EXTERNAL POWER SUPPLIES

EPS3 / EPS5

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 (2.4 Ah) has a rigid plastic case and can be installed on any devices outfitted with a Weaver rail or ¼ tripod mount. The EPS5 (5 Ah) 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 an extension cable).

VIDEO RECORDER

NEWTON CVR640

The video recorder NEWTON CVR640 is a compact device for video recording of a signal coming from the sensor of night vision devices or thermal imaging scopes. The NEWTON CVR640 can be used with any Yukon, Pulsar or Newton digital optical device equipped with a video output.

BASIC FEATURES:
- Recording parameters – 640x480 pix @ 25 fps
- SD Memory card
- Operating voltage 4.5 V (3xAAA)
- Continuous operation on a battery set – 6 hours
- MiniUSB port for the direct signal transmission to PC, and for reading-out recorded information
- Compact dimensions, lightweight

NEWTON
sports optics

APEX

ADVANTAGES

MORE THAN 1 KM TARGET DETECTION
Depending on the model Apex riflescopes provide hunting game detection (wild boar, moose, deer, or bear) at distances of 1 km and more. Apex riflescopes employ a new technology of programmed improvement of object detection IRIS (Increased Recognition and Detection Software).

HIGH SHOCK RESISTANCE
Original shock and vibration protection of microbolometer array allows using Apex riflescopes on large caliber up to .375 rifled hunting guns and on smooth-bore and air rifles.
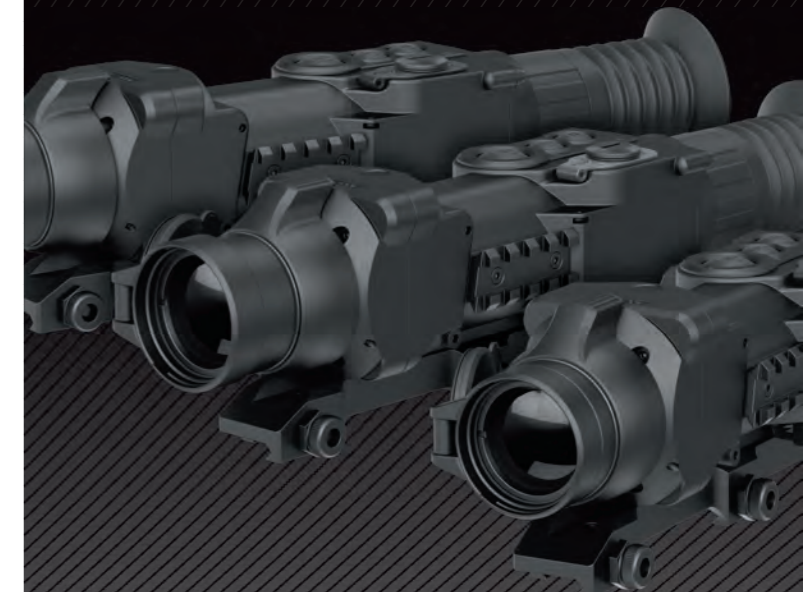
EYESAFE EYE RELIEF
The Apex thermal sights feature a 67 mm eye relief – one of the best parameters in its class. The greater is the eye relief the less traumatic is the use of the scope, especially on hunting weapons with considerable recoil.

FULLY WATERPROOF
With IPX7 (IEC 60529 standard) water protection class Apex riflescopes can be operated in the conditions of precipitation of any intensity and withstand a short underwater submersion.

WIDE OPERATING TEMPERATURE RANGE (-25 … +50°C)
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.

PULSAR

MODEL	79111	79112
Product name	**EPS3**	**EPS5**
Battery type	Li-Pol	Li-Pol
Rated capacity (Ampere-hour rating), Ah	2.4	5
Nominal voltage, V	12	12
Voltage at end of discharge, V	8.9	8.9
Charging voltage, V	12.6	12.6
Full charge time, hour	2	4
Full discharge time (I=250 мА), hour	9	20
Degree of protection (acc. to IEC 60529), IP rating	IPX5	IPX3
Mount type	Weaver	-
Length, mm	85x76x40	106x75x20
Weight, kg	0.23	0.35

MODEL	17044
Product name	**Newton CVR640**
Recording resolution, pixel	640x480
Frame frequency, frames/sec	25
Video signal standard	PAL/NTSC
Power supply, V	3 – 4.5
Battery type	3xAAA (LR03)
Operating time with one set of batteries (stand-by/ recording mode), hour	7 / 6
Type of memory card	SD
Recording time with a 1 Gb card, minutes	50
Dimensions, mm	70x50x40
Weight (with/ without batteries), g	100 / 65

APEX
XD75 | **XD50** | **XD38**

PULSAR

THERMAL IMAGING SIGHTS

http://www.pulsar-nv.com

APEX XD75 | XD50 | XD38

THERMAL IMAGING SIGHTS

- Original protection of microbolometer sensor from high impact loads
- 10 selectable integrated reticles
- Memorization of zeroing parameters for three types of weapons or distances
- "Picture-in-Picture" function: Additional image of the target in the field of view with 2x zoom
- One shot zeroing with "Freeze function"
- Smooth digital zoom 2x
- Fully dust and water resistant
- Image optimization function for different places and conditions of observation
- Various calibration modes (noiseless, semiautomatic, automatic)
- Long eye relief (67 mm)
- External power supply option
- Convenient graphic interface
- Upgradable software
- Easy controls
- Ergonomic design

SELECTABLE RETICLES

A reticle is electronically displayed on the screen and is permanently located in the plane of target image. The Apex internal memory contains 10 reticles of various shapes and applications. The color of the reticle can be switched from black to white.

3 TYPES OF ZEROING PARAMETERS MEMORIZATION

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.

"PICTURE IN PICTURE" FUNCTION

"Picture in Picture" function provides shooter with a possibility to display an additional image region on the screen which contains 2x magnified image of a target and reticle. This allows seeing image in the aiming area in a more detailed way. Additional region (precise aiming frame) is situated in the top center part of the screen above the reticle. Occupying merely 1/10 of the total screen area additional image region allows simultaneous use of total field of view for observation.

DISPLAY OFF FUNCTION

Apex has display shut down function which has to be used in the cases of short breaks during the process of observation for preventing disclosure of the shooter by the light from the eyepiece. When display is turned off all other systems are fully functional which allows instantaneous activation of the riflescope.

ZEROING WITH FREEZE FUNCTION

Standard for Pulsar digital riflescopes "one shot zeroing" in Apex models is complemented by an even more convenient zeroing function – "Freeze": after making a zeroing shot it is enough to save a frame of a target in the memory of the riflescope and align reticle with point of impact looking at this frame without the necessity of keeping full immobility of a weapon.

OPERATING MODES

The Apex offers three operating modes, each designed to deliver the best possible image in specific viewing conditions: "Rocks" (enhanced contrast), "Forest" (low contrast) and "Identification" (improved rendering of hot objects' details).

EXTERNAL POWER SUPPLY

Operation time can be significantly increased with the help of external power supplies (e.g., Pulsar EPS3/ EPS5). When used in frosty weather, the power supply can be stored under the clothes.

VIDEO OUT

The Apex thermal sights are equipped with a Video Out jack enabling real time video recording with the use of external recording equipment.

WIRELESS REMOTE CONTROL

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

SPECIFICATIONS

MODEL #	76415	76425	76475
Product Name	Apex XD38	Apex XD50	Apex XD75
Objective lens	F38/1.2	F50/1.2	F75/1.4
Microbolometer resolution, pix.	384x288	384x288	384x288
Frame rate, Hz	50	50	50
Display type	OLED	OLED	OLED
Display resolution, pix.	640x480	640x480	640x480
Magnification, x (smooth zoom)	1.5 – 3	2 – 4	3 – 6
Field of view,°, horizontal & vertical (without zoom)	14.4x10.8	11x8.2	7.2x5.4
Range of detection, m	950	1250	1600
Eye relief, mm	67	67	67
Battery type	2xCR123	2xCR123	2xCR123
Battery life (video out off), hour	5	5	5
External power supply availability	Yes	Yes	Yes
Operating temperature,°C	–25 ... +50	–25 ... +50	–25 ... +50
Level of protection (acc. to IEC 60529)	IPX7	IPX7	IPX7
Dimensions, mm	335x80x75	343x80x75	381x80x75
Weight (without batteries & mount), kg	0.60	0.70	0.77