PULSAR

The
NEXT LEVEL OF IMAGE QUALITY

www.pulsar-vision.com | **2022**

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Mobile App

STREAM VISION 2

WIFI

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.

Available on the **App Store**
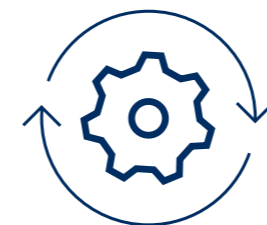
ANDROID APP ON **Google play**

The free Stream Vision 2 mobile application is a powerful mobile client expanding the features and use scenarios of thermal imaging, digital night vision and multispectral electro-optic devices from PULSAR and YUKON. The application enriches the functionality of electro-optic devices by allowing them to work in combination with smartphones using Android or iOS platforms. Linking the electro-optic device via a Wi-Fi connection with a smartphone enables the smartphone to act as a file browser, viewfinder for direct unit-to-phone image streaming, remote control for changing unit's settings on-the-go, firmware update platform, and offers many more functions. After registration in the application, the user gets free space in the Stream Vision 2 Cloud for storage of both photos and videos. Stream Vision 2 gives an opportunity to receive the latest news about technologies and happenings in the world of night vision and thermal imaging.

Remote control
Control and adjust the settings of your thermal imaging or digital night vision device in the Stream Vision 2 App. See all changes in real-time in the viewfinder and make necessary corrections on-the-go.

Photo and video browser
Browse all photos and videos recorded in on your thermal or digital night vision device. Download the files to your smartphone and share them with your friends.

Remote real-time image viewing
See a real-time image from your electro-optic device in the screen of your smartphone, allowing you to record footage and take photos.

Firmware update
Keep your Pulsar or Yukon optic device up-to-date and receive all the latest features and firmware enhancements. Use your Stream Vision 2 App to check and download the latest firmware for your device. Update your unit with downloaded firmware and enjoy new features.

PULSAR
IMAGE QUALITY

THERMAL IMAGING

NEW

THERMION 2 LRF

THE FIRST THERMAL IMAGING RIFLESCOPE WITH CLASSIC DESIGN AND BUILT-IN LASER RANGEFINDER

XP50 PRO / XG50 / XQ50 PRO

Pro Series. Unprecedented thermal sensor sensitivity <25mK NETD

Thermal imaging sensor with NETD <25mK 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 imaging.

F/1.0

Fast aperture lens F50/1.0

The characteristics of thermal imaging optics have a decisive influence on a thermal imager's ability to capture even the lowest radiation levels. Ultimate detection efficiency is achieved with the fast lens of the Thermion 2 LRF XP50 Pro (F50/1.0) thermal imager in combination with the highly sensitive thermal sensor. The Thermion 2 LRF XP50 Pro gives users the best quality, most detailed & high-contrast, informative imagery every time, even during rain or fog, when the temperature contrast of the observed scene is minimal.

High Definition Thermal Sensors 640x480 pixel @ 12 μm / 17 μm

Sharp, richly contrasted thermal imaging for enhanced identification of animals, their extremities and even the smallest details, i.e. branches, leaves, grass and terrain.
* Thermion 2 LRF XP50 Pro & XG50 models

Up to 10 hours of battery life on a single charge

The Thermion 2 LRF is powered with two rechargeable batteries: one built-in with a capacity of 4.9 Ah, the other replaceable with a capacity of 2 Ah. A single charge guarantees up to 10 hours of battery life, which covers the time of active use of the scope for a hunt. The embossment on the body of the replaceable battery for accurate determination of the correct position makes it possible to quickly and confidently replace a flat battery with a new one in complete darkness by touch.

Long detection range

A powerful long-distance F50/1.0 objective lens combined with a highly-sensitive thermal imaging sensors provides exceptional detection capabilities. A standard 1.8 m tall object can be detected on a distances of 1800 – 2300 m away in complete darkness.

High-precision ambidextrous lens focusing

Objective lens with internal focusing mechanism gives a clear and sharp image at any range. Ergonomic focusing wheels are located on the right and left sides, making focusing easy either left- or right-handed.

The first thermal imaging riflescope with classic design and built-in laser rangefinder

The laser rangefinder is seamlessly integrated into a slim design riflescope. The rangefinder is compact, the receiver and emitter are within clearance limits of a single optical channel. The measuring range is 800 metres – the Thermion 2 LRF provides the hunter with an accurate sense of distance at the hunting site helping to take a precise shot.

5 individual shooting profiles / 50 zeroing distances

Zeroing settings are saved in a shooting profile. The Thermion 2 LRF memory contains up to five shooting profiles for several types of weapons or cartridges. Each profile can hold up to ten zeroing distances.

⚡

High caliber recoil resistance: 12 gauge, 9.3x64, .375H&H

Thermion 2 LRF thermal riflescopes are high impact resistant and can be used with rifled hunting weapons with calibers of 9.3×64, .30-06, .300, .375H&H, etc., as well as with smooth-bore and pneumatic weapons.

⚡

High-precision aiming in the "Picture-in-picture" mode

The "Picture-in-picture" function enables the shooter to display a high-precision zeroing frame. Taking only 10% of the total display area, the frame shows a magnified image of the target and reticle and allows the user to closely see the image in the aiming area and have visual control of the entire field of view at the same time.

⚡

Wide-angle eyepiece for comfortable observation

The wide-angle eyepiece (29.5°) and wide viewing angle of the HD quality AMOLED display provide comfortable image perception and the absence of the keyhole effect with safe removal of the exit pupil of 50mm. Observation with the Thermion 2 LRF does not strain your eyes and enables the hunter to fully concentrate on the hunting process.

⚡

Improved Wi-Fi connectivity with 2.4 / 5 GHZ waveband support

In Thermion 2 LRF, the standard smartphone connection frequency range via a 2.4 GHz WiFi channel is complemented with an effective 5 GHz range. The 5 GHz connection offers better bandwidth, a faster data transfer rate, noise immunity and improved connection stability, resulting in more productive and easier operation of the thermal riflescope with a smartphone.

⚡

Distant operation from a smartphone and software updating with the Stream Vision 2 App

Built-in WiFi connects the Thermion 2 LRF to Android and iOS smartphones via the Stream Vision 2 mobile application. This opens up a wide range of options including wireless device software updates, real-time image transmission from the device to the smartphone screen, publication on social media of photo and video content captured by the device or transfer to messengers, remote control of digital device functions and access to the latest news from Pulsar. Moreover, registered users receive 16 GB of cloud storage for photos and videos recorded with the device.

⚡

More features:

- Long detection range up to 2300 m
- Variable magnification: up to x4 / x8 digital zoom
- A selection of 10 reticle shapes in 9 color modes
- High contrast HD AMOLED display
- A selection of different color palettes
- Instant Start-up
- Operating temperature range: -25 to +50 °C
- Completely waterproof IPX7

Mobile App
STREAM VISION 2

ANDROID APP ON Google play   Available on the App Store

TECHNICAL SPECIFICATIONS	Model	LRF XP50 Pro	LRF XG50	LRF XQ50 Pro
	SKU	76551	76552	76555
	Microbolometer, resolution, pixels @ pixel pitch, µm	640×480 @ 17	640×480 @ 12	384×288 @ 17
	Display, type / resolution, pixels	AMOLED 1024×768		
	Objective lens	F50/1.0		
	Magnification, x	2 – 16 (x8 zoom)	3 – 24 (x8 zoom)	3 – 12 (x4 zoom)
	Field of view, °	12.4×9.3	8.8×6.6	7.5×5.6
	Range of detection, m	1800	2300	1800
	Laser rangefinder measurement range, m	800		
	Body material	Aluminum Alloy		
	Weight, kg	0.97		

THERMAL
IMAGING

Thermal Imaging Riflescopes

THERMION 2 PRO
SERIES

TRUE SUPERIORITY

XQ35 / XQ50 / XP50

- Unprecedented Thermal Sensor Sensitivity <25 mK NETD
- Fast aperture F35/1.0 and F50/1.0 lenses
- Long detection range up to 1800 m
- Up to 10 hours of battery life on a single charge
- Mounting on standard 30 mm rings
- Variable magnification: up to x4 / x8 digital zoom
- Photo and video recording
- High caliber recoil resistance: 12 gauge, 9.3×64, .375H&H
- 5 shooting profiles / 50 zeroing distances

- A selection of 10 reticle shapes in 9 color modes
- High-precision aiming in the "Picture-in-picture" mode
- High contrast HD AMOLED display
- A selection of different color palettes
- Instant Start-up
- Wide-angle eyepiece for comfortable observation

- Improved Wi-Fi connectivity with 2.4 / 5 GHZ waveband support
- Distant operation from a smartphone and software updating with the Stream Vision 2 App
- Operating temperature range from -25 to +50 °C
- Completely waterproof IPX7

STREAM VISION 2   Mobile App   Google play   Available on the App Store

TECHNICAL SPECIFICATIONS	Model	XP50 Pro	XQ35 Pro	XQ50 Pro
	SKU	76547	76541	76548
	Microbolometer, resolution, pixels @ pixel pitch, µm	640×480 @ 17	384×288 @ 17	
	Display, type / resolution, pixels	AMOLED 1024×768		
	Objective lens	F50/1.0	F35/1.0	F50/1.0
	Magnification, x	2 – 16	2.5 – 10	3 – 12
	Field of view, °	12.4×9.3	10.7×8.0	7.5×5.6
	Range of detection, m	1800	1350	1800
	Body material	Magnesium Alloy		
	Weight, kg	0.75	0.9	0.9

PULSAR
IMAGE.QUALITY

Thermal Imaging Riflescopes

NEW **TALION**

PURE THERMAL
ACTION

Multi-point prism mount for exact positioning on a rifle
Mounting prism with multiple screwing points ensures flexibility and convenience for installing Talion riflescope on various types of rifles. During installation, the user can shift the scope along the rifle to reach the most comfortable viewing position.

Rapid battery extraction mechanism
Unique design of battery cover with rapid extraction lock ensures fast and flawless battery replacement. Releasing the lock opens and raises battery cover in the top of riflescope's housing providing quick access to rechargeable battery.

XG35 / XQ38

9 hours of work on a single charge

Talion is powered with Pulsar APS5 interchangeable, rechargeable battery. A single charge guarantees up to 9 hours of battery life, which covers the time of active use of the scope for a hunt. Design of battery cover helps to accurately determine the correct position and makes it possible to quickly replace a flat battery with a new one in complete darkness by touch.

Focus adjustment with tactile marker set for nighttime shot

Precise focusing adjustment has integrated fin lever that is set to match protruding ridge on the housing of Talion riflescope when focusing reaches 70m mark, nighttime shooting distance. It helps to set correct focusing fast, even without looking in the riflescope.

# All control elements in direct access

All controls in Talion riflescopes are placed on the top panel of the eyepiece to simplify access and make it convenient for right- and left-handed users.

Lightweight and rugged magnesium alloy housing

Talion's housing is made of magnesium alloy to ensure great structural strength and retain light weight. Robust and lightweight metal housing serves also as a heat sink taking away the warmth generated by inner electronics and thus making thermal imaging device more sensitive.

3 sensitivity amplification levels

Selection of the signal amplification level combined with new filtration algorithms with fine brightness and contrast adjustments offers the hunter great opportunities for long-range detection of the game in diverse weather and temperature conditions. Amplification setting helps to define animal's trophy features and ensures clear rendering of objects and background in the field of view.
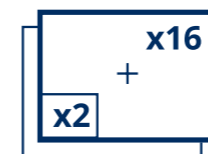
Variable magnification (x4/x8 digital zoom)

The base magnification of Talion riflescopes increases by several times thanks to digital zoom. The zoom changes either gradually by 2x steps or continuously to set the ideal ratio of magnification and visible field of view for specific situations.

Photo and video recording

Keep the best moments of observation and share them with your friends and hunting colleagues. One touch of a button is enough to capture an interesting moment or start recording a video. 16 GB of internal memory will give the ability to record many hours of video and tens of thousands of photos.
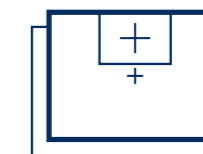
Precision aiming in the "Picture-in-picture" mode

The "Picture-in-picture" function enables the shooter to display a high-precision zeroing frame. Taking only 10% of the total display area, the frame shows a magnified image of the target and reticle and allows the user to closely see the image in the aiming area and have visual control of the entire field of view at the same time.

XG35 / XQ38

High-resolution thermal sensor
640×480 pix @ 12 µm

Variable magnification
2x–16x

Fast-aperture lens
F35/1.0

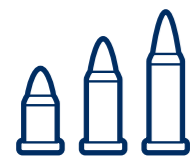**Long detection range**
1750 m

Pro-grade thermal sensor
384×288 pix @ 17 µm / NETD <40mK

Variable magnification
2,5x–10x

Waterproof IPX7 housing

With an IPX7 waterproof rating, the Talion riflescopes work in conditions of high humidity and heavy rain and can withstand half an hour immersion in water to a depth of 1 meter.

High caliber recoil resistance: 12 gauge, 9.3x64, .375H&H

Talion thermal riflescopes are high impact resistant and can be used with rifled hunting weapons with calibers of 9.3×64, .30-06, .300, .375H&H, etc., as well as with smooth-bore and pneumatic weapons.

5 shooting profiles / 50 zeroing distances

Zeroing settings are saved in a shooting profile. Talion memory contains up to five shooting profiles for several types of weapons or cartridges. Each profile can hold up to ten zeroing distances.

A selection of 10 reticle shapes in 9 color modes

A reticle is electronically displayed in the same plane as the target. The Talion memory contains ten reticle configurations and functions (direct shot type, ballistic, scalable and regular), all available in nine colour options.

Variable color palettes

A choice of 8 colour palettes lets the user observe their field of view more effectively, allowing them to optimise the unit for specific tasks as well as react to changing observation conditions. White Hot, Black Hot and Red Hot are optimal for object detection, Rainbow and Ultramarine help increase chances for recognition & identification. Red Monochrome, Sepia and Violet are most suitable for long observation in the night.
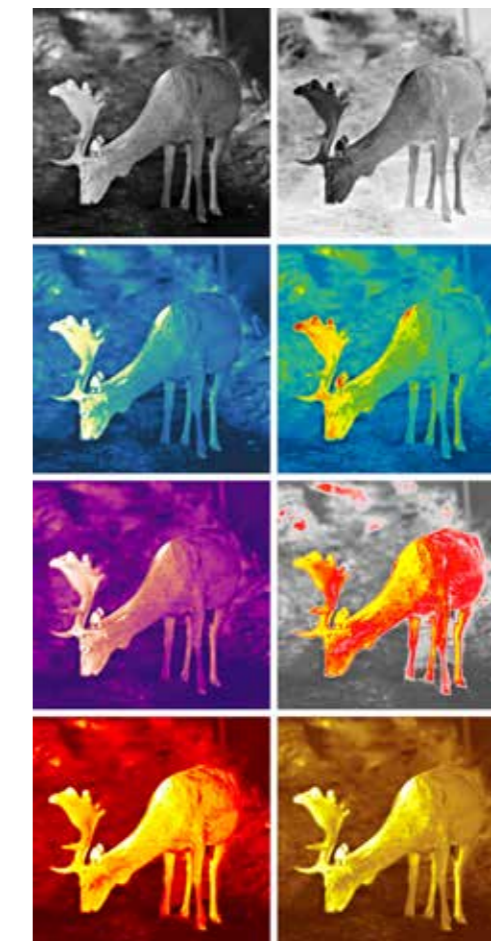
Wi-Fi integration with iOS and Android devices. Stream Vision 2 application.

The built-in WiFi module will connect the device with smartphones based on Android and iOS via the Stream Vision 2 mobile application. This combination provides a great opportunity, such as wireless update of the device software, transmission of images to the screen of a mobile device in real time, remote control of digital functions of the device and many others. Users registered in the application are provided with cloud storage space for photos and videos taken with a digital or thermal imaging device

Mobile App
STREAM VISION 2

ANDROID APP ON **Google play**   Available on the **App Store**

Model	XQ38	XG35
SKU	76561	76563
Microbolometer, resolution, pixels @ pixel pitch, µm	384×288 @ 17	640×480 @ 12
Display, type / resolution, pixels	AMOLED 1024×768	
Objective lens	F38/1.2	F35/1.0
Magnification, x	2.5 – 10	2 – 16
Field of view (horizontal), °	9.8×7.3	12.5×9.4
Range of detection, meters	1350	1750
Dimensions, mm	330×57×67	
Weight (without APS5 battery), kg	0.7	

Realistic daytime colour rendering

The Digex C50 combines the full-colour imaging of classic daytime optics with ultimate digital functionality. So conservative day hunting becomes high tech and a usual day sight is simply unnecessary.

24/7 use

The use of different lens and sensor operating modes guarantees the best results at any time of day. In the morning and at twilight, during the day and after midnight, the image is clear and detailed. The riflescope discerns game trophy qualities and peculiarities of behavior in Full HD resolution, providing the hunter with the maximum possible information to make the right decision and take a shot.

NEW
Digital Day & Night Riflescopes

DIGEX C50

COLOUR
THE DARKNESS

Full-colour imaging from sunset till dusk in the Colour Twilight mode

In deep twilight, when the human eye is already unable to discern details of observed objects, the Digex C50 displays a bright image with correct colour rendering, prolonging hunting time into the night.
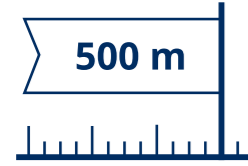
Over 500 meters night viewing range

The Digex C50 has the best sensitivity in its class for infrared spectrum (night sensitivity), including a wavelength range of 900–950 nm. The device is highly effective when paired with invisible IR illuminators. This makes the Digex C50 a perfect tool for detecting targets such as wild boar, deer and elk at distances ranging from 500 meters.

500 m

High-precision aiming with the "Picture-in-Picture" mode

The "Picture-in-picture" function enables the shooter to display a high-precision aiming frame. Occupying only 10% of the total display area, the frame contains an enlarged image of the target and a reticle, which provides the user with a more detailed image of the aiming area and gives visual control of the entire field of view.
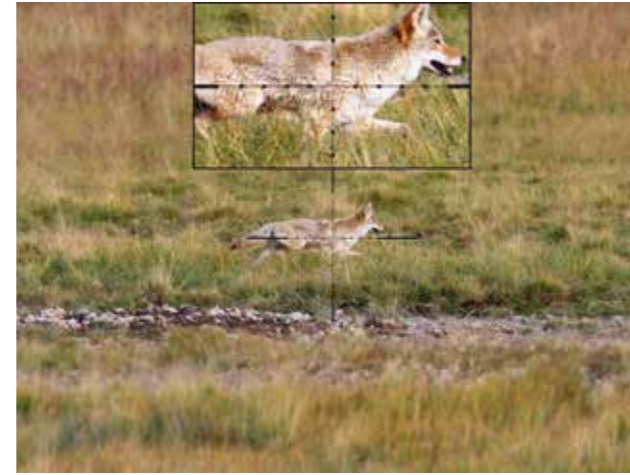
Up to 10 hours of battery life on a single charge

The Digex C50 is powered with two rechargeable batteries: one built-in with a capacity of 4.9 Ah, the other replaceable with a capacity of 2 Ah. A single charge guarantees up to 10 hours of battery life, which covers the time of active use of the scope for a hunt. The embossment on the body of the replaceable battery for accurate determination of the correct position makes it possible to quickly and confidently replace a flat battery with a new one in complete darkness by touch.

Classic design. Mounting on standard 30 mm rings

The Digex C50 offers visual aesthetics on any hunting weapon. From the outside the riflescope resembles a classic day sight in a 30mm housing. This form factor provides flexibility for mounting the scope on hunting weapons using proven ring solutions.

Wide-angle eyepiece for comfortable observation

The wide-angle eyepiece (29.5°) and wide viewing angle of the HD quality AMOLED display provide comfortable image perception and the absence of the keyhole effect with safe removal of the exit pupil of 50mm. Observation with the Digex C50 does not strain your eyes and enables the hunter to fully concentrate on the hunting process.

5 shooting profiles / 50 zeroing distances

The Digex C50 offers a choice of ten different reticles that vary in Colour, configuration, and function – direct shot and ballistic, scalable (FFP) and non-scalable (SFP). Zeroing results are stored in five shooting profiles. Each profile can hold up to 10 zeroing distances.

⚡ **Improved Wi-Fi connectivity with 2.4 / 5 GHZ waveband support**

In Digex C50, the standard smartphone connection frequency range via a a 2.4 GHz WiFi channel is complemented with an effective 5 GHz range. The 5 GHz connection offers better bandwidth, a faster data transfer rate, noise immunity and improved connection stability, resulting in more productive and easier operation of the riflescope with a smartphone.

⚡ **Distant operation from a smartphone and software updating with the Stream Vision 2 App**

Built-in WiFi connects the Digex C50 to Android and iOS smartphones via the Stream Vision 2 mobile application. This opens up a wide range of options including wireless device software updates, real-time image transmission from the device to the smartphone screen, publication on social media of photo and video content captured by the device or transfer to messengers, remote control of digital device functions and access to the latest news from Pulsar. Moreover, registered users receive 16 GB of cloud storage for photos and videos recorded with the device.

Mobile App

STREAM VISION 2

ANDROID APP ON **Google play**

Available on the **App Store**

⚡ **More features:**

- **Built-in photo and video recorder. 16 GB of cloud storage free of charge.**
- **SumLight enhanced sensitivity software**
- **Removable eye cup with magnet fixing**
- **Variable magnification from 3.5x to 14x**
- **Robust aluminum alloy housing**
- **Operating temperature range: -25 to +50 °C**
- **High caliber recoil resistance: 12 gauge., 9.3x64, .375H&H**
- **Instant start-up**
- **Fully Waterproof IPX7**
- **Accurate zoom zeroing**
- **Automatic shut-down function**

Model	C50	C50 (w/o Wi-Fi)
SKU	76635	76635A
Sensor type / resolution, px.	FHD CMOS 1928×1088	
Display type / resolution, px.	AMOLED 1024×768	
Magnification, x	3.5 – 14	
Field of view, °	6.7×5	
IR Illuminator	Optional	
WiFi. Integration with smartphones	Yes, Stream Vision 2 App	no
Dimensions (without mount), mm	408×78×83	
Weight (with battery), kg	1.15	

TECHNICAL SPECIFICATIONS
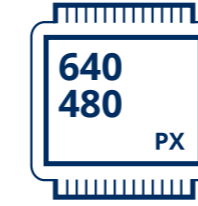
THERMAL IMAGING

Thermal Imaging Monocular / Front Attachment

KRYPTON

## THERMAL UPGRADE

FXG50 / XG50

Krypton FXG50 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.

640 480 PX

Highly sensitive 640x480 pixel @ 12 μm thermal imaging sensor

For image acquisition KRYPTON uses high quality 12 μm thermal imaging sensor with 640×480 pixel resolution that offers exceptionally crisp, contrast image and excellent thermal sensitivity in all weather conditions.

⚡ 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 9.3×64.
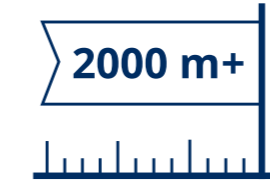
2000 m+

Detection range exceeding 2000 m

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.

⚡ Wide range of recommended magnifications of day optics

Krypton FXG50 attachment can be used comfortably in wide range of magnifications of day optics from 1.5x to 6x.

⚡ Shockproof magnesium alloy housing

Rugged and lightweight 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.

⚡ Quick-change high capacity battery (up to 8 hrs. of 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.

⚡ **Wireless remote control included**

The ergonomic Pulsar BT wireless remote control is a perfect tool for full control of software functions of Krypton thermal attachment. With the remote control placed on any convenient part of the fore-end or rifle butt the hunter controls the optical device with minimum action maintaining maximum concentration on the hunting process.

⚡ **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.

⚡ **XG50 model: Krypton as an observation device**

The Krypton XG50 is a modular thermal imaging monocular consisting of a thermal imaging unit and a Pulsar 5×30B 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.

⚡ **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.

⚡ **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.

⚡ **Quick-release adapter with precise screen positioning mechanism in the field of view of day optics**

The attachment docks with front quick-release PSP adapter* 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

⚡ **Weaver rail mountable**

Use the PSP-V Adapter to mount the Krypton on Weaver rail in front of the day sight. For better pairing with optical riflescopes, the adapter provides two attachment height positions depending on the riflescope lens size and mounting height. The PSP-V is a quick-release adapter – the attachment with the adapter is instantly mounted on the rail and removed from it thanks to the single-point locking lever assembly. The adapter is completed with a silicone cover to protect the riflescope lens from ambient light.
* bought separately

⚡ **Stream Vision 2. WiFi integration with iOS and Android devices**

The built-in WiFi module connects the device with either Android or iOS smartphones using the Stream Vision 2 mobile application. This combination opens up a wide range of options: wireless device software updates, realtime image transmission to the mobile device screen, remote control digital functions and much more. Users registered in the application are provided with cloud storage space for photos and videos taken with the device.

	Model	FXG50	XG50
	SKU	76655	77375
TECHNICAL SPECIFICATIONS	Objective lens	F50 / 1.2	
	Microbolometer resolution, pixels @ pixel pitch, μm	640 × 480 @ 12	
	Display, type & resolution, pixels	HD AMOLED 1746 × 1000	
	Magnifcation, 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 / IPS7 Battery Pack	
	Dimensions, mm	143 x 93 x 76	260 × 93 x 76 (with Pulsar 5×30B monocular)

PULSAR
IMAGE.QUALITY

Thermal Imaging Monocular / Front Attachment

PROTON

The
NEXT LEVEL OF THERMAL PRECISION

FXQ30 / XQ30

Lightweight and compact size

When stalking each extra gram of hunting equipment matters. Using the Proton is easy and intuitive regardless of which daytime optic it is connected to – an optical sight, a Pulsar 5×30B monocular, a spotting scope or binocular from the hunter's arsenal. The compact Proton thermal imaging module weighs just 370 grams – light enough not to have a meaningful effect on the balance of any daytime optic it is installed on.

384 288 PX
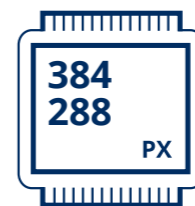
Highly sensitive thermal imaging sensor $<$ **40mK** NETD

Thermal imaging sensor with NETD 40mK 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.

12 Mg MAGNESIUM

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.

Easy transformation into observation scope

Several seconds and 5×30B Pulsar monocular - all that is needed to take Proton off the riflescope and turn it into a thermal imaging spotter with 5x magnification. 5×30B monocular can be easily connected with Proton by means of bayonet connector. PSP adapter used for mounting Proton on day optics can remain attached to Proton when paired with Pulsar 5×30 monocular. In the field, it ensures fast and easy transformation of Proton from attachment into spotter and back.

Quick-change APS5 battery system

Quick-change high capacity rechargeable Li-Ion battery offers up to 6 hours of operation time on single charge. Fast and easy battery replacement ensures continuous observation without disruptions. Ordinary power bank connected via USB Type-C socket can be used as an external power source.

Wireless remote control included

The ergonomic Pulsar BT wireless remote control is a perfect tool for full control of software functions of Proton thermal attachments. With the remote control placed on any convenient part of the fore-end or rifle butt the hunter controls the optical device with minimum action maintaining maximum concentration on the hunting process.

IPX7 fully waterproof

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

Quick-release adapter with precise screen positioning mechanism in the field of view of day optics

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

Weaver rail mountable

Use the PSP-V Adapter to mount the Proton on Weaver rail in front of the day sight. For better pairing with optical riflescopes, the adapter provides two attachment height positions depending on the riflescope lens size and mounting height. The PSP-V is a quick-release adapter – the attachment with the adapter is instantly mounted on the rail and removed from it thanks to the single-point locking lever assembly. The adapter is completed with a silicone cover to protect the riflescope lens from ambient light.

Wi-Fi. Integration with IOS and Android devices

Built in Wi-Fi module provides connectivity of Proton thermal 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, transfer and sharing of multimedia files, firmware update, remote control of unit's settings and many other.

Model	FXQ30	XQ30
SKU	76653	77378
Objective lens	F30/1.2	
Microbolometer resolution, pixels @ pixel pitch, µm	384×288 @ 17	
Display, type & resolution, pixels	AMOLED HD 1024×768	
Magnification, x	-	5x (with Pulsar 5×30B monocular)
Horizontal field of view, ° / m @ 100 m	12.4 / 21.8	
Range of detection, m	900	
Recommended magnification of the day scope / sight, x	1.5 - 4	-
Power supply, V / Battery type	5 / Li-Ion APS5 Battery Pack	
Pulsar 5×30B monocular included	no	yes
Dimensions, mm	119×58×75	248×59×75 (with Pulsar 5×30B monocular)

TECHNICAL SPECIFICATIONS

Mobile App

STREAM VISION 2

ANDROID APP ON Google play

Available on the App Store

Digital NV Monocular / Front Attachment

FORWARD

F455S / FN455S

Easy transformation of an optic sight into a night vision device

To install the Forward F onto the front optical bell of a day sight, adapters of various mounting size are used. The adapter permanently attaches to the sight's bell. This allows quick installation of the Forward F attachment in front of the lens for nighttime shooting. When the attachment is not used, the adapter accommodates a protective cap to protect the sight lens in the daytime.

12 Mg MAGNESIUM

Shockproof magnesium alloy housing

Shockproof magnesium alloy housingRugged 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.

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. Attachment's design ensures stability of the point-of-impact when re-focusing the attachment at various distances.

x8 + x2

Comfortable usage in a wide range of magnification of daylight optics
Forward attachment can be used comfortably in wide range of magnifications of day optics from 2x to 8x.

500 m+

Over 500m nighttime viewing range
High nighttime sensitivity, high resolution display and sensor, wide selection of brightness and contrast settings, quality optics and a powerful built-in IR Illuminator for operation in total darkness make the Forward F455S the perfect tool for detecting large quarry at distances of 450-500 meters.

High-power invisible IR illuminator with an adjustable IR spot position

The Forward F455S is supplied with a new high power invisible IR illuminator (940 nm). Three adjustable IR power levels help choose preferred effective range and illumination level of an object observed. Design of the illuminator allows spot position to be corrected in the field of view horizontally and vertically.

Quick-change long-life rechargeable battery packs

Forward F455 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 device's body without protruding and delivers over 5 hours of operation from a single charge in the maximum consumption mode. Quick-release and wireless design, long operating time are the major highlights of this power system.

Four point quick bayonet mount system with secure clamp

The attachment docks the proprietary adapter with the durable four-point bayonet assembly. Pulsar line includes three models of adapters to mount on sights with a lens diameter of 40, 42, 50, 56mm.

Wireless remote control included

The ergonomic Pulsar BT wireless remote control is a perfect tool for full control of software functions of Forward F digital attachments. With the remote control placed on any convenient part of the fore-end or rifle butt the hunter controls the optical device with minimum action maintaining maximum concentration on the hunting process.

Enhanced nighttime sensitivity

The Forward F455S 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 Forward F455S with invisible IR Illuminators.

Wi-Fi. Integration with iOS and Android devices via the Stream Vision 2 application

The built-in Wi-Fi module will connect the device with smartphones based on Android and iOS via the Stream Vision 2 mobile application. This combination provides a great opportunity, such as wireless update of the device software, transmission of images to the screen of a mobile device in real time, remote control of digital functions of the device and many others. Users registered in the application are provided with cloud storage space for photos and videos taken with a digital or thermal imaging device.

Mobile App
STREAM VISION 2

ANDROID APP ON Google play
Available on the App Store

And more:

* HD-sensor 1280×720 pixel
* Software sensitivity enhancement algorithm SumLight
* Photo and video recording
* Instant start-up
* Quick-change long-life rechargeable battery backs
* Four point quick bayonet mount system
* High caliber recoil resistance: 12 gauge., 9.3×64, .375H&H
* Wide range of operating temperature (-25 to +50°C)
* Fully waterproof (IPX7)

|	Model	F455S	FN455S
TECHNICAL SPECIFICATIONS	**SKU**	78189	78199
	Sensor type / resolution, pixels	CMOS 1280×720	
	Objective lens	F50/1.0	
	Magnification, x	–	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 5×30 monocular)

Unprecedented thermal sensitivity <25mK

NETD

Thermal imaging sensor with NETD <25mK 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.

640 480 PX
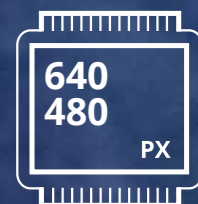
High definition thermal sensor 640x480 pixel @ 17 μm
Sharp, richly contrasted thermal imaging for enhanced identification of animals, their extremities and even the smallest details, i.e. branches, leaves, grass and terrain.

Fast aperture F50/1.0 lens

F/1.0

The characteristics of thermal imaging optics have a decisive influence on a thermal imagers ability to capture even the lowest radiation levels. Ultimate detection efficiency is achieved with the fast lens of the Helion 2 XP50 Pro (F50/1.0) thermal imager in combination with highly sensitive thermal sensor. The Helion 2 XP50 Pro gives users the best quality, most detailed & high-contrast, informative imagery every time, even during rain or fog, when the temperature contrast of the observed scene is minimal.

12 Mg MAGNESIUM

Ultra-high-strength magnesium alloy housing
The lightweight magnesium alloy housing standsout due to a high structural strength and resistance to external mechanical and climatic loads. The housing material effectively removes and dissipates the heat generated by the electronics, ensuring the operational stability of the thermal imager and maintains a high quality image during prolonged observation.

Full colour HD AMOLED display

AMOLED

The new 1024×768 HD AMOLED display has improved colour rendering, is power saving, offers high contrast imagery and a quick-response, as well as providing clear & smooth images when observing on-the-move or in cold conditions.

Image Detail Boost function
The Helion 2 Pro thermal imager produces clear, high contrast images with precise tracing of contours and informative visualization of the smallest objects and areas with minimal temperature differences. A hunter is able to clearly identify objects, both target and background, as well as accurately evaluate the trophy.

Built-in photo and video recorder with 16 GB of 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.
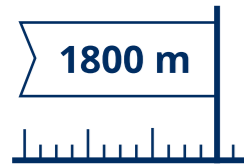
1800 m

Long detection range up to 1800 m

A powerful long-distance F50/1.0 objective lens combined with a 640×480@17µm highly-sensitive thermal imaging sensor provides exceptional detection capabilities. A standard 1.8m tall object can be detected up to 1800 m away in complete darkness.

2.5x-20x variable magnification

Digital zoom, up to 8x, provides improved focus and better overall object recognition at significant distances. The zoom changes either gradually in 2x step or continuously for a truly optimum, customized field of view for specific situation.

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.

Wide range of operating temperatures (-25 to +50°C)

Housing, power unit, optics and electronics of Helion 2 XP50 Pro are designed with regard to applications in wide range of temperatures. Helion ensures reliable and effective performance in freezing cold up to -25°C.

IPX7 waterproof rated

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

Stadiametric rangefinder

The stadiametric rangefinder is a dynamic rangefinding scale intended to help determine approximate range to objects with known height 1.7 m (deer), 0.7m (wild boar) and 0.3 m (rabbit).

Quick-change high capacity battery (up to 8 hrs. of operation time)

Quick-change rechargeable battery packs provide enough power for up to 8 hours of non-stop operation. 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. The IPS14 Battery Pack, available as a separate item, provides up to 16 hrs. of operation time. A battery cradle for LR6 (AA) batteries is an optional accessory.

8 color palettes

A choice of 8 colour palettes lets the user observe their field of view more effectively, allowing them to optimise the unit for specific tasks as well as react to changing observation conditions. White Hot, Black Hot and Red Hot are optimal for object detection, Rainbow and Ultramarine help increase chances for recognition & identification. Red Monochrome, Sepia and Violet are most suitable for long observation in the night.

Wi-Fi. Integration with IOS and Android devices

Built in Wi-Fi module provides connectivity of Helion 2 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.

STREAM VISION 2 — Mobile App — ANDROID APP ON Google play — Available on the App Store

TECHNICAL SPECIFICATIONS	Model	XP50 PRO
	SKU	77431
	Microbolometer, resolution, pixels @ pixel pitch, µm	640×480 @ 17
	Sensor NETD value, mK	<25
	Display, type / resolution, pixels	AMOLED 1024×768
	Objective lens	F50/1.0
	Magnification, x	2.5 – 20
	Field of view, °	12.4×9.3
	Range of detection, m	1800
	Dimensions, mm	242 × 75 × 60
	Weight, kg	0.5

PULSAR
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THERMAL IMAGING

Thermal Imaging Monoculars
NEW AXION 2

BETTER QUALITY. BETTER PRICE

XG35 / LRF XG35 / XQ35 / LRF XQ35

Enhanced image processing algorithms

The Axion 2 thermal imaging devices use a new approach to image optimisation depending on the purposes and conditions of observation and provide high-quality rendering of both target objects and background. Three levels of signal amplification in combination with a connected smoothing filter and fine brightness and contrast adjustments give the hunter great opportunities for long-range detection of the animal under different weather and temperature conditions and determining its trophy qualities.

Extended battery life. Up to 11 hours on a single charge

A high-capacity APS5 rechargeable battery provides up to 11 hours* of continuous operation of the thermal imaging device on a single charge. The battery is removed from a battery housing and replaced with a new one in seconds. The battery is charged in a special charger or inside the device from a PC, household power system or power bank via USB-C. The same sources are used for external power supply of a thermal imaging device.
* - depending on model

12
Mg
MAGNESIUM

High-quality reinforced magnesium alloy housing

Axion is designed for constant, often hard use. A magnesium alloy housing is light and strong at the same time. The housing reliably protects the internal components of a thermal imaging device from shocks, drops, moisture, heat or cold. At the same time, a metal housing effectively removes the heat from electronics, minimizes image noise and increases consistency of the device operation during long-term observation.

Highly-sensitive European-made Lynred sensor
The Axion 2 thermal monoculars are equipped with a European Lynred sensors with a resolution of 384×288 pixels (pixel size 17 µm) / 640×488 pixels (pixel size 12 µm), which qualitatively capture a useful signal under difficult observation conditions, such as rain, fog and high atmospheric humidity at the observation site.

Pocket-sized dimensions and light weight
Axion 2 has a space-saving and pocket-sized design and weighing up to 350 grams. The device is easy to grip and operate by right-handed and left-handed people due to the symmetrical design and in-line buttons arrangement on the upper panel.

Fast Aperture F35/1.0 Lens
Germanium F35/1.0 lens features high infrared transmission in the LWIR range. Due to the high precision manufacturing of the optical elements of the lens, the image generated by the Axion 2 thermal imaging device sensor is distinguished for its clarity and detailing.

F/1.0

Fast Start-Up
The Axion 2 features a short turn-on time: the device is fully functional within 5 seconds after pressing the ON button. Quick start-up helps save battery power: when hunting, the Axion 2 doesn't need to be kept ready at all times, simply turn it on when needed.

Axion 2 LRF. Long-distance laser rangefinder (1000 m).

Understanding the target distance is an essential factor in making the right decisions. A built-in laser rangefinder with a range of up to 1 kilometre allows you to measure distances in single measurements and continuous scanning modes with an accuracy of ± 1 meter for quick and error-free assessment of the situation.

1000 m
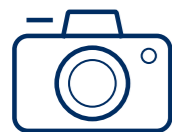
Built-in photo and video recorder.

The Axion 2 has a built-in video recorder. The internal memory of the Axion 2 can store hours of video and tens of thousands of photos. One touch of a button is enough to take a photo of an interesting scene or start recording video. The footage is copied to a computer hard drive via a USB-C port. The Axion 2 owner has a free 16 GB disk space for storing photos and videos captured with the device in the Pulsar cloud storage. Simply install the Stream Vision 2 mobile application, log in and connect the device with a smartphone via WiFi.

A selection of 8 color palettes

A choice of 8 colour palettes lets the user observe their field of view more effectively, allowing them to optimise the unit for specific tasks as well as react to changing observation conditions. White Hot, Black Hot and Red Hot are optimal for object detection, Rainbow and Ultramarine help increase chances for recognition & identification. Red Monochrome, Sepia and Violet are most suitable for long observation in the night.

Variable magnification

Digital zoom, up to 4x (XQ models) or 8x (XG models), provides improved focus and better overall object recognition at significant distances. The zoom changes either gradually in 2x step or continuously for a truly optimum, customized field of view for specific situation.

Improved Wi-Fi connectivity with 2.4 / 5 GHZ waveband support

In Axion 2 thermal imagers, the standard smartphone connection frequency range via a 2.4 GHz WiFi channel is complemented with an effective 5 GHz range. The 5 GHz connection offers better bandwidth, a faster data transfer rate, noise immunity and improved connection stability, resulting in more productive and easier operation of the thermal imager with a smartphone.

Distant operation from a smartphone and software updating with the Stream Vision 2 App

Built-in WiFi connects the Axion 2 to Android and iOS smartphones via the Stream Vision 2 mobile application. This opens up a wide range of options including wireless device software updates, real-time image transmission from the device to the smartphone screen, publication on social media of photo and video content captured by the device or transfer to messengers, remote control of digital device functions and access to the latest news from Pulsar. Moreover, registered users receive 16 GB of cloud storage for photos and videos recorded with the device.

Mobile App

ANDROID APP ON
Google play

Available on the
App Store

STREAM VISION 2

IPX7 Waterproof Rated

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

	Model	XG35	LRF XG35	XQ35	LRF XQ35
TECHNICAL SPECIFICATIONS	SKU	77476	77477	77478	77479
	Microbolometer, resolution, pixels @ pixel pitch, µm	640×480 @ 12		384×288 @ 17	
	Display, type / resolution, pixels	AMOLED 1024×768		AMOLED 640×480	
	Objective lens	F35/1.0			
	Magnification, x	2.5 – 20 (x8 zoom)		2 – 8 (x4 zoom)	
	Field of view, °	12.5×9.4		10.7×8.0	
	Range of detection, m	1750		1300	
	Rangefinder	Stadiametric	Laser	Stadiametric	Laser
	Operation time, h	7		11	
	Level of Protection (acc. to IEC 60529)	IPX7 (fully waterproof)			
	Dimensions, mm	152×50×74	152×74×75	152×50×74	152×74×75
	Weight, kg	0.3	0.35	0.3	0.35

PULSAR
IMAGE.QUALITY

Thermal Imaging Monocular
AXION
XM30F

GET MORE FOR LESS

12 Mg MAGNESIUM

APS3

Pocket-sized dimensions and light weight
Axion XM30F has a space-saving and pocket-sized design and weighing less than 250 grams. This is a classic option for a running hunting and tourism. The device is easy to grip and operate by right-handed and left-handed people due to the symmetrical arrangement of buttons on the upper panel.

Rugged magnesium alloy housing
Axion XM30F is designed for constant, often hard use. A magnesium alloy housing is light and strong at the same time. The housing reliably protects the internal components of a thermal imaging device from shocks, drops, moisture, heat or cold. At the same time a metal housing effectively removes the heat from electronics, minimizes image noise and increases consistency of the device operation during long-term observation.

Low power consumption. 7 hours of battery life on a single charge
A quick-change APS3 rechargeable battery provides 7 hours of continuous operation of the thermal imaging device on a single charge. The battery is removed from a battery housing and replaced with a new one in seconds. The battery is charged in a special device or inside the device from a PC, household power system or power bank via USB. The same sources are used for external power supply of a thermal imaging device.

Three sensitivity amplification levels

N **H** **U**

User selection of signal amplification combined with a new filtration algorithm and fine brightness and contrast adjustments, give the hunter great opportunities for early detection of the animal under different weather and temperature conditions and to determine its trophy qualities. These settings provide high-quality rendering of the target and background objects in the observation scene.

And more:
- Detection range up to 1300 m
- Ideal optical magnification
- Frost-resistant AMOLED Display
- A selection of 8 color palettes
- Built-in photo and video recorder. 16 GB of free cloud storage
- Improved Wi-Fi connectivity with 2.4 / 5 GHZ waveband support
- Stream Vision 2. WiFi integration with iOS and Android devices
- IPX7 Waterproof Rated

STREAM VISION 2

Mobile App

ANDROID APP ON Google play   Available on the App Store

| Model	XM30F
SKU	77473
Microbolometer, resolution, pixels @ pixel pitch, μm	320×240 @ 12
Display, type / resolution, pixels	AMOLED 640×480
Objective lens	F30/1.2
Magnification, x	3 – 12 (x4 zoom)
Field of view, °	7.8x5.9
Range of detection, m	1300
Operation time, h	7
Level of Protection (acc. to IEC 60529)	IPX7 (fully waterproof)
Dimensions, мм	144×40×69
Weight, kg	0.25

TECHNICAL SPECIFICATIONS

THERMAL IMAGING

NEW

Thermal Imaging Rangefinding Binoculars

MERGER LRF XP50

CLASSICAL DESIGN & SUPREME ERGONOMICS

High definition thermal imaging with 640x480 pixel @ 17 µm sensor <25mK NETD

Thermal imaging sensor with NETD <25mK 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.
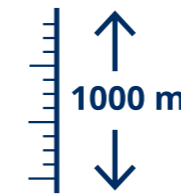
1000 m ↑↓ Long-distance laser rangefinder

Understanding the target distance is an essential factor in making the right decisions. A built-in laser rangefinder with a range of up to 1 kilometre allows you to measure distances in single measurements and continuous scanning modes with an accuracy of ± 1 meters for quick and error-free assessment of the situation.

⚡ Comfortable viewing experience

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 from 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.

⚡ Enhanced image processing algorithms

The Merger LRF thermal imaging binoculars use a new approach to image optimisation depending on the purposes and conditions of observation and provide high-quality rendering of both target objects and background. Three levels of signal amplification in combination with a connected smoothing filter and fine brightness and contrast adjustments give the hunter great opportunities for long-range detection of the animal under different weather and temperature conditions and determining its trophy qualities.

F/1.0

Fast aperture F50/1.0 lens

The characteristics of thermal imaging optics have a decisive influence on a thermal imager's ability to capture even the lowest radiation levels. Ultimate detection efficiency is achieved with the fast lens of the Merger LRF (F50/1.0) thermal imager in combination with the highly sensitive thermal sensor. The Merger LRF gives users the best quality, most detailed & high-contrast, informative imagery every time, even during rain or fog, when the temperature contrast of the observed scene is minimal.

12 Mg MAGNESIUM

Rugged magnesium alloy housing

Merger LRF is designed for constant, often hard use. A magnesium alloy housing is light and strong at the same time. The housing reliably protects the internal components of a thermal imaging device from shocks, drops, moisture, heat or cold. At the same time, a metal housing effectively removes the heat from electronics, minimizes image noise and increases consistency of the device operation during long-term observation.
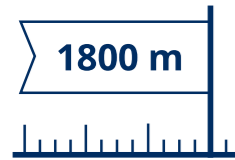
Long detection range

1800 m

A powerful long-distance objective lens combined with a 640×480@17 µm highly-sensitive thermal imaging sensor provides exceptional detection capabilities. A standard 1.8 m tall object can be detected up to 1800 m away in complete darkness.

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.

10 h

Two independent batteries. Up to 10 hours of continuous work

The Merger LRF is powered with two rechargeable batteries: one built-in with a capacity of 4 Ah, the other replaceable with a capacity of 3.2 Ah. A single charge guarantees up to 10 hours of battery life, which covers the time of active use of the scope for a hunt. The embossment on the body of the replaceable battery for accurate determination of the correct position makes it possible to quickly and confidently replace a flat battery with a new one in complete darkness by touch.

Built-in photo and video recorder

The Merger LRF has a built-in video recorder. The internal memory of Merger LRF can store hours of video and tens of thousands of photos. One touch of a button is enough to take a photo of an interesting scene or start recording video. The footage is copied to a computer hard drive via a USB-C port. The Merger LRF owner has a free 16 GB disk space for storing photos and videos captured with the device in the Pulsar cloud storage. Simply install the Stream Vision 2 mobile application, log in and connect the device with a smartphone via WiFi.

Improved Wi-Fi connectivity with 2.4 / 5 GHZ waveband support

Improved Wi-Fi connectivity with 2.4 / 5 GHZ waveband support
In Merger LRF thermal imagers, the standard smartphone connection frequency range via a 2.4 GHz WiFi channel is complemented with an effective 5 GHz range. The 5 GHz connection offers better bandwidth, a faster data transfer rate, noise immunity and improved connection stability, resulting in more productive and easier operation of the thermal imager with a smartphone.

8

A selection of 8 color palettes

A choice of 8 colour palettes lets the user observe their field of view more effectively, allowing them to optimise the unit for specific tasks as well as react to changing observation conditions. White Hot, Black Hot and Red Hot are optimal for object detection, Rainbow and Ultramarine help increase chances for recognition & identification. Red Monochrome, Sepia and Violet are most suitable for long observation in the night.

Firmware update via Stream Vision 2 App. Free 16 GB cloud space.

Built-in WiFi (2.4 / 5 GHZ waveband support) connects the Merger LRF to Android and iOS smartphones via the Stream Vision 2 mobile application. This opens up a wide range of options including wireless device software updates, real-time image transmission from the device to the smartphone screen, publication on social media of photo and video content captured by the device or transfer to messengers, remote control of digital device functions and access to the latest news from Pulsar. Moreover, registered users receive 16 GB of cloud storage for photos and videos recorded with the device.

STREAM VISION 2
Mobile App
ANDROID APP ON Google play
Available on the App Store

And more:

- Supreme ergonomics and convenient controls
- 2.5x-20x variable magnification
- Two high-contrast HD AMOLED displays
- IPX7 waterproof rated
- Wide range of operating temperature (-25 to +50°C)

Model	LRF XP50
SKU	77465
Microbolometer, resolution, pixels @ pixel pitch, µm	640×480 @ 17
Display type / resolution, pixels	AMOLED 1024×768
Objective lens	F50 / 1.0
Magnification, x	2.5 – 20
Range of detection, m	1800
Integrated laser rangefinder	Yes, up to 1000 m
Field of view, °	12.4 × 9.3
Dimensions, mm	196×143×76
Weight (without changeable battery), kg	0.8

TECHNICAL SPECIFICATIONS

ACCESSORIES

Infrared illuminators for Digex riflescopes

Interchangeable infrared illuminators for Digex digital night vision riflescopes. High power. Tenfold range of smooth power adjustment. Adjustable IR spot position. Mounting diameter 30 mm.

79197 Pulsar Digex-X850S

800 mW optical power. Wavelength of IR-illuminator Pulsar Digex-X850s is 850 nm. Sensors of digital night vision devices have the best sensitivity in this range and due to this fact, illuminator is effective for viewing remote objects.

79198 Pulsar Digex-X940S

700 mW optical power. IR Illuminator Pulsar Digex-X940S operates in 940 nm IR waveband, "invisible" for human eye. It allows the hunter observe animals without the risk of being discovered and scaring them.

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.

79201 Weaver U rifle mount

includes special adapters to position the mount on thermal imaging riflescopes of the Talion family.

79177 Weaver SQD rifle mount

Quick-release mount. It is designed to mount sight on hunting weapons equipped with rails such as Weaver or Picatinny. The mount has a reliable pin locking system to prevent accidental opening. Weaver SQD locking mechanisms are secured by locking screws so the mount withstands intensive operation – multiple cycles of removing and installing, vibration and shock loading during firing, the accumulated effect of a large number of shots – including complete repeatability of mounting the sight with the mount on the rail, maintaining the point of impact (adjusting) and accuracy of fire.

79202 Weaver USQD rifle mount

includes special adapters to position the mount on thermal imaging riflescopes of the Talion family.

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".

79129 CZ550 rifle mount

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

79203 Weaver LQD Mount

Quick-release rifle mount for installing digital and thermal imaging Pulsar riflescopes on weapons with Weaver/Picatinny-type rails. The rifle mount design and precision of manufacturing guarantee that the point of impact will not change after removing and re-installing the riflescope with the Weaver LQD rifle mount on the weapon. The rifle mount is fixed on the rail using a lever-type clamp with a locking mechanism to prevent accidental opening when hooked or during intense shooting. The rifle mount is ideal for mounting digital and thermal imaging optics on sporting and hunting weapons based on MSR (modern sporting rifles) / AR-15 platforms. Compatible with Trail, Apex, Digisight and Talion series riflescopes.

FN Cover Ring Adapters

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

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.

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.

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.

PSP ring adapters

PSP Ring Adapters enable installation of Krypton / Proton 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.

79179 PSP-V Weaver rail adapter

An adapter for mounting Krypton FXG50 and Proton FXQ30 thermal imaging attachments in front of the riflescope lens to the Weaver/Picatinny rail.

For the most convenient observation, the attachment's display image is centred in the field of view for daytime optics. For the best pairing with optical riflescopes, the adapter provides two attachment height positions depending on the riflescope lens size and mounting height. The PSP-V is a quick-release adapter – the attachment with the adapter is instantly mounted on the rail and removed from it thanks to the single-point locking lever assembly. The adapter is completed with a silicone cover to protect the riflescope lens from ambient light.

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.

APS Power Supplies

Interchangeable standard power supplies for Axion, Thermion, Digex and Proton.

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 / Proton.

79165 APS battery charger
Intended for charging the APS2 / APS3 battery packs.

79182 APS5 battery charger
Intended for charging the APS5 battery packs.

79186 APS-V battery charger
Designed to charge APS2 / APS3 and APS5 battery packs.

IPS power supplies

Interchangeable standard power supplies for Trail / Helion / Forward / Krypton / 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).
Not recommended for use with Forward / Krypton.

79119 BPS 3xAA battery holder
Capacity 1.5 - 2 A·h (rechargeable batteries).
Operating time 2 - 3 h.
Compatible with Helion XQ / XP, Helion 2 XP50, Accolade, Trail XQ / XP

79164 IPS battery charger
Intended for charging the IPS5 / IPS7 / IPS7A / IPS10 / IPS14 battery packs.

Other accessories

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.
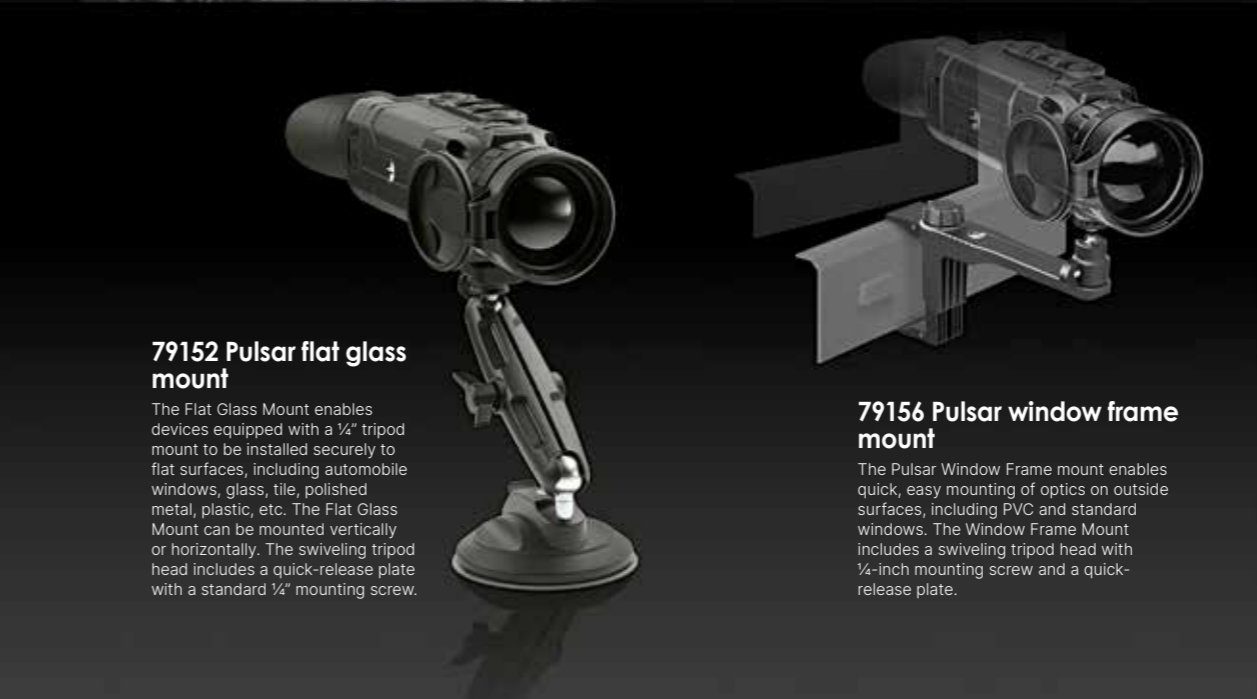
79152 Pulsar flat glass mount
The Flat Glass Mount enables devices equipped with a ¼" tripod mount to be installed securely to flat surfaces, including automobile windows, glass, tile, polished metal, plastic, etc. The Flat Glass Mount can be mounted vertically or horizontally. The swiveling tripod head includes a quick-release plate with a standard ¼" mounting screw.

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 ¾-inch mounting screw and a quick-release plate.

71013 Monocular Pulsar 5x30B
The Pulsar 5×30B monocular can be attached to the Krypton / Proton thermal unit and used as a 5x power thermal monocular. Along with this, the Pulsar 5×30B is a fully-functional daylight observation device.

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.

79142 Pulsar BT wireless remote control
The ergonomic, wireless remote control, with encoder wheel, puts the full range of device's capabilities at your fingertips for comfortable, convenient, hands-off operation. Compatible with Forward F/FN 400th, Krypton XG/FXG, Proton XQ/FXQ monoculars & front attachments.

79178 L-type tripod adapter
Allows mounting of Axion XQ thermal monoculars on a tripod in either a vertical or horizontal positions.

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.

PULSAR