



OBSERVATION

VIRTUOSE

Ultra-Lightweight Multifunction
Monocular



OUR VISION FOR INNOVATION



Portable Optronics



**UNIQUE THERMAL &
DIRECT LIGHT PATH
COMBINATION.**

**THE BEST COMPACTNESS/
PERFORMANCE RATIO.**

ULTRA-LIGHTWEIGHT.

MULTI-MISSION.

**TAILORED FOR
COLLABORATIVE COMBAT.**

INTUIVE & DURABLE.

VIRTUOSE

While taking information, collecting and sharing data are growingly important on the battlefield, operators only have access to thermal imaging and designation systems that are often cumbersome and sometimes unsuited to the needs of their missions.

These materials, which represent a significant physical load, are moreover only accessible to a limited number of operators.

Virtuose is positioned as the answer to these issues for land, naval and air forces, for optimized OODA loops.

Virtuose is a multifunction monocular combining a thermal and direct optical path, laser rangefinder, geolocation and many other advanced features, in an extremely reduced size.

Its structure is studied to dissipate the heat of the electronic components, guaranteeing optimal performance even during long-term use. It also reduces the thermal signature of the product to make it as stealthy as possible.



The ergonomics of Virtuose can be appreciated very quickly, due to its shape but also thanks to its judiciously positioned grips.



Its dimensions (length: 14.3cm; width: 14.9cm; height: 5cm) make it easily transportable; it can for example be stored in a pocket, a bag...





Power supply suitable for on-board or off-board use and optimized for multi-mission.

- standard batteries
- rechargeable batteries
- super fast replacement

- + **Robust equipment suitable for deployment in theaters of the battlefield under demanding conditions.**
- + **Multifunction solution with ergonomics adapted to the user (reduced weight and very small size).**
- + **Unique thermal/direct optical path combination offering unequaled observation performance.**
- + **High performance laser rangefinder usable in any situation.**
- + **Connectivity to share the information to the chain of command.**



Reduced weight allowing observation without fatigue.



- Great ergonomics and an ultra-intuitive HMI.
- Main modes quickly accessible via a simple press of a button.
- Change of IR/Visible mode by simple action of a lever, allowing a quick execution
- Designed for ambidextrous use
- Quick and instinctive access to menus

A UNIQUE COMBINATION. PERFECT DAY AND NIGHT VISION.

HIGH DEFINITION THERMAL IMAGING

The Lynred® 640x480 thermal imaging sensor at NETD <30mK enables perfect detail recognition, even in challenging weather conditions or with low thermal contrast.

The smallest temperature variations will thus be visible.



The thermal image produced is precise, rich in detail and high in contrast allowing better identification of even the finest details.

The quality of the lens combined with the high-performance thermal imaging sensor provides very high detection capabilities, allowing it, for example, to identify a standardized object (1m80) at distances greater than one kilometer.

State-of-the-art electronics and improved image processing algorithms offer a new approach to image optimization for all forms of observation and under all conditions.

- ≥30Hz frame rate for smooth viewing, especially with motion
- High contrast OLED display for stable, high quality imaging



+ HIGHLY MODULAR

Hardware designed in a modular way to evolve over time and easily integrate new features.

+ EQUIPMENT DESIGNED FOR EXTREME ENVIRONMENTS

Qualified for military use, its structure gives Virtuose a very high level of resistance despite its reduced weight. The equipment is protected from shocks, vibrations, temperature variations, humidity, salty and dusty environments.

Objective: withstand an intensive use in constrained environments.

UNIQUE OPTICAL DIRECT LIGHT PATH DESIGN

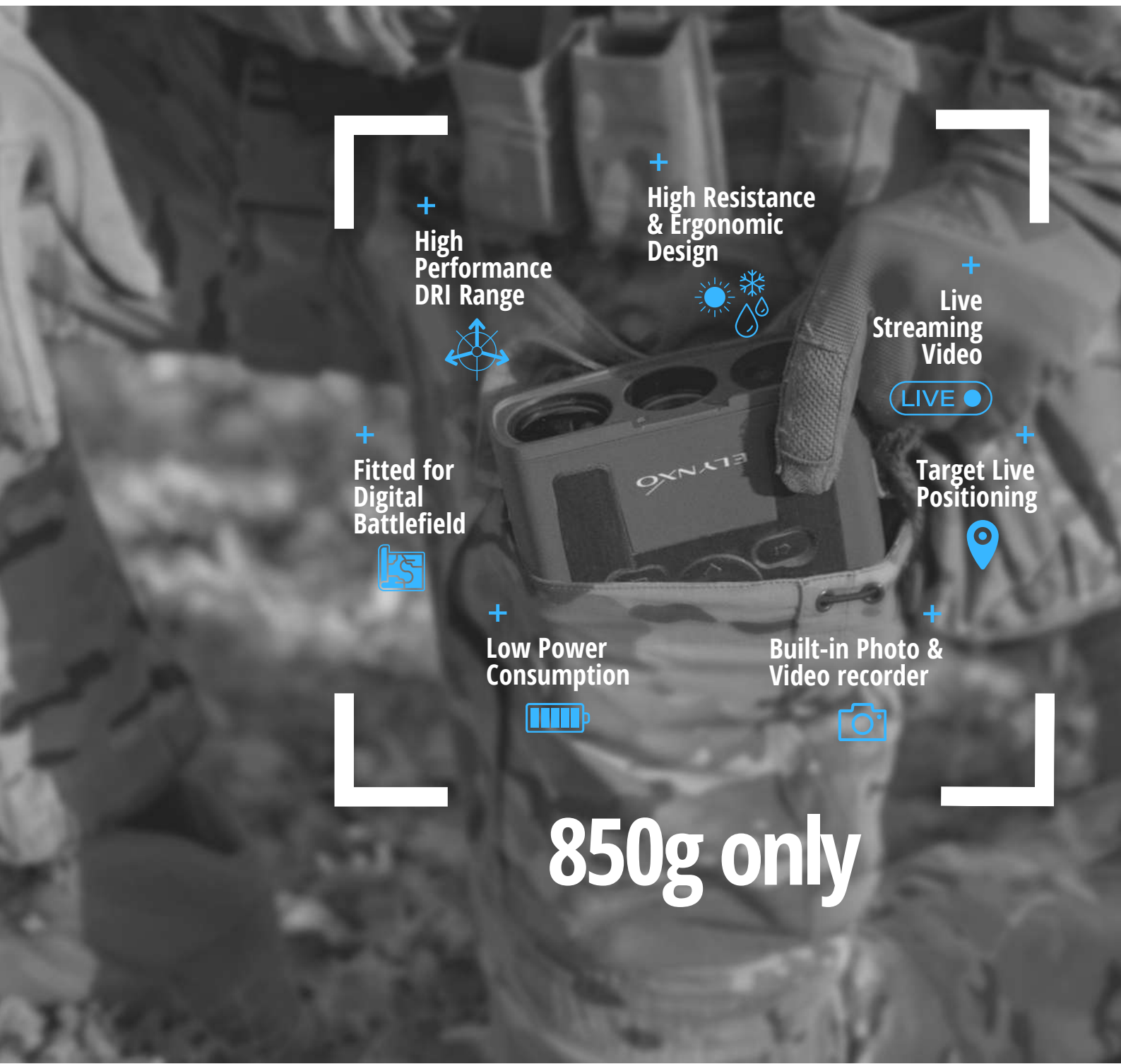
A fixed 7x optical magnification with high light transmission allowing daytime observation of your environment, even in low light.

The use of a direct optical path allows a high light transmission rate (>85) - above average and allows the equipment to be operational even without batteries.



+ STATE-OF-THE-ART FEATURES

- LRF (laser range finder)
An integrated LRF with a range of up to 4.5 km with a single measurement or continuous scan mode with an accuracy of <1m.
- GPS positioning
Ultra-fast GPS positioning of the monocular and designated targets via the LRF allowing the extraction of coordinates of objects of interest with a level of precision of the type TLE 4.
- Built-in camera and video capture
- Live streaming vidéo
- Laser pointer (optional)
Allowing to precisely designate the object or the target and characterize its position.



+ High Performance DRI Range

+ High Resistance & Ergonomic Design

+ Live Streaming Video
LIVE

+ Fitted for Digital Battlefield

+ Target Live Positioning

+ Low Power Consumption

+ Built-in Photo & Video recorder

850g only



FLEXIBLE VIEW MODES

- Thermal image for detection and situational awareness by day and night
- True direct optical path, ultra bright (>85%). Usable even without batteries
- Ultra fast switch between view modes



ULTRA LIGHTWEIGHT

- Impressive weight /performance ratio
- Weights incl. batteries less than 1kg



HIGH PERFORMANCE DRI RANGE

- Exceptional DRI capabilities
- Combination of optimized optical design and 640x480@17µm highly-sensitive thermal imaging sensor



LONG DISTANCE LASER RANGEFINDER

- Ranges of up to 4 500m (depending on version) with an accuracy of <1m, depending on target size and distance.
- Laser Rangefinder Safety class 1 → Eye Safe
- Invisible
- Single computation and continuous scanning modes



TARGET LIVE POSITIONING

- Ultra fast geolocalization positioning. TLE 4.



IMPRESSIVE CONNECTIVITY

- High C4ISR compatibility
- Multiple interfaces incl. USB, Wifi, Bluetooth for data exchange with other devices



BUILT-IN PHOTO & VIDEO RECORDER

- Internal memory with a capacity to store hours of video and thousands of photos
- Extractible micro SD-Card



LOW POWER CONSUMPTION

- Virtuose can be powered (at your choice) by :
2 rechargeable batteries - 18650
4 standard batteries - CR123
- Autonomy ≥6h Depending on mission



HIGH RESISTANCE

- Weather resistant (IP67)
- Qualified for a military use
- Outstanding performances in terms of robustness



LIVE STREAMING VIDEO

- High quality for video streaming to an external device (Android/Ios)
- Recording capacity at the same time



FITTED FOR DIGITAL BATTLEFIELD

- Ready for battle management integration (SIC-S, ATAK and AFS compatible)
- Cursor On Target standard, other interface on demand



USER FRIENDLY

- Ultra compact size :
length : 14.3cm
width: 14.9cm
height : 5cm
- Intuitive, efficient user interface
- One shortcut button per feature
- Ergonomic design for ambidextrous use
- Easy batteries access



LASER POINTER (OPTIONAL)

- Two possibilities :
→ Visible laser
→ Infrared pointer (compatible NVG)
- Eye safe
- Long Range





Situational awareness in all lighting and weather conditions.



ACCESSORIES

INCLUDED

- Pelicase
- Cloth carrying case
- Tether strap
- Cleaning kit
- 4 rechargeable batteries
- USB-C cables
- User Manual

TECHNICAL SPECIFICATIONS

DIRECT LIGHT PATH CHANNEL

Magnification	x7
Diopter Range	-3δ / +2δ
Light Transmission	>85%
Horizontal field of view	5°

THERMAL CHANNEL

IR Sensor	Uncooled microbolometer
Sensor Resolution	640x480, 17μm
Internal Display	OLED 1280 x 1024, 30 fps
Magnification	x1.7, x4, x7, x10, x14
Horizontal field of view	15°
Colors available	5 color palette

OTHER FEATURES

Laser Rangefinder (depending on version)	905nm wavelength Up to 1500m
	1500nm wavelength Up to 4500m
Geolocalisation accuracy	<90m at 1 000m (TLE4)
Laser Pointer	(Optional)
Picture/Video recording	
Tripod adaptator	

POWER

x2 Rechargeable 18650 batteries
Autonomy ≥6h Depending on mission
x4 Batteries type CR123
External power supply: USB-C
Internal charger - The device has the ability to charge the batteries

INTERFACES

USB C: charging and data managing
Bluetooth/WiFi
ATAK, AFS connectivity

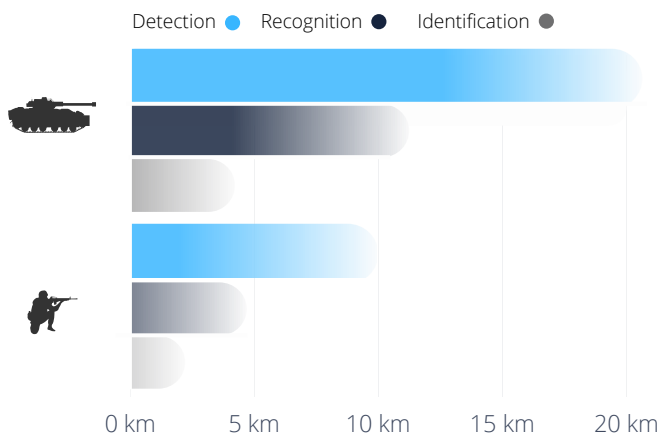
ENVIRONMENTAL

MIL-STD 810G & MIL-STD-461F
IP67

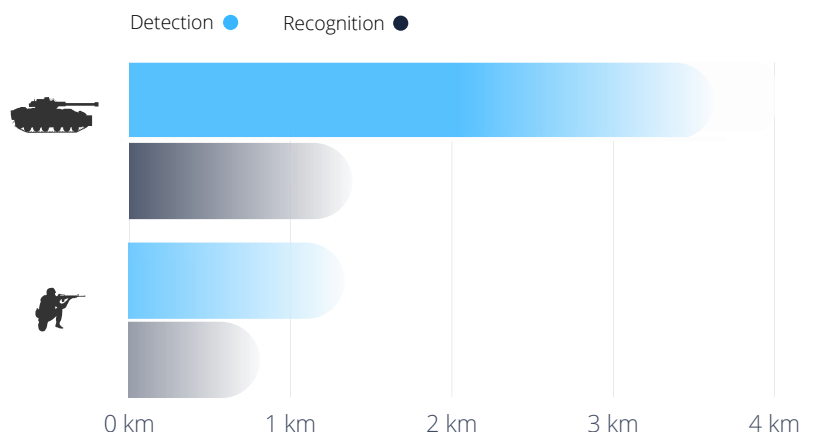


DIRECT LIGHT path/THERMAL RANGES

DIRECT LIGHT PATH PERFORMANCE RANGE:



THERMAL PERFORMANCE RANGE:





**JOINING OUR STRENGTHS
TO MAKE YOUR MISSION
A SUCCESS**

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