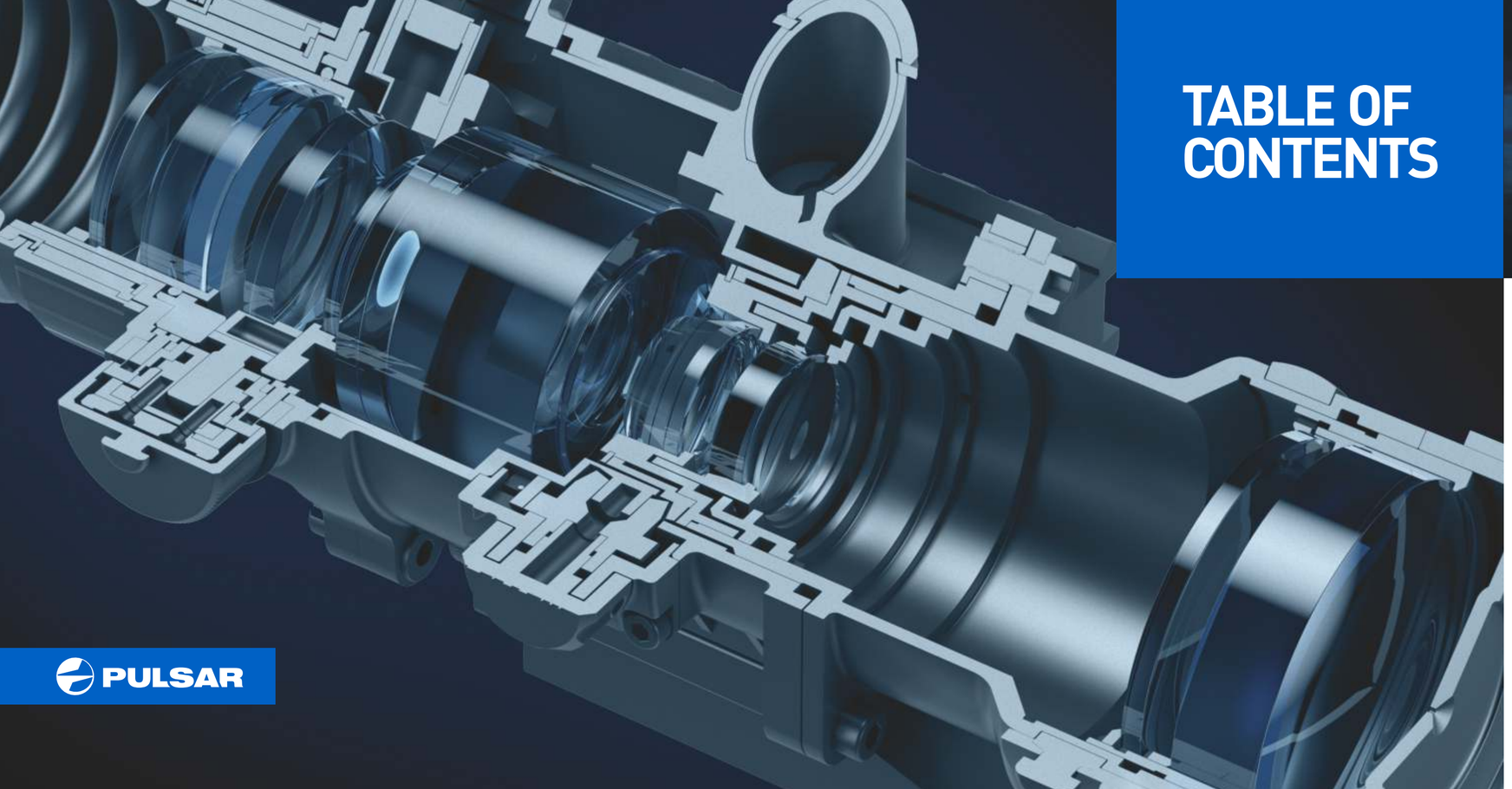
PULSAR

www.pulsar-nv.com

PULSAR CATALOGUE 2013



PULSAR

TABLE OF CONTENTS

QUANTUM	4	THERMAL IMAGING SCOPES
DIGISIGHT	6	DIGITAL NIGHT VISION RIFLESCOPES
FORWARD	8	DIGITAL NIGHT VISION FRONT ATTACHMENTS
PHANTOM	10	NIGHT VISION RIFLESCOPES
SENTINEL	12	NIGHT VISION RIFLESCOPES
RECON	14	DIGITAL NIGHT VISION SCOPES
CHALLENGER	16	NIGHT VISION SCOPES
EDGE	18	NIGHT VISION BINOCULARS & GOGGLES
EXPERT	20	PROFESSIONAL BINOCULARS
EXPERT LRF	22	RANGEFINDING BINOCULARS
	24	IR - FLASHLIGHTS
	26	ACCESSORIES
	28	PRODUCT SPECIFICATIONS
	30	OUR TECHNOLOGIES

PULSAR

THERMAL IMAGING DEVICES

QUANTUM

Quantum HD 38S | Quantum LD 38S
Quantum HD 19S | Quantum LD 19S

- Long Viewing Range
- Germanium Lens with Internal Focusing
- Wide Range of Operation Temperature (-20°C...+50°C)
- Effective Operation in Fog or Smoke Conditions
- Detector Size 384x288
- High Contrast Frost-Resistant OLED Display
- 2X Digital Zoom
- Constant Image Quality Across the Entire Field of View
- Three Calibration Modes (manual (silent), semiautomatic and automatic)
- Three Operating Modes ("City", "Forest", "Identification")
- Defective Pixel Repair Option
- Brightness and Contrast Settings
- User Choice of Modes "White Hot"/ "Black Hot"
- Quick Start-Up
- External Power Supply Availability
- Power saving mode
- Video Out (Video Recording Capability)
- Weaver MIL-STD-1913 Rail to Install Accessories (Video Recorder, External Power Supply etc.)
- Partially Rubberized Carbon Fiber Body
- Two ¼ Inch Sockets
- Lightweight and Compact Dimensions
- New Graphic Interface

30 Hz
9 Hz

DESCRIPTION

CONTROLS
Main control functions (turning on and off the unit, sensor calibration, colour inversion/digital zoom) are carried out with the buttons on the upper panel. The size and location of the buttons are customised for comfortable use both with a gloved or bare hand. Brightness and contrast are set up with the controller wheel located next to the objective lens.

USER INTERFACE
Actual information about the status of the thermal imaging device, depicted in the form of blue icons and numbers, is located on the data panel in the lower portion of the screen, and does not interfere with the image observed. When switching between various functions (digital zoom, colour inversion, brightness/ contrast settings), the respective large sized icon appears in the right upper portion of the screen

MAIN MENU
The controller wheel enables operation with the menu. The menu contains such functions as: choice of optimal operation mode, sensor calibration mode, video output activation/disable, clock setup, defective pixel repair option.

CALIBRATION
The Quantum S suggests three calibration modes: silent manual mode ("M"), automatic ("A") and semiautomatic ("H"). The "A" mode implies calibration without user participation (process initiation (actuation of the shutter) takes place automatically). In the "H" mode the user decides on his own if calibration is required based on the image quality. Button "Cal" is pressed in this mode. Manual calibration ("M") is carried out by pressing the button when the lens cap is closed. The "M" mode is recommended for hunting due to silent operation.

OPERATING MODES
The Quantum S suggests three operating modes, each designed to deliver best possible image in specific viewing conditions. The modes are as follows: "City" (enhanced contrast), "Forest" (low contrast) and "Identification" (improved rendering of hot objects' details).

VIDEO OUTPUT
All Quantum models are equipped with an analog video output to enable connection of external recording equipment or transmitting image to the display.

WIDE RANGE OF OPERATION TEMPERATURES
Quantum imaging scopes are effective for the use in low temperatures (-20°C) thanks to the frost-resistant OLED display employed in the unit (image remains the same as when viewing at positive temperature of the surrounding atmosphere).

SELF-CONTAINED POWER SUPPLY
The Quantum is powered with four AA (rechargeable) batteries. The batteries are stored in a container which is then placed in a battery compartment of the unit.

EXTERNAL POWER SUPPLY
Operation time of the unit can be significantly increased thanks to the use of external power supplies (for example, Pulsar EPS3/ EPS5) that can be connected with a special jack. When used in frosty weather, the power supply can be stored under the clothes.

POWER SAVING MODE
Disabling the video output module in the Quantum S series thermal scopes increases self-contained operating time on a set of batteries or external power supply.

BODY
Partially rubberized carbon fiber body featuring extra durability ensures secure grip of the unit.

PULSAR

DIGITAL NIGHT VISION RIFLESCOPES

DIGISIGHT

Digisight N750A | Digisight N750UA
Digisight N770A | Digisight N770UA

- Great Image Quality and Resolution
- Large Caliber Shockproof
- Built-in Laser IR Illuminator with Three-Step Power Adjustment
- High Resolution (640x480) OLED / LCD Display
- Wide Choice of Selectable Integrated Reticles
- Long Eye Relief (67 mm)
- 1.5x Zoom
- Wide Range of Operating Temperature
- Built-In & External Power Supply Options
- Wireless Remote Control
- Water- and Dust Resistant
- Additional Weaver MIL-STD-1913 Rail for Accessories
- Flip-up Lens Cap
- Video Output
- Composite Housing

OLED
LCD

DESCRIPTION

BUILT-IN LASER IR ILLUMINATOR

The Digisight riflescopes are outfitted with built-in IR Laser Illuminators complying with Class 1 laser safety, with three-step power control. The IR Illuminator of the N750A / N750UA models emits at 780 nm wavelength and provides effective observation of remote objects in total darkness. The Digisight N770A / N770UA models feature the laser IR Illuminator operating in the covert IR range (915 nm), invisible to the unaided human eye.

SELECTABLE RETICLES

A reticle is electronically displayed on the screen and is permanently located in the plane of target image. The Digisight's internal memory contains a large number of reticles of various shapes and applications. The central part of the reticles is illuminated, color can be changed from red to green. The color of the main part can be switched from black to white. The software allows the user to save in riflescope's memory three points of impact for three various distances (types of weapon or cartridges), and each option allows the use of a dedicated reticle. The horizontal and vertical numeric coordinates of the reticle position facilitates windage/elevation adjustments and completes memorization function.

LONG EYE RELIEF

The Digisight riflescopes feature a 67 mm eye relief – one of the best parameters in its class.

WIDE OPERATING TEMPERATURE RANGE

Ability to operate in normal mode at sub-zero temperatures is due to the use of a frost-resistant OLED display (Digisight N750A & N770A models) featuring fast response and provides crisp image when observing dynamic object.

RIFLE MOUNT

The mounting holes in the base of the riflescope enable the mount to be installed in one of multiple positions. This choice (depending on the rifle type, anthropometric data of a shooter, etc.) helps the user to ensure the most suitable position on a riflescope.

EXTERNAL POWER SUPPLY

Operating time can be significantly extended by using high-capacity external power supply units attached to the Digisight via an external power jack. During continued use in freezing weather, the external power supply units can be stored under the clothes.

WIRELESS REMOTE CONTROL

The wireless remote control allows basic operations to be fulfilled without resorting to standard controls.

VIDEO OUT

The Digisight riflescopes are equipped with a Video Out jack enabling real time video recording with the use of external recording equipment.

PULSAR

DIGITAL NIGHT VISION FRONT ATTACHMENTS

FORWARD

Forward DFA75 | Forward DN55

- Fast and Easy Conversion of a Day Optical Sight into a Night Riflescope
- Quick and Easy Mounting and Adjustment
- Suitable for Use with the Majority of Daylight Sights with 42, 50 & 56 mm Lens Diameters
- Long Viewing Range
- Removable Eye-Safe Invisible Laser IR Illuminator
- High Resolution OLED Display
- Convertible into a 10x Hand-Held Digital NV Monocular (DN Model)
- Wide Range of Operating Temperature
- Various Image Set-Up Options (Brightness, Contrast Set-Up, Sensitivity Enhancement)
- Wireless Remote Control
- Self-Contained & External Power Supply Options
- Composite Housing
- Lightweight

DESCRIPTION

BUILT-IN LASER IR ILLUMINATOR
Digital NV Forward DFA & DN are outfitted with detachable laser IR Illuminator operating in the "invisible" range (915nm). The 915nm laser IR Illuminator complies with Class 1 laser safety, features focusable IR beam from spot to flood, three-step power adjustment.

FORWARD DN/DFA AS NV ATTACHMENT
To install the night vision module of Forward DN/DFA onto the front optical bell of a day optical devices (telescopic sights, spotting scopes) with lens diameters 42, 50 and 56 mm or similar, specially designed mounting assemblies (bought separately) are used. The assemblies are the adapters with various diameters with a set of reducing rings (the rings can be used as necessary depending on the diameter of the optical bell). The adapter is permanently attached to the optical bell of a telescopic sight. This allows the Forward DFA attachment to be quickly installed in front of the lens for nighttime shooting. When the attachment is not used, the adapter accommodates a protective cap that covers the lens of an optical sight in the daytime.

VIDEO OUT
Enables real time video recording to external devices and transmitting video signal to a screen.

WIRELESS REMOTE CONTROL
The wireless remote control allows basic operations to be fulfilled without resorting to standard controls.

WIDE OPERATING TEMPERATURE RANGE
Ability to operate in normal mode at sub-zero temperatures is due to the use of a frost-resistant OLED display featuring fast response and provides crisp image when observing dynamic object.

EXTERNAL POWER SUPPLY
Operating time can be significantly extended by using high-capacity external power supply units attached to the Forward via an external power jack. During continued use in freezing weather, the external power supply units can be stored under the clothes.

EXTENDED FUNCTIONALITY
The main menu includes a number of functions such as: one shot zeroing, brightness, contrast and sensitivity set-up, clock set-up, output video signal selection etc.

PULSAR

NIGHT VISION RIFLESCOPES

PHANTOM

Phantom 3x50 | Phantom 4x60
Phantom 3x50 MD | Phantom 4x60 MD

- Fine Image Quality and Resolution
- Multi-Reticle or Switchable Two-Colour Mil-Dot Reticle Options
- 50 Cal. Ready
- Nitrogen Purged Optical Path
- Rugged and Water-Resistant to IPX6 Standard
- Stabilized Power Supply Unit
- Functions with One AA (1.5V) or CR123A (3V) Battery
- Low Battery Indicator
- Instant On Function
- Internal Focus Adjustment
- Ergonomic Design and Easy-to-Use Interface
- Remote Control with Secure Attachment
- Additional Weaver MIL-STD-1913 Rail for Accessories
- Manufacturing Employs Carbon Plastic and Other Modern Technologies
- Flip-Up Objective Lens Cover

3x50
4x60

DESCRIPTION

NITROGEN PURGED OPTICAL PATH

The Phantom's housing is rugged and reliable due to its construction of high grade, glass-filled, plastic composite. The unit can be operated in any weather condition. Unique for Night Vision, nitrogen-purged optical channel prevents fogging caused by the temperature drops or high humidity.

SELECTABLE RETICLE

The standard Phantom features a red-on-green reticle with brightness control. The hunter can choose one of three reticle options, whichever best suits the specific situation. They are easily switched by the simple push of a button. The Phantom MD features a selectable, two-color, red-on-green or green-on-green reticle Mil-Dot reticle. Blinking reticle indicates that the battery should be replaced within the 15-30 minutes.

REMOTE CONTROL

The 3 button remote control (two duplicate the "On/Off" function) is helpful for tactical applications and can be mounted on any easy to reach part of the weapon. The third button is intended for an Instant On start-up of the riflescope.

BUILT-IN IR ILLUMINATOR

The Phantom has an option of a powerful removable IR illuminator offering a variable beam from spot to flood.

INTERNAL FOCUSING

The optical system employs an internal focusing mechanism (from 5m to infinity) with 'definite' click-stop focus positions. The focusing provides clear images at extremely short distances as well as optimising quality at all distances within the riflescope's working range.

PROTECTIVE LENS CAP

Protective lens cap is permanently attached to the body to prevent it being lost and can be slid back down the body when observing or shooting.

WEAVER 7/8" RAIL

A Weaver 7/8" rail on the left side of the body designed for mounting additional accessories (IR flashlight, DSAS, red dot laser).

POWER SUPPLY

The riflescope can be powered both with a single AA (1.5V) or CR123A (3V) battery. The stabilized voltage of the power supply prevents reticle shift and drop in reticle brightness and guarantees proper operation of the tube and IR-illuminator, even when the batteries are nearly empty. The batteries are positioned vertically, which enhances reliability of energy supply when recoiling.

GLOW OF TUBE'S SCREEN

The Phantom (Gen.2+ models) are equipped with image intensifier tubes with various glow of the screen – regular green or black and white (model Phantom BW) with enhanced contrast.

PULSAR

NIGHT VISION RIFLESCOPES

SENTINEL

Sentinel GS 2x50 | Sentinel GS 2.5x60 | Sentinel G2+ 3x50
Sentinel G2+ 4x60 | Sentinel G2+ 3x50 MD | Sentinel G2+ 4x60 MD

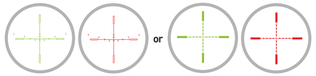
- Lightweight and Extremely Durable Titanium Body
- Switchable Two-Colour Range Finding Reticle or Two-Colour Mil-Dot Reticle options
- Variable Reticle Brightness Adjustment
- Built-In IR Illuminator with Focusable Beam
- Precision Internal Windage/ Elevation Adjustment
- Vertical Positioning of the Battery Ensures Uninterrupted Power Supply when Shooting
- Low Battery Indicator in GS (CF-SUPER GEN) Models
- Stabilized Power Supply
- Weaver MIL-STD-1913 Accessory Rail
- Remote Control with Secure Attachment

CF-SUPER GEN 2+

DESCRIPTION

TWO - COLOR ULTRA-FINE RANGE-FINDING RETICLE

The Sentinel reticle has a brightness control option and a range-finding scale to facilitate adjustment when shooting at different distances (provided the shooter knows the size of the target). Initially, the riflescope should be sighted at a known range (say 50m) on the central cross-hair. Distance is determined by placing a target with known width (specific value depends on riflescope's model) between the marks of the ranging chevrons ">..<". If the target fits between the marks, you should make the vertical adjustment according to the mark. Thus, you can make adjustments when shooting at distances of 15, 25, 50 and 100m. The reticle colour can be switched at any time from green-on-green to red-on-green to optimize performance depending on the contrast of the target/ surrounding vegetation. The Sentinel G2+ is also available with a Mil-Dot Reticle.



BUILT-IN IR ILLUMINATOR

The Sentinel is equipped with a powerful IR illuminator offering a variable beam from spot to flood.

INTERNAL FOCUSING

The optical system employs an internal focusing mechanism (from 5m to infinity) with 'definite' click-stop focus positions. The focusing provides clear images at extremely short distances as well as optimising quality at all distances within the riflescope's working range.

PROTECTIVE LENS CAP

Protective lens cap is permanently attached to the body to prevent it being lost and can be slid back down the body when observing or shooting.

WEAVER 7/8" RAIL

A Weaver 7/8" rail on the left side of the body designed for mounting additional accessories (IR flashlight, DSAS, red dot laser).

STABILIZED POWER SUPPLY UNIT

The stabilized voltage of the power supply prevents reticle shift and drop in reticle brightness and guarantees the tube's and IR-illuminator's proper operation, even when the batteries are nearly empty. The batteries are positioned vertically, which enhances reliability of energy supply when recoiling.

REMOTE CONTROL

The 3 button remote control (two duplicate the "On/ Off" function) is helpful for tactical applications and can be mounted on any easy to reach part of the weapon. The third button is intended for an Instant On start-up of the riflescope.

PULSAR

DIGITAL NIGHT VISION SCOPES

RECON

Recon 750 | Recon 750R
Recon 770 | Recon 770R

- Sensitive CCD Array
- High Light Transmission Lens
- Video Output
- Built-In Video Recorder (R Models)
- Resistant to Bright Light Exposure
- Multi-Color Screen Selection
- Contrast Gain Function
- Built-In «Stealth» Laser IR Illuminator (Recon 770/ 770R Models)

780 nm
915 nm

DESCRIPTION

CONTROLS AND BASIC FUNCTIONS

Turning on and off the unit, built-in IR Illuminator and selection of display modes in Recon units is effected by a group of buttons on the top of the unit. Display color modes are as follows: black and white, black and white with increased contrast, green (simulates image in a tube-based NV device) and red (helps eyesight quickly adapt to night conditions after using the NV device). Adjust the screen brightness suitable for you.

RECON R SERIES

The Recon R series designed with an on-board recorder allowing video recording and image capturing during observation. Compact yet easy to operate video recorder's controls are designed specifically for night-time operation. Recon R series devices also have Motion function - video recording starts automatically as soon as a moving object appears in the field of view.

BUILT-IN IR ILLUMINATOR

Digital night vision scopes Recon are supplied with various IR Illuminators including laser IR Illuminators complying with Class 1 laser safety (including the "invisible" 915 nm and long range 780 nm model) as well as LED based 805 nm Illuminators.

VIDEO OUT

The Recon is equipped with a jack allowing connection of external video recording sources or TV set facilitating long-time stationary viewing.

MOUNTS

The Recon night vision scopes are equipped with an original mount fitting which combines a ¼" tripod socket (to enable mounting on a tripod) and a Mil – STD 1913 weaver short rail to enable mounting different accessories including auxiliary IRs, sound amplification and other systems.

PULSAR

NIGHT VISION SCOPES

CHALLENGER

Challenger G2+ 1x21 | Challenger G2+ 2x42 | Challenger G2+ 3.5x56
Challenger GS 1x20 | Challenger GS 2.7x50
Challenger GS 3.5x50 | Challenger GS 4.5x60

- Lightweight and Extremely Durable Compact Body
- Water- and Dust-Resistant
- Built-in IR Illuminator
- Flexible Carrying Case
- High Contrast Optics
- Dual Mounts & Tripod Socket
- Hand-Held & Hands-Free Use
- Single Switch Button Operation

CF-SUPER
GEN 2+

DESCRIPTION

BUILT-IN IR ILLUMINATOR
The Challenger night vision scopes are equipped with built-in IR illuminators which are various in design:
- The devices without visual magnification (1x) and Challenger G2+ 2x42 are equipped with an energy-conserving wide-angled IR illuminator optimised for the use with the a Head Mount in lowlight (for map reading, use in dark closed rooms).
- All other Challenger units feature a powerful IR illuminator for observation at insufficient levels of illumination at a distance above the average.

CONTROLS
All operations are carried out with the help of a single switch that sequentially turns on the unit and IR Illuminator.

MOUNT
Two diametrically positioned mounting rails with a ¼" tripod mount are used to attach to the Head Mount. Additional Weaver rail on the body is designed to install extra Pulsar IR Illuminator or other accessories.

EYEPIECE
The Challenger night vision scopes are outfitted with a new five-lens eyepiece that minimizes distortion across the edges of the field of view and increases image sharpness and contrast. A soft rubber eyecup conceals the light emission from the tube thus permitting a user to stay unnoticed.

BODY
The body of metal and carbon-filled plastic is able to effectively withstand impact, moisture and dust which allows the units to be used in extreme conditions.

PULSAR

NIGHT VISION BINOCULARS & GOGGLES

EDGE

Edge G2+ 1x21 | Edge GS 1x20 | Edge GS 2.7x50
Edge GS 2.7x50 L | Edge GS 3.5x50 | Edge GS 3.5x50 L

- Lightweight and Compact
- CF-Super or Gen 2+ Tube Inside
- Multi-Coated Lenses
- High Resolution Through the Field of View
- Built-In Automatic Bright Source Protection
- Reinforced Fiberglass Body
- Built-In Laser/ LED IR Illuminator with Variable Power
- Flexible Carrying Case
- Hand-Held & Hands-Free Use

CF-SUPER
GEN 2+

DESCRIPTION

BUILT-IN IR ILLUMINATOR

The Edge night vision binoculars are equipped with built-in IR illuminators with a gradual power control function:
- Devices without the visual magnification (1x) are equipped with an energy-conserving wide-angled short-range IR illuminator optimized for the use with a Head Mount in lowlight (for map reading, use in dark closed rooms).
- The Edge GS 2.7x50/3.5x50 & 2.7x50/3.5x50 L night vision binoculars feature more powerful IR Illuminators (805 nm LED & 780 nm eye-safe Laser respectively) for observation at insufficient levels of illumination at a distance above the average.

TUBE PROTECTION

The Edge GS series features an image intensifier tube protection system – once the luminance threshold level is exceeded, current feed to the tube is automatically reduced or fully ceased. This allows the user to reach the highest possible tube performance.

CONTROLS

The Edge night vision binoculars are easy in operation. The device and IR illuminator are switched by pressing buttons (ON and IR respectively) located on the top of the body. Additionally, the Edge binoculars & goggles are equipped with a gradual IR illuminator power adjustment function. The wheel-shaped power controller is located next to the IR illuminator activation button.

WEAVER 7/8'' RAIL

A[13:01:58] Andrew S. Yatskevich: Weaver Rail fixed on the top of the Edge GS 2.7x & 3.5x models is used to enable attachment of additional accessories like IR Flashlights.

BODY

The body of metal and carbon-filled plastic is able to effectively withstand impact, moisture and dust which allows the units to be used in extreme conditions.

HEAD MOUNT

The Compact Head Mount is designed for joint use with the Edge GS 1x20 or Edge G2+ 1x21 night vision goggles. This allows hands-free operation of the night vision device in partial and complete darkness. The Head Mount ensures stable positioning of a night vision device in front of the user's eyes, even while in fast motion (pacing, running, abrupt movements). The Head Mount is simple and convenient to use. Minimal protrusion of the suspension point reduces fatigue and load on the user's neck if operated for long periods of time. The Head Mount can also be paired with a camouflage cover.

PULSAR

BINOCULARS

EXPERT

Expert VMR 8x40

Expert VM 8x40 | Expert VM 8x40 Marine

- Progressive Porro II Prism Design
- Three Viewing Modes via Switchable Built-In Filters
- Nitrogen Purged Optical Channel
- Fully Encased Optical System Protected by Flat Exterior Lenses
- Ergonomic Eyepieces
- Exclusive Eclipse-M Lens Caps
- Durable Fiber Reinforced Composite Body
- Anti-Reflection Coating Based on True Color™ Vacuum Technology
- Noticeable Bright Yellow Inserts in the Binocular's Body (Marine Version)
- Protective Rubber Grip Pads (VMR Version)

VM

VMR

DESCRIPTION

VIEWING MODES

The Expert VM boasts switchable internal filters to enhance viewing experience. Really helpful in foggy conditions, or bright light, they work by polarizing the incoming light or cutting out some of the spectrum. Changing the viewing modes is as simple as moving a switch on the bottom of the binocular.

Observation in Reflection Reduction Mode neutralizes or minimizes the dazzling effect of light bouncing back from non-metallic, highly reflective surfaces (water, snow, ice or glass) as well as may assist in observing through some of them (car windows).

Contrast Mode featuring the yellow light tint helps in twilight, haze or fog for enhancing the image with brighter and contrasting spectrum.

DESIGN FEATURES

The Expert was intended from the outset as a platform for several future application developments. The solid, yet very light, glass-reinforced plastic body safely encases the internal moving parts. Nitrogen filling prevents lenses from fogging. Designed as a waterproof, extra durable system the binocular Expert complies with IP67 standards of water & dust resistance (IEC 60529). Comfortable in use, and to carry, the binocular Expert is surprisingly light and compact for the performance level it provides.

FLAT LENSES

The first line of protection against extreme outside conditions – extra durable flat front lenses prevent the inner optics from scratches, dust and moisture.

EYEPIECES

The only moving part of the body - eyepieces are setting interpupillary distance, while oblique eyecups maximize comfort and cut out peripheral light.

LENS CAPS

Eclipse-M lens caps remain attached at all times and can protect the front optics from distortion due to precipitation.

EXPERT VMR 8x40

As compared to basic models, the Expert VMR 8x40 has partially rubberized body.

EXPERT VM MARINE

The distinctive feature of the binocular Expert VM 8x40 Marine is the yellow inserts of the lens caps and eyepiece areas. This special coloring makes the binoculars more visible.

PULSAR

LASER RANGEFINDING BINOCULARS

EXPERT LRF

Expert LRF 8x40

- Supreme Light Transmission
- Realistic Colour Rendering
- Operation Possible in Freezing Conditions
- Wide Range of Symbols Brightness Settings
- Stable Position of Graphic Data in the Field of View
- Excellent Perception of On-Screen Symbols Under Any Conditions
- Single Measurement and Scan Modes (Meters/Yards)
- Low Power Consumption
- Low Battery Indicator
- Durable Fiber Reinforced Composite Body with Protective Rubber Grip Pads

LRF
8x40

DESCRIPTION

SELF-CONTAINED RANGEFINDER MODULE
The emitter and receiver of the rangefinder module are located between the binocular's lenses separately from the optical channel and therefore do not impact high light transmission.

HIGH TRANSMISSION FACTOR
The Expert LRF 8x40 features one of the best transmission factors among similar devices, ensuring a brighter image which can be seen especially well when conducting observation in cloudy weather in the daytime or twilight.
The use of the patented on-screen data input system ensures a lower loss of light in the optical channel as compared to LCD based display solutions.

REALISTIC COLOUR RENDERING
The multi-coating used for the Expert LRF 8x40 binocular ensures realistic colour rendering of an image under observation. You will not see the noticeable cold blue tints inherent in the image of some other popular binoculars with a built-in laser rangefinder.

DISPLAYING INFORMATION
The reticle, letters and figures are displayed in the field of view as luminous red symbols.
Gradual five step adjustment provides for optimal brightness level for any levels of illumination – symbols can be seen clearly both in the daytime and twilight.

OPERATION POSSIBLE AT EXTREME LOW TEMPERATURES
The Expert LRF 8x40 shows stable operation in sub-zero conditions (the unit was tested multiple times at a temperature of 30°C below zero). Competitive units using LCD displays show visible slowdown of graphic data in the field of view at sub-zero temperatures.

STABLE POSITION OF GRAPHIC DATA IN THE FIELD OF VIEW
The construction of the Expert LRF provides stable horizontal positioning of symbols in the field of view irrespective of the interpupillary distance setting of the eyepieces.

ADVANCED IMAGE SHARPNESS
The high resolution image seen through the Expert LRF offers high levels of sharpness and the ability to render small objects at long distances in all zones of the field of view.

LOW POWER CONSUMPTION
The Expert LRF 8x40 allows you to take up to 14000 single measurements from one battery which makes it one of today's most effective units with a laser rangefinder in terms of energy consumption.

IR FLASHLIGHTS

PULSAR

Pulsar - X850 | Pulsar L - 808S | Pulsar L - 915
Pulsar – 805 | Pulsar - 940

- Increases Viewing Range in Extremely Dark Conditions
- Smooth Power Adjustment
- Variable Beam
- Adjustable IR Spot Position
- Attachment on Any NV Devices with a Weaver Rail or ¼ Inch Socket
- Laser Safety Class 1 – Eyesafe (Models L - 808S / L - 915)
- Low Battery Indicator
- Invisible to the Unaided Human Eye (915 & 940 nm Models)
- Compact and Lightweight

LED
LASER

DESCRIPTION

FOCUSING
Pulsar IR Flashlights' spot can be smoothly adjusted from narrow beam to flood. Unfocused beam illuminates larger area; the narrow beam light ensures longest possible viewing distance.

IR SPOT POSITION
Design of Pulsar IR Flashlights allows spot position to be corrected in the field of view horizontally and vertically. To do this, loosen the ring fixing the optical assembly, adjust the IR spot in the center of the field of view (the NV unit should be on) and tighten the ring again.

POWER
Power is adjusted by rotating the wheel on the body next to the ON button. Adjustment of both – power and spot divergence angle – helps achieve best illumination of an object in specific observation conditions.

MOUNTING
Pulsar IR Flashlights are equipped with a mount adaptable for Weaver rail available in most modern night vision rifle scopes and optical units, as well as hunting or sports and pneumatic weapons. Package also includes an adapter that allows flashlights to be attached to NV units outfitted with a ¼ inch tripod mount.

INDICATION
After the IR Flashlight is on, a LED indicator lights located next to the battery container. When the batteries are low, the indicator changes a color, the latter depending on the IR Flashlights model.

Pulsar - 805 IR Flashlight
Weaver rail mountable to fit all Pulsar designs - the 805 IR features focusable beam, adjustable collimation and smooth brightness control. Powered by 2 AA batteries of its own it does not drain the internal power storage of a night vision device.

Pulsar L - 808S Laser IR Flashlight
Similar in mechanical system to the 805 model, the L-808S is a first step in developing line of the Pulsar's eye-safe laser IR flashlights. With an emission power higher than that of the diode design – the L - 808S is one of the most powerful IR flashlights in the market today. It provides greater viewing distance when used with analog (image intensifier tube based) and digital night vision devices.

Pulsar - 940 IR Flashlight
Pulsar L - 915 Laser IR Flashlight
Operates in the stealth IR range, invisible by the unaided eye. Intended for use with digital NV systems, it is not effective and sometimes even undetectable for an analog (tube) NV systems.

PULSAR - X850 IR Illuminator
The most powerful in Pulsar line.

#79102 **50 mm Weather Guard**
#79103 **60 mm Weather Guard**
The Weather Guard, attached in front of the objective lens of the Phantom or Sentinel night vision riflescopes, will protect the objective lens against atmospheric precipitation (rain or snow).

#79096 **NV50 1.5x Lens Converter**
#79097 **NV60 1.5x Lens Converter**
Fast aperture afocal attachments fixed in front of the lens that increase magnification of Pulsar night vision riflescopes (including Phantom, Sentinel GS/G2+) 1.5 times retaining image quality.

#79092 **Challenger GS 1x20 2x Lens Converter**
Afocal lens converter increasing the magnification of the Challenger GS 1x20 2 times.

#79041 **Challenger GS 1x20 DOS Adapter**
#79042 **Challenger G2+ 1x21 DOS Adapter**
Combined with the Challenger GS 1x20 / Challenger G2+ 1x21 NV monocular adapters allow use of soft air guns with a day optical riflescope for night shooting. The reticle of the riflescope is perfect for aiming. The adapters come equipped with reducing rings to affix the night vision device onto day riflescope and provides the benefit of various eyepiece diameters. To increase brightness of the image and range of shooting, additional Pulsar IR Flashlight can also be affixed on the adapter.

#79044 **ZT Adapter**
Combined with the Challenger GS 1x20 adapter allows use of day optical scopes for night observation.

ACCESSORIES

#79111 **EPS3 Battery Pack**
#79112 **EPS5 Battery Pack**
External power supplies are designed for the use with digital units and NV riflescopes, thermal imaging scopes. They feature greater capacity as compared to regular batteries which increases operation time of digital NV units and thermal imaging scopes several times. The EPS3 (2.4Ah) has a rigid plastic case and can be installed on any devices outfitted with a Weaver rail or ¼ tripod mount. The EPS5 (5Ah) is outfitted with a one meter cable which allows it to be placed underwear in freezing conditions and to prolong operation time (EPS3 unit is supplied with a extension cable).

#79032 **NV Compact Head Mount**
The NV Compact Head Mount is designed for joint use with the Challenger G2+ 1x21 night vision devices, Challenger GS 1x20 or other night vision devices with a similar bracket. This allows hands-free operation of the night vision device in partial and complete darkness. The Head Mount ensures stable positioning of a night vision device in front of the user's eyes, even while in fast motion (pacing, running, abrupt movements). The Head Mount is simple and convenient to use. Minimal protrusion of the suspension point reduces fatigue and load on the user's neck if operated for long periods of time. The Head Mount can also be paired with a camouflage cover. Combined with a night vision device, the NV Compact Head Mount is ideal for high-tech ranger games, night hiking etc.

#79121 **42 mm Cover Ring Adapter**
#79122 **50 mm Cover Ring Adapter**
#79123 **56 mm Cover Ring Adapter**
The Cover Ring Adapters are designed to mount the Forward DFA on the bell of an optical sight in the nighttime. The Adapters have various mounting diameters with reducing rings. When the Forward DFA is not used, a cover (included) is attached to the adapter to protect lens of a daylight sight.

#17044 **VIDEO RECORDER NEWTON CVR640**
The video recorder NEWTON CVR640 is a compact device for video recording of a signal coming from the CCD array of night vision devices or thermal imaging scopes. The NEWTON CVR640 can be used with any digital observations device Yukon, Pulsar or Newton equipped with a video output.
Basic features:
- Recording parameters – 640x480 pix @ 30 fps
- SD Memory card
- Operating voltage 4.5 V (3xAAA)
- Continuous operation on a battery set – 5 hours
- MiniUSB port for the direct signal transmission to PC, and for reading-out recorded information
- Compact dimensions, lightweight

#79051 **Challenger G2+ 2x Objective Lens**
#79052 **Challenger G2+ 3.5x Objective Lens**
Replaceable lenses for Challenger G2+ night vision monoculars.

#79045 **Digisight Weaver Rifle Mount**
#79046 **Digisight Rifle Mount MAK Adapter**
#79047 **Digisight Prism 14/200 Rifle Mount**
#79048 **Digisight Los/Dovetail Rifle Mount**
#79049 **Digisight AK Side Rifle Mount**
Mounts for the Digisight riflescopes.

#79043 **Challenger HS Adapter**
Standard for professional compact NV monocular, the HS adapter is used for mounting the Challenger GS 1x20/G2+ 1x21 behind a red-dot scope. The adapter is recommended for use with red-dot sights featuring night reticle luminescence mode.

SPECIFICATIONS

DIGISIGHT

MODEL	76312A	76317A	76315A	76318A
Product name	**Digisight N750A**	**Digisight N750UA**	**Digisight N770A**	**Digisight N770UA**
Generation	Digital	Digital	Digital	Digital
Magnification, x	4.5	4.5	4.5	4.5
Digital zoom, x	1.5	1.5	1.5	1.5
Objective lens	F50, 1.0	F50, 1.0	F50, 1.0	F50, 1.0
Display Type	OLED	LCD	OLED	LCD
Eye relief, mm	67	67	67	67
Built-In IR Flashlight, type	Laser	Laser	Laser	Laser
Wavelength of Built-In IR Flashlights, nm	780	780	915	915
Resolution, lines per mm	55	55	55	55
Max. detection range, m **	600	600	450	450
Operating voltage, V / Battery type	3.7 ... 6 / 4xAA	3.7 ... 6 / 4xAA	3.7 ... 6 / 4xAA	3.7 ... 6 / 4xAA
External power supply, V / Consumption power, W	DC 9 ... 15 / 3	DC 9 ... 15 / 3	DC 9 ... 15 / 3	DC 9 ... 15 / 3
Operating temperature, °C	-20 ... +50	-10 ... +50	-20 ... +50	-10 ... +50
Dimensions, mm	340x95x94	340x95x94	340x95x94	340x95x94

PHANTOM

MODEL MIL-DOT MODEL	76057T 76157T	76058T 76158T	76057BWT 76157BWT	76058BWT 76158BWT
Product name	**Phantom 3x50 FX**	**Phantom 4x60 FX**	**Phantom 3x50 BW**	**Phantom 4x60 BW**
Image Tube Type	EPM221G*	EPM221G*	EPM66G-2-U-WPT	EPM66G-2-U-WPT
Generation	2+	2+	2+	2+
Magnification, x	3	4	3	4
Objective lens diameter, mm	50	60	50	60
Field of view, angular degrees	11	9	11	9
Eye relief distance, mm	50	50	50	50
Resolution, lines/mm, min.	45	45	45	45
Max. detection range, m **	600	700	600	700
Diopter setting, D	± 3.5	± 3.5	± 3.5	± 3.5
Close-up range, m	5	8	5	8
Screen glow [luminophor]	green	green	black&white	black&white
Water intrusion rating [IEC 60529]	IPX6	IPX6	IPX6	IPX6
Dimensions, mm	278x95x103	320x95x103	278x95x103	320x95x103
Weight without the mount, kg	1	1	1	1

CHALLENGER & EDGE NIGHT VISION

MODEL HEAD MOUNT KIT MODEL	74094 74091	74092 —	74093 —	74099 74095	74096 —	74097 —	74098 —	— 75091	— 75095	75096 —	75098 —	75097 —	75099 —
Product name	**Challenger G2+ 1x21**	**Challenger G2+ 2x42**	**Challenger G2+ 3.5x56**	**Challenger GS 1x20**	**Challenger GS 2.7x50**	**Challenger GS 3.5x50**	**Challenger GS 4.5x60**	**Edge G2+ 1x21**	**Edge GS 1x20**	**Edge GS 2.7x50**	**Edge GS 2.7x50L**	**Edge GS 3.5x50**	**Edge GS 3.5x50L**
Image tube type	EPM207G-2*	EPM207G-2*	EPM207G-2*	EP33-SF-U	EP33-SF-U	EP33-SF-U	EP33-SF-U	EPM207G-2*	EP33-SF-U	EP33-SF-U	EP33-SF-U	EP33-SF-U	EP33-SF-U
Generation	2+	2+	2+	CF-Super	CF-Super	CF-Super	CF-Super	2+	CF-Super	CF-Super	CF-Super	CF-Super	CF-Super
Magnification, x	1	2	3.5	1	2.7	3.5	4.5	1	1	2.7	2.7	3.5	3.5
Objective lens, mm	21	42	56	20	50	50	60	21	20	50	50	50	50
Resolution, lines per mm	40	42	42	42	42	42	42	40	42	42	42	42	42
Angular field of view, degree	40	20	12	36	13	11	9	40	36	13	13	11	11
IR Illuminator	LED 805 nm	LED 805 nm	LED 805 nm	LED 805 nm	LED 805 nm	LED 805 nm	LED 805 nm	LED 805 nm	LED 805 nm	LED 805 nm	Laser 780 nm	LED 805 nm	Laser 780 nm
Max. detection range, m **	200	400	700	90	150	170	200	200	90	150	200	170	220
Min. focusing distance, m	0.2	0.5	1.5	1	1.8	2	3.2	0.2	1	5	5	5	5
Eyepiece adjustment, diopter	±4	±6	±6	±4	±4	±4	±4	±4	±4	±4	±4	±4	±4
Eye relief, mm	25	25	25	12	12	12	15	25	12	12	12	12	12
Operating voltage, V	3 (CR123A)	3 (CR123A)	3 (CR123A)	3 (CR123A)	3 (CR123A)	-20 ... +40	3 (CR123A)	3 [2xAAA]	3 [2xAAA]	3 [2xAAA]	3 [2xAAA]	3 [2xAAA]	3 [2xAAA]
Operating temperature, °C	-20 ... +40	-20 ... +40	-20 ... +40	-20 ... +40	-20 ... +40	IP65	-20 ... +40	-20 ... +40	-20 ... +40	-20 ... +40	-20 ... +40	-20 ... +40	-20 ... +40
Degree of protection [IEC 60529]	IP65	IPX6	IPX6	IP65	IP65	234x79x57	IP66	255x108x75	163x113x60	203x122x65	203x122x65	203x122x65	203x122x65
Dimensions, mm	163x79x57	180x76x58	240x100x68	163x79x57	202x79x57	0.5	0.7	-	0.65	0.85	0.85	0.85	0.85
Weight of the unit, kg	0.36	0.54	0.7	0.3	0.5	-	-	0.2	0.2	-	-	-	-
Weight of the head mount, kg	0.2	-	-	0.2	-								

FORWARD DFA / DN

MODEL	78114	78115
Product name	**Forward DFA75**	**Forward DN55**
Generation	Digital	Digital
Magnification, x:		
- of the digital module	1	1
- when used with Pulsar 10x32 Monocular	10	10
Objective lens	F50, 1.0	F50, 1.0
Resolution, lines per mm	50	50
Built-In IR Flashlight, type / wavelength, nm	Laser / 915	Laser / 915
Operating voltage, V	3.7 ... 6 [4*AA]	3.7 ... 6 [4*AA]
External power supply, V / Consumption power, W	DC 9 ... 15 / 3	DC 9 ... 15 / 3
Operating Temperature, °C	-20 ... +50	-20 ... +50
Pulsar 10x32 Monocular [#71011] Included	no	yes

SENTINEL

MODEL MIL-DOT MODEL	76115T 76125T	76116T 76126T	76017T –	76018T –
Product name	**Sentinel G2+ 3x50**	**Sentinel G2+ 4x60**	**Sentinel GS 2x50**	**Sentinel GS 2.5x60**
Image Tube Type	EPM221G*	EPM221G*	EP33-SF-U	EP33-SF-U
Generation	2+	2+	CF-Super I+	CF-Super I+
Magnification, x	3	4	2	2.5
Objective lens diameter, mm	50	60	50	60
Field of view, °, at eye relief 50 mm	11	9	13.5	8
Focusing Range, m	5 ... inf.	8 ... inf.	5 ... inf.	7 ... inf.
Max. Detection Range, m **	600	700	150	170
Eye relief, mm	50	50	45	45
Diopter Adjustment, D	±3.5	±3.5	±3.5	±3.5
Resolution in the central part, lpm, min.	45	45	42	42
Power supply, V	3V [2xAA]	3V [2xAA]	3V [2xAA]	3V [2xAA]
Grade of water-resistance [IEC 60529]	IPX4	IPX4	IPX4	IPX4
Dimensions, mm	288x90x100	320x90x100	256x90x100	285x90x100

QUANTUM

MODEL	77311	77312	77313	77314
Product name	**Quantum HD38S**	**Quantum LD38S**	**Quantum HD19S**	**Quantum LD19S**
Type of microbolometer	UL 03 16 2 (a-Si)	UL 03 16 2 (a-Si)	UL 03 16 2 (a-Si)	UL 03 16 2 (a-Si)
Resolution of microbolometer sensor, pixel	384x288	384x288	384x288	384x288
Refresh rate, Hz	30	9	30	9
Spectral range, µm	7.7...13.2	7.7... 13.2	7.7...13.2	7.7...13.2
Magnification, x	2.1	2.1	1.1	1.1
Digital zoom, x	2	2	2	2
Range of detection	950	950	500	500
Display type	OLED WVGA	OLED WVGA	OLED WVGA	OLED WVGA
Display resolution, pixel	640x480	640x480	640x480	640x480
Field of view, HxV, degree	14.4x10.8	14.4x10.8	26.8x20.8	26.8x20.8
Eyepiece adjustment, dptr	±5	±5	±5	±5
Power supply	4 ... 6 V / 4xAA	4 ... 6 V / 4xAA	4 ... 6 V / 4xAA	4 ... 6 V / 4xAA
External power supply	8.4 ... 16 V	8.4 ... 16 V	8.4 ... 16 V	8.4 ... 16 V
Video output signal	PAL / NTSC	PAL / NTSC	PAL / NTSC	PAL / NTSC
Operating temperature, °C	-20 ... +50	-20 ... +50	-20 ... +50	-20 ... +50
Dimensions, mm	200x86x59	200x86x59	180x86x58	180x86x58
Weight without batteries, kg	0.35	0.35	0.32	0.32

RECON

MODEL	78023	78033	78024	78034
Product name	**Recon 750**	**Recon 750R**	**Recon 770**	**Recon 770R**
Generation	Digital	Digital	Digital	Digital
Magnification, x	4	4	4	4
Objective lens	50 mm, F/1.0	50 mm, F/1.0	50 mm, F/1.0	50 mm, F/1.0
Viewing range, m **	3 ... 350	3 ... 350	3 ... 300	3 ... 300
Resolution, lines per mm	40	40	40	40
Built-In IR Illuminator, type	laser	laser	laser	laser
Wavelength of the built-In IR Illuminator, nm	780	780	915	915
Power supply, V	4.5 ... 6.5	4.5 ... 6.5	4.5 ... 6.5	4.5 ... 6.5
Battery type	4xAA	4xAA	4xAA	4xAA
Video output signal	CCIR / EIA	CCIR / EIA	CCIR / EIA	CCIR / EIA
Camera res, pixel [CCIR/EIA]	500x582 / 510x492	500x582 / 510x492	500x582 / 510x492	500x582 / 510x492
Built-In video recorder	No	Yes	No	Yes
Operating temperature, °C	-10 ... +45	-10 ... +45	-10 ... +45	-10 ... +45
Dimensions, mm	176x83x62	176x83x62	176x83x62	176x83x62
Weight, kg	0.4	0.42	0.4	0.42

* - the devices use these or similar tubes

** - object 1.7x0.5 m, in normal nighttime conditions - 0.05 lux (quarter moon)

EXPERT VM/VMR

MODEL	72085	72081	72091
Product name	**Expert VMR 8x40**	**Expert VM 8x40**	**Expert VM 8x40 Marine**
Objective lens diameter, mm	40	40	40
Magnification, x	8	8	8
Eye relief, mm	15.0	15.0	15.0
Exit pupil, mm	5.0	5.0	5.0
Field of view, degree	8	8	8
Eyepiece diopter adjustment, diopter	±3.5	±3.5	±3.5
Minimal focusing distance, m	5	5	5
Level of protection, acc. to IEC 60529 Standard	IP67	IP67	IP67
Tripod mount, inch	¼	¼	¼
Dimensions, mm	200x136x80	200x136x80	200x136x80
Extra viewing modes available	Yes	Yes	Yes
Body color	Green	Black	Black&Yellow
Rubber armouring	Yes	No	No

EXPERT LRF

MODEL	77071
Product name	**Expert LRF 8x40**
Objective lens diameter, mm	40
Magnification, x	8
Eye relief, mm	18
Exit pupil, mm	5.0
Field of view, degree	6.5
Eyepiece diopter adjustment, diopter	±5
Measurement range, m	1000
Accuracy of range measurement, m	±1
Power supply / Battery	3V / CR123A
Battery Life, activations, at least	3000
Operating temperature,°C	-30 ... +45
Level of protection, acc. to IEC 60529 Standard	IPX4
Dimensions, mm	200x144x80
Weight, kg	0.94

IR FLASHLIGHTS

MODEL	79071	79076	79072	79075	79074
Product name	**Pulsar - 805**	**Pulsar - 940**	**Pulsar L - 808S**	**Pulsar L - 915**	**Pulsar - X850**
Emitter	LED	LED	Laser Diode	Laser Diode	LED
Range of power adjustment [min ... max], mW	30 ... 200	30 ... 200	125 ... 250	125 ... 250	50 ... 350
Wavelength, nm	805	940	780	915	850
Range of beam divergence, degree	5.7 ... 10	5.7 ... 10	4.5 ... 7	4.5 ... 7	3 ... 9.5
Power supply, V	3 (2xAA)	3 (2xAA)	3 (2xAA)	3 (2xAA)	3 (2xAA)
Average operation time with one set of batteries, hour	2	2	14	5	2
Operating temperature, °C	-20 ... +40	-20 ... +40	-20 ... +40	-20 ... +40	-20 ... +40
Dimensions, mm	132x45x52	132x45x52	140x45x52	140x45x52	152x45x52
Weight (without/ with batteries), g	140/190	140/190	160/210	160/210	175/220
Compatibility	All NV Dev.	Digital NV	All NV Dev.	Digital NV	All NV Dev.

CF-SUPER

CF-SUPER. WHAT IS IT?
The technology is based on the use of the image intensifier tube CF-Super/EP33SF-U (with a sphere shaped photocathode) and specially designed optics.

WHAT ARE THE ADVANTAGES?
There are several:
Lack of distortion.
The image does not have distortion at the edge of the field of view which is inherent in low cost NV devices using standard Gen 1 tubes. The image is in focus both in the central and peripheral areas.
High resolution.
The CF-Super tube features, on average, 20% higher resolution than in Gen. 1 units.
Constant image quality across the whole field of view.
CF-Super's resolution is notable for its consistency (resolution difference between the centre/edge does not exceed 20%, whilst no peripheral focus is possible in Gen. 1 units).
Effective field of view – image is in focus across the whole imaging area.
High resolution and geometric image precision provided by CF-Super based NV devices allows effective observation of an object located in any part of the unit's field of view. The majority of Gen. 1 devices have decent image quality only in the centre of the imaging area – there is no image focus towards the periphery.

Pulsar branded night vision devices based on CF-Super technology have "GS" included in their names. Yukon Advanced Optics Worldwide has exclusive rights for the use of CF-Super technology - it is only available in Yukon and Pulsar branded products. The development is patent protected.

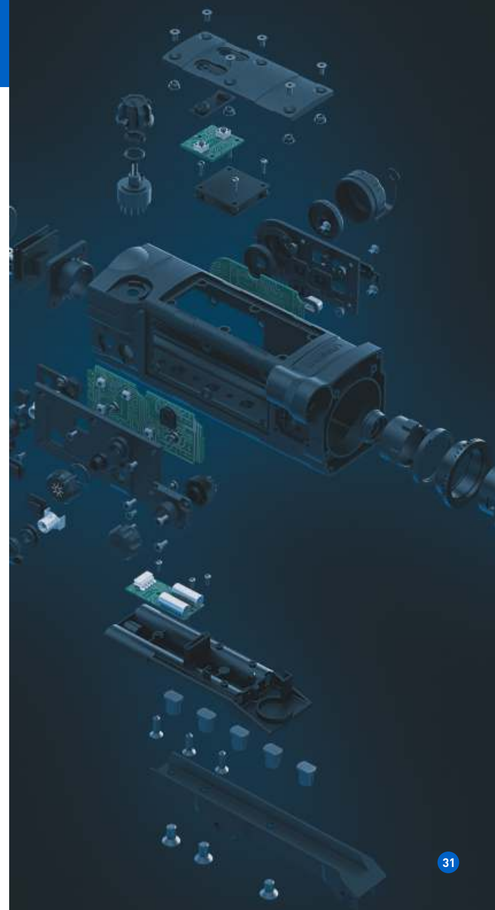
OUR TECHNOLOGIES

LASER TECHNOLOGIES

Most of new Yukon NV devices are equipped with built-in laser IR Illuminators. As compared to IR Illuminators using LED diodes, laser Illuminators are more effective (provide greater viewing range and quality IR spot) and less power-consuming. Laser IR Illuminators generate a round, user-convenient spot in the field of view.
Another important advantage – all Pulsar IR Illuminators comply with Class 1 laser safety according to standard IEC 60825 (Class 1 includes lasers and laser systems not able to produce radiation level hazardous for the human eye; Class 1 radiation is harmless for the eye even in case of long-time direct observation). It means that Pulsar IR Illuminators can be safely used with optical observation devices. Design of Pulsar laser IR Illuminators is patented by Yukon Advanced Optics Worldwide.

GENERATION DIGITAL

Employment of digital technologies is one of the top priorities of company's development of night vision devicesby Yukon Advanced Optics Worldwide. Our company has great experience in designing and manufacturing NV devices and a number of patented solutions in this product segment.
As regards to general image quality, digital night vision devices, regardless of their class, are rapidly getting closer to Gen. 2+ tube based equipment. But digital devices possess certain unbeatable advantages and extended functionality which lets them find application not only on hunting market but also on law enforcement market.
Some of the advantages are as follows:
Protection against bright light sources.
Digital NV devices can be readily turned on in the daylight without the fear of being damaged immediately or in the long run.
Long-life performance.
Average life of a CCD array is 25000 hours which is 2-25 times longer than that of standard image intensifiers.
Signal reception and transmission.
Digital NV devices are best suited for image recording on integrated or external recording equipment without resorting to photo adapters; image transmission to monitor, as well as outer video signal input.
Effective use with "invisible" IR Illuminators.
As opposed to tube-based devices, digital NV equipment feature advanced efficiency when used with IR Illuminators working in long wave range (more than 900 nm) and invisible by the naked eye.
We are continuously working on improvement of our digital devices which includes reduced power consumption, increasing sensitivity, widening working temperature range.

ON-SCREEN DATA INPUT SYSTEM

Binocular with built-in rangefinder Expert LRF 8x40 is the first Pulsar device using a special, patented on-screen data input system. As opposed to traditional solutions (using large amount of optical components, complex adjustment methods, heavy loss of light etc.), our system is notable for being simple and effective.
Major advantages are:
- High light transmission ratio
- Compact size
- Suitable for operation in low temperatures
- Contrast and bright symbols
- Capability of input of various colors at the same time