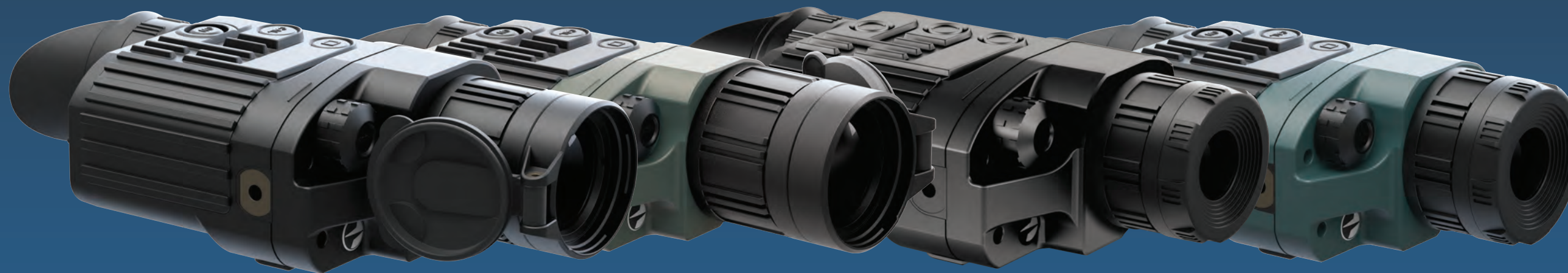


QUANTUM

NEW

THERMAL IMAGING SCOPES HD38S | LD38S | HD19S | LD19S



MAIN FEATURES

- Long detection range
- Effective operation in fog or smoke conditions
- Detector size 384x288
- Wide range of operation temperatures (-20...+50°C)
- High contrast frost-resistant OLED display
- 2X digital zoom
- Three calibration modes
- Three operating modes ("city", "forest", "identification")
- Defective pixel repair option
- User defined choice of modes - "White hot"/ "Black hot"
- Brightness and contrast settings
- Quick start-up
- External power supply availability
- Power saving mode
- Video out (video recording capability)
- Rubberized composite body
- Lightweight
- New graphic interface



"Black Hot"



"White Hot"



QUANTUM S | DESCRIPTION & COMPETITIVE ADVANTAGES

LONG DETECTION RANGE

Actual detection range of a human figure (1.8x0.5m) in the field (wearing an outerwear, in the field against tforest background) for the Quantum S units ranges from 500 to 950 m, depending on the model.

CALIBRATION

The Quantum S offers three calibration modes: silent manual mode ("M"), automatic ("A") and semiautomatic ("H").

The "A" mode implies automatic calibration without user's participation.

In the "H" mode the user decides on his own if calibration is required depending on the image quality.

The "Cal" button 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.

WIDE RANGE OF OPERATION TEMPERATURES

The Quantum S thermal imagers operate stably even in freezing conditions at a temperature of -25°C thanks to the frost-resistant OLED display applied in the unit (image remains the same as during the observation in the conditions of positive temperature of the surrounding atmosphere).

USER INTERFACE

Actual information about the status of the thermal imager, depicted in the form of blue icons and numbers, is located in the status bar below the screen, and does not interfere with observed image. During switching between various functions (digital zoom, colour inversion, brightness/contrast settings), the respective large sized icon appear in the screen.

QUICK START-UP

The Quantum S is ready to operate in 8 seconds after it is turned on.

OPERATING MODES

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



VIDEO OUTPUT

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

CONTROLS

Main control buttons are located on the upper side of Thermal imager. The buttons' size and position are customised for comfortable use both with gloved or bare hands.

EXTERNAL POWER SUPPLY

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

BODY

Rubberized composite body featuring extra durability ensures secure grip of the unit.

LED INDICATION

LED indicator shows current status of the thermal imager: green colour of LED indicator means the unit is on; changing colour to red occurs when the battery level is low; after that the unit still keeps working for about thirty minutes before the batteries are completely drained.

SELF-CONTAINED POWER SUPPLY

The Quantum S is supplied with four AA (rechargeable) batteries. The batteries are put in a container which is placed in a battery compartment of the unit.

POWER SAVING MODE

By disabling the video output module in the Quantum S thermal imagers it is possible to significantly increase operating time on a set of batteries or external power supply.

BRIGHTNESS AND CONTRAST SETTINGS

The Quantum S Thermal imager allows a 20-step brightness and contrast adjustment.



QUANTUM S | SPECIFICATIONS

MODEL	77311	77312	77313	77314
Product name	Quantum HD38S	Quantum LD38S	Quantum HD19S	Quantum LD19S
Type of microbolometer	UL 03 16 2	UL 03 16 2	UL 03 16 2	UL 03 16 2
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, $^{\circ}\text{C}$	-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

QUANTUM S | RECOMMENDED ACCESSORIES

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 imagers 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 an extension cable).

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



QUANTUM S| RECOMMENDED ACCESSORIES

NEWTON CVR640 VIDEO RECORDER

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

MODEL	17044
Product name	Newton CVR640
Recording resolution, pixel	640x480
Frame frequency	30 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 (max. capacity)	SD (32 Gb)
Recording time with a 1 Gb card	50 min
Dimensions, mm	70x50x40
Weight (with/without batteries), g	100 / 65

MAIN FEATURES:

- Recording parameters – 640x480 pix @ 30 fps
- Compact dimensions, lightweight
- Operating voltage 4.5 V (3xAAA)
- Operating time on a battery set – 6 hours
- MiniUSB port for uploading recorded information to PC
- SD Memory card

