
z	Field of view, horizontal & vertical without zoom, deg	9.83	ĸ7.4	12.4	x9.3
ЕСН	Range of detection, yds	1500		20	00
-	Weight, oz	21.2	24.7	21.5	25

Enhanced Nighttime Sensitivity

The Digisight 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 900-950nm makes it possible to use the Digisight Ultra riflescopes with invisible IR Illuminators.

HD-Sensor

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

Variable Magnification from 4.5x to 18x

The Digisight Ultra N455 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.

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.

Instant Start-Up

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

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.

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.



30

Digital NV Riflescopes

PULSAR IMAGE QUALITY



Using the free, high-tech, iOS and Android compatible Stream Vision app, the Digisight 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.





5 Individual Shooting Profiles / 50 Distances

Create up to five shooting profiles for multiple rifles and cartridges, with up to 10 zeroing distances.

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

gauge, 9.3x64, 30-06, 300 and 375 H&H, as well as smooth-bore and airsoft systems.

powerful IR illuminator combine to provide the perfect tool for hunting in complete darkness Recoil rated for high-powered calibers such as 12and detection of mid- to large-size predators and game animals at distances up to 500 - 600 yards.

and sensor, wide selection of brightness and

contrast settings, robust magnification and

	SKU	76617	76618
S S	Model	N450	N455
A T I O	Sensor type / resolution, px.	CMOS 1280x720	CMOS 1280x720
ی	Display type / resolution, px.	AMOLED 1024x768	AMOLED 1024x768
SPECIF	Spectral sensitivity at a wave length of 780 / 915 nm, mV	1.5·10 ⁻⁵ / 5.5·10 ⁻⁵	1.5·10 ⁻⁵ / 5.5·10 ⁻⁵
	Magnification, x	4.5 - 18	4.5 - 18
٦ ۲	Field of View,°, horizontal	6.2 (at 4.5x)	6.2 (at 4.5x)
O N H	IR Illuminator, type / wavelength, nm	LED / 850 (long-range)	LED / 940 (invisible)
	Detection Range, yds	600	550
_	Dimensions (without mount), in	14.5x2.9x2.9	14.5x2.9x2.9
	Weight (without mount), oz	30.7	30.7

Accurate Zoom Zeroing

The user can zero the riflescope either at the basic magnification or at a zoom, with the click value decreasing as the zoom value increases. At the maximum magnification reticle step is less than 0.1 MOA. Aiming point is stable in the entire range of magnifications.

Quick-Change Long-Life Rechargeable Battery Packs

Digisight Ultra uses an advanced self-contained autonomous B-Pack power supply system. The rechargeable battery IPS5 (5 Ah) fits into a special slot in the riflescope's body without protruding and delivers over 5 hrs. of operation from a single charge in the maximum consumption mode. Higher-powered IPS7 (6.5Ah), IPS10 (10Ah) and IPS14 (13.2Ah) Battery Packs are also optionally available. Quick-release and wireless design, long operating time are the major highlights of this power system.



Additional Features

- · Powerful long-range IR Illuminator
- 10 reticle shapes in 6 color modes
- Extreme Operating Temperatures (-13 ... +122°F)
- Fully waterproof IPX7
- · Side incline and elevation angle sensor
- · Stadiametric rangefinder
- Software sensitivity enhancement algorithm SumLight
- Updatable Software





CF-Super Technology

At the core of Pulsar GS line is a unique R-Contact optics and CF-Super image intensifier tube combination specially designed to provide the highest edge-to-edge resolution performance ever seen in cost-conscious consumer night vision products. CF-Super Technology includes a number of advantages:

Constant image quality across the entire field of view.

CF-Super resolution is popular for its consistency, meaning the difference in resolution between the field of-view's center and periphery areas does not exceed 20%, 5x greater performance than Gen-1 night vision.

Effective field of view.

The high resolution and precision geometric imaging provided by devices utilizing CF-Super technology result in effective observation in all areas of the field of view. In stark contrast, image quality in Gen-1 night vision, as an example, is only found at the center of the field of view.

Distortion-free

Stable, distortion free imaging throughout the field of

ligh resolution.

The CF-Super tube features, on average, 20% higher resolution than available with Gen-1 night vision devices,

Edge GS Controls

Simple to operate, the Edge night vision binocular and onboard IR illuminator are activated by pressing "On" and "IR" (located at the top of the device) respectively. Edge night vision goggles also include a wheel-shape power controller for gradual IR illuminator adjustments.



Challenger and Edge devices include 5lens eyepieces designed to increase image sharpness and contrast, and minimize distortion throughout the field of view.



Challenger GS controls were designed with simplicity in mind. A single switch sequentially turns on the unit and IR illuminator.



Edge GS Tube Protection

The Edge GS features an image intensifier tube protection system. Once a luminance threshold is exceeded, current feed to the tube is automatically reduced or ceased, resulting in optimum tube performance.

*

Head Mount

The Pulsar Compact Head Mount, included with Challenger GS 1x20 Head Mount Kit and Edge GS 1x20 Night Vision Goggles, offers hands-free night vision viewing. The Compact Head Mount positions the Edge or Challenger perfectly in front your eyes and provides amazing stability, even during rapid movement, i.e. walking, running and other abrupt movements, while an ergonomic design keeps the suspension-point close for reduced load on the neck and overall fatigue. Combined with a night vision device, the Compact Head Mount is ideal for high-tech military-inspired games, night hiking, surveillance, trekking to and from hunting positions, etc.



Body

The rugged metal and carbon-filled composite body protects fragile internal components against moisture, dust and impacts, even in extreme environments.

Built-In IR Illuminator

Challenger & Edge night vision devices are equipped with built-in IR illuminators:



Edge GS Night Vision Goggles feature IR illuminator with smooth power adjustment

Devices without visual magnification (1x) are equipped with an energy-conserving, wide-angled IR illuminator. The device can be head-mounted. The IR's versatility is also useful for map reading and close-quarter illumination in extreme lowlight conditions.

The Edge GS 3.5x50L features a powerful Laser IR illuminator complying with Class 1 laser safety perfect for use in low light at greater distances.

SKU	79095	75095	75099
Model	Challenger GS 1x20	Edge GS 1x20	Edge GS 3.5x50L
Туре	Monocular / Goggle Kit	Binoculars / Goggles	Binoculars
Image tube type / generation	CF-Super / I+	CF-Super / I+	CF-Super / I+
Magnification, x	1	1	3.5
Objective lens, mm	20	20	50
Field of view, deg	36	36	11
IR Illuminator	LED 805 nm	LED 805 nm	Laser 780 nm
Detection range, yds	100	100	240
Dimensions, in	6.4x3.1x2.2	6.4x4.4x2.4	9.1x4.8x2.6
Weight, oz	17.6 incl. head mount	30 incl. head mount	30



Thermal Imaging Lenses

Interchangeable objective lenses for Helion XP series.



79053 F28 Thermal Imaging Lens

F28/1.2.

Provides magnification 1.4 - 11.2x and detection distance up to 1100 yds. Quick bayonet mounting. Waterproof.



79054 F38 Thermal Imaging Lens

Provides magnification 1.9 - 15.2x and detection distance up to 1475 vds. Quick bayonet mounting. Waterproof.



79055 F50 Thermal Imaging Lens

F50/1.2.

Provides magnification 2.5 - 20x and detection distance up to 1950 yds. Quick bayonet mounting. Waterproof.



Attachable Infrared Illuminators

adjustment. Powered by the NV riflescope.

79132 Pulsar AI -915T

Laser 915 nm (invisible), 0 - 175 mW. For use with digital NV devices. Vertical mounting recommended (top Weaver rail).



Laser 915 nm (invisible), 0 - 175 mW. For use with digital NV devices. Side mounting recommended (side Weaver rail).



79047 Prism 14/200 Rifle Mount

Enables installation compatibility with monoblock MAK mounts (MAK Milmont. MAR 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».



79127 Weaver QD112 Rifle Mount



Quick-release mount for installation on riflescopes utilizing Weaver or Picatinny rails. Total length 8". Distance between the centers of locking screws 4.7".



79129 CZ550 Rifle Mount

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



79136 Pulsar Ultra-X940

79135 Pulsar Ultra-X850

LED 940 nm. Invisible range.

The mounting holes in the base of Pulsar riflescopes enables the mount to be installed in

LED 850 nm.

Long range.

Interchangeable infrared illuminators for Digisight Ultra N400th riflescopes. 3-Step power



Increase detection range and night vision efficiency in low light conditions. Smooth power adjustment. Beam focusing. Adjustable IR-spot position. Weaver mounted.



79071 Pulsar-805

LED 805 nm. 30 - 200 mW. Effective use with NV devices of all types.

79076 Pulsar – 940

LED 940 nm (invisible), 30 - 200 mW. For the use with digital NV devices.



79074 Pulsar - X850

LED 850 nm, 50 - 350 mW (high-power). Effective use with NV devices of all types.



Pulsar Riflescopes Rifle Mounts

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 6.8". Length of mounting part 4.4". Distance between the centers of locking screws 3.4"



79046 MAK Adapter

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



34000 Pulsar LOD Rail Mount

The improved Pulsar Locking QD Mount is a true return-to-zero base, ideal for shooters using Pulsar optics on AR-15 and MSRplatform rifles. The LQD Rail Mount is half the length of the standard Pulsar optic mount and features a locking lever. The Locking QD Mount is compatible with Pulsar Trail, Apex, Digisight and Core series riflescopes. Includes 3 mounting screws.

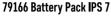
IPS Power Supplies

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



79114 Battery Pack IPS 5

Capacity 5 A.h. Operating time 8-10 h (with Helion).



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



79115 Battery Pack IPS 10

Capacity 10 A.h. Operating time 16-20 h (with Helion).

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.



79164 IPS Battery Charger

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



Interchangeable standard power supplies for Axion and Thermion devices.



79162 Battery Pack APS 2

Capacity 2 A.h. Compatible with Thermion.



79161 Battery Pack APS 3

Capacity 3.2 A•h. Compatible with Axion / Thermion.



79165 APS Battery Charger

APS2 / APS3 battery packs.

Intended for charging the

Core FXQ Cover Ring Adapters

Cover ring adapters enable installation of Core FXQ devices 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 Core FXQ devices. When an FXQ device is not in use the attached adapter also holds an included lens cover to protect your day optic.



79124 DN 42 mm Cover Ring Adapter

Compatible with 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.



79125 DN 50 mm Cover Ring Adapter

Compatible with 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.



79126 DN 56 mm Cover Ring Adapter

Compatible with 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.



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 5V, battery level indicator, Compatible with Trail / Helion / Digisight Ultra.



79112 Battery Pack EPS5

The EPS5 (5Ah) extends operating time and includes a 1m cable so it can be placed under clothing layers during freezing conditions. *EPS3I unit is supplied with an extension cable



79113 Battery Pack EPS3I

The EPS3I (2.4Ah) has a rigid plastic case and can be installed on any devices outfitted with a Weaver rail or 1/4 inch tripod mount. Features an integrated LED battery level

Other Accessories



79041 NV Challenger GS 1x20 DOS Adapter

Combined with the Challenger GS 1x20 Monocular, the DOS Adapter enables mounting on airsoft guns equipped with day optics, for night shooting, using the day optic's reticle. The 1x20 DOS Adapter includes reducing rings for stable mounting to a daytime scope and accommodates multiple eyepiece diameters. This adapter also accommodates an IR illuminator for increased brightness and an extended shooting range.



79141 Pulsar RCC Wireless Remote Control

Ergonomic controls. Effective coverage up to 4 meters. Compatible with Trail / Helion / Accolade.



79152 Pulsar Flat Glass Mount

The Flat Glass Mount enables devices equipped with a 1/4" 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 guickrelease plate with a standard 1/4" mounting screw.



79032 NV Compact Head Mount

The NV Compact Head Mount allows handsfree 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.



79154 Pulsar C-Clamp Mount

Attached to your optic via a 1/4-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.



79081 Pulsar Neck Strap

Designed for use with Pulsar devices with 1/4-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.



79155 Pulsar Tree Mount

Pulsar optics weighing under 2.2 pounds are safe and secure, even when mounted on a tree. The Pulsar Tree Mount includes a swiveling tripod head with 1/4-inch mounting screw, quick-release plate and a strapattachment system, perfect for trees with a diameter under 20 inches.



79151 Helion Flip-Up Phone Mount

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



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 1/4-inch mounting screw and a quick-release plate.



79153 Pulsar Nonslip Phone Stand

The Pulsar Nonslip Phone Stand is designed to position or smartphone vertically. Non-slip material makes placing the stand on a horizontal surface like a table, even with a slight slope like a dashboard, quick and easy.



Notes	



