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 (2.4Ah) 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).

SPECIFICATIONS

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	12.3	12.6
Full charge time, hour	2	4
Full discharge time (I=250 mA), hour	9	20
Degree of protection (acc. to IEC60529), IP rating	IPX5	IPX3
Mount type	Weaver	-
Length, mm	85x76x40	106x75x20
Weight, kg	0.23	0.35

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 @ 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

SPECIFICATIONS

MODEL	17044
Product name	Newton CVR640
Recording resolution, pixel	640x480
Frame frequency	25 frames/sec
Video signal standard	PAL/NTSC
Power supply	3 – 4.5 V
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	50 min
Dimensions, mm	70x50x40
Weight (with/without batteries), g	100 / 65

QUANTUM

ADVANTAGES

LONG VIEWING RANGE
Actual range of detection of a human figure (1.8x0.5m) in the field (human has outerwear, in the field against the background of the forest) for the Quantum models varies from 500 to 1250 m, depending on the model.

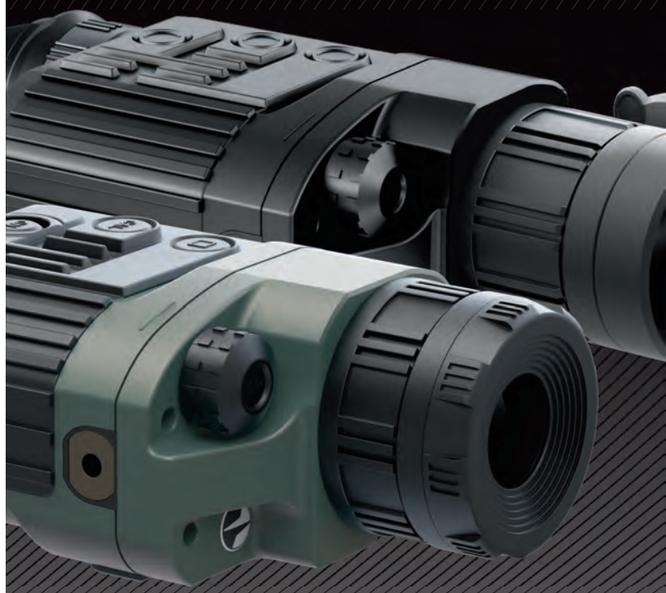
WIDE RANGE OF OPERATION TEMPERATURES
Quantum imaging scopes are effective for the use in low temperatures (-25°C) thanks to the frost-resistant OLED display employed in the unit (image remains the same as when viewing at positive temperature of the surrounding atmosphere).

CALIBRATION MODE SELECTION
Selection of one of the three available calibration modes of the thermal sensor – automatic, semiautomatic and fully silent manual mode.

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.

QUICK START-UP
The Quantum is ready to operate in 6...8 seconds after it is turned on.

PULSAR



QUANTUM

HD50S | LD50S | HD38S | LD38S
HD19S | LD19S

THERMAL IMAGING DEVICES

PULSAR

http://www.pulsar-nv.com

QUANTUM

THERMAL IMAGING DEVICES

- Long viewing range
- Effective operation in fog or smoke conditions
- Detector size 384x288
- Wide range of operation temperature (-25...+50°C)
- High contrast frost-resistant OLED display
- 2x digital zoom
- Three calibration modes (manual (silent), semiautomatic and automatic
- Three operating modes ("city", "forest", "identification")
- Defective pixel repair option
- User choice of modes
- "White hot"/ "Black hot" modes
- Brightness and contrast settings
- Quick start-up
- External power supply availability
- Power saving mode
- Video out (video recording capability)
- Partially rubberized glass-nylon composite body
- Lightweight and compact dimensions
- New graphic interface

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.

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.

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).

EXTERNAL POWER SUPPLY

Unit's operating time 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.

DISPLAY

The Quantum scopes feature a high resolution contrast OLED display, fully operable at temperatures lower than -20°C

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.

LED INDICATION

A LED indicator shows current operating status of the thermal imaging scope: the LED indicator means the unit is on; colour changes to red when battery level is low; after that the unit still keeps working for about thirty minutes before the batteries are completely exhausted.

BODY

Composite body features enhanced durability. Partially rubberized body ensures secure grip of the unit.

SPECIFICATIONS

MODEL	77321	77322	77311	77312	77313	77314
Product name	**Quantum HD50S**	**Quantum LD50S**	**Quantum HD38S**	**Quantum LD38S**	**Quantum HD19S**	**Quantum LD19S**
Oblective lens	F50/1.2	F50/1.2	F38/1.2	F38/1.2	F19/1.2	F19/1.2
Resolution of microbolometer sensor, pixel	384x288	384x288	384x288	384x288	384x288	384x288
Refresh rate, Hz	30	9	30	9	30	9
Magnification, x	2.8	2.8	2.1	2.1	1.1	1.1
Digital zoom, x	2	2	2	2	2	2
Range of detection	1250	1250	950	950	500	500
Display type	OLED	OLED	OLED	OLED	OLED	OLED
Display resolution, pixel	640x480	640x480	640x480	640x480	640x480	640x480
Field of view, horizontal, degree	11	11	14.4	14.4	26.8	26.8
Eyepiece adjustment, dptr	±5	±5	±5	±5	±5	±5
Power supply	4 ... 6 B / 4xAA	4 ... 6 B / 4xAA	4 ... 6 B / 4xAA	4 ... 6 B / 4xAA	4 ... 6 B / 4xAA	4 ... 6 B / 4xAA
External power supply	8.4 ... 15 V	8.4 ... 15 V	8.4 ... 15 V	8.4 ... 15 V	8.4 ... 15 V	8.4 ... 15 V
Video output signal	PAL / NTSC	PAL / NTSC	PAL / NTSC	PAL / NTSC	PAL / NTSC	PAL / NTSC
Operating temperature, °C	-25 ... +50	-25 ... +50	-25 ... +50	-25 ... +50	-25 ... +50	-25 ... +50
Dimensions, mm	207x86x59	207x86x59	200x86x59	200x86x59	180x86x58	180x86x58
Weight without batteries, kg	0.43	0.43	0.35	0.35	0.32	0.32