



# NIGHTOPTIX™

## Aurora-Hybrid Goggles

The Aurora-Hybrid goggles are augmented vision goggles for tactical surveillance and observation at short- and medium-range distances. Along with selecting between visible/near-infrared and far-infrared (thermal) channels individually, Unique Patented technology allows the unit to produce and display real-time, delay-free fusion images that superimpose all ranges of the spectrum from its sensors to successfully detect any target and defy poor lighting or weather conditions. Wide field of view allows for better situation awareness. The unit is small and lightweight, and yet made of a hard-anodized aluminum for added strength and shock resistance. The unit is compatible with most head gears and helmet mounts for hands-free operation.



### KEY FEATURES

- ◆ 100% Target Detection Capability
- ◆ Dual-Eye Observation
- ◆ Multi-Mode 24/7 Operation
- ◆ High Situational Awareness
- ◆ Auto-NUC: No Calibration Needed
- ◆ Universal Power Solution

### MAIN APPLICATIONS

- ◆ Defence
- ◆ Security
- ◆ Border Patrol
- ◆ Special Forces
- ◆ Surveillance
- ◆ Reconnaissance



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<b>OPTICAL PARAMETERS</b>	Optical Magnification	1X
	Field of View	24.5°x18.5°
	Focusing Range	0.5m .. Infinity
	Eyepiece	Dual
	Eyereief	Min. 20mm
<b>SYSTEM PARAMETERS: CAPABILITIES AND SPECIAL FEATURES</b>	Digital Passive Stadiametric Rangefinder (SRF)	Yes
	Digital Detail Enhancement Feature (DDE)	Yes
	Digital Edge Detection Feature (DED)	Yes
	Wide Dynamic Range Feature (WDR)	Yes
	Stow Safety Feature (SSF)	Yes
	Integrated 9-Axis Absolute Orientation HUD (Heads-Up Display)	Optional: 3-Axis Sensors - Magnetometer, Accelerometer and Gyroscope
	Integrated Compass	Optional
	Pitch / Roll / Azimuth Indications	Optional
	Power Saving Mode	Yes
	Real-Time Date-Time Stamp	Yes: Simplified, Extended, DTG Formats
	Digital Video Recorder with Real-Time Stamp	Optional: Comes with Removable 32GB microSD Card
	Detection Capability: Man (1.7x0.5m) / NATO Target (2.3x2.3m)	830m / 1130m
	Hand-Held Configuration	Yes
	Tripod-Mountable	Yes
	User Profiles (Configurable)	Yes: 8
	Automatic/Manual Pixel Masking	Yes
	Reset to Factory Defaults	Yes
	External Video Feed Protection	Yes
	Automatic Power Down Control	User-Configurable: 10 .. 60 minutes of inactivity
	<b>THERMAL (LWIR) CHANNEL</b>	FPA Type
FPA Resolution and Pitch		640x480, 17µm
FPA Sensitivity (NETD)		<40mK
FPA Refresh Rate		50Hz
Digital Zoom		1X, 2X, 4X
Imaging Modes		Monochrome (White-Hot / Black-Hot) and 8 Colour Palettes
<b>DAY/NIGHT (VNIR) CHANNEL</b>	Sensor Type	High-Performance CCD
	Sensor Size	1/3"
	Resolution	800x600
	Sensitivity	Up to 0.1Lux
	Night Boost Mode	Yes
	VNIR Modes	Day/Night

<b>DISPLAY</b>	Internal Display	Full Size: 0.5-Inch Diagonal, Dual-AMOLED, Colour, 800x600
	Internal Display Contrast	>10000:1
<b>IMAGE FUSION</b>	Type	Real-time, Electronic
	Fused Channels	LWIR + VNIR
	Parallax Compensation	Electronic, Adjustable
	Heat Signature Opacity Range	User Adjustable: 0% .. 100%
<b>ELECTRONICS, MECHANICAL, ENVIRONMENTAL FEATURES</b>	Accepted Batteries	4 (Four) AA: Lithium Recommended
	Universal Port	Video-Out, Remote Control and External Power (4VDC .. 15VDC)
	Video Output Signal	CVBS 1Vpp @ 75 Ohm
	Battery Life on 4x AA	Up to 7 Hours
	Environmental Protection	Min. IP67, Nitrogen-Purged Housing
	Dimensions	152x132x59mm
	Weight	650 grams
	Operating Temperature	-40°C .. +50°C
	Storage Temperature	-55°C .. +65°C
	Body Material	Hard-Anodized Aluminum
Warranty	5 Years, Limited	

Aurora-Hybrid products are Available for Export Worldwide. *Export Permit Required. Nightoptix provides assistance in obtaining the Permit .*





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Aurora-Hybrid  
Goggles

### STANDARD EQUIPMENT: WHAT'S IN THE BOX

1	Aurora Hybrid Goggles
2	Mounting Bracket ( <i>Installed: Bayonet or Adjustable Dovetail</i> )
3	Rubber Eyecups ( <i>Installed on the device</i> ) + Spares
4	Protective Lens Covers ( <i>Installed on the device</i> )
5	USB Power Cable ( <i>5-pin to USB</i> )
6	Video-Out Cable ( <i>5-pin to RCA</i> )
7	Quick Swap Battery Containers (AA)
8	Neck Cord
9	Soft Carrying Pouch
10	User Manual
11	5-Year Warranty
12	Waterproof Hard Carrying Case
13	Cleaning Kit (3-in-1 Multi-Pen + Cleaning Cloth)

### OPTIONAL EQUIPMENT

A	Universal Remote Control Unit TRC120 (Comes with connection cable)
B	Advanced Low-Profile Flip-Up Helmet Mount HM-714LP-SR-D: Shroud-Ready Mount. Adjustable Dovetail Socket. Comes with Allen Keys Set.
C	Advanced Low-Profile Flip-Up Helmet Mount HM-714LP-SR-P: Shroud-Ready Mount. Adjustable Bayonet Socket. Comes with Allen Keys Set.
D	Non-Flip-Up Head Gear PHG-7 ( <i>Bayonet Type only</i> )
E	Advanced Helmet Mount Harness HMM-1
F	Universal Multi-Voltage Battery Pack MVP-240 (Comes with connection cable)
G	Built-In Digital Video Recorder TT/H-DVR-INT (Comes with 32GB microSD card and SD adapter)
H	External Digital Video Recorder TT/H-EDVR (Comes with set of cables and 32GB SD card)
I	Portable Head-Mounted Display HMD-800-MOD (streams thermal video directly from the device, comes with connection cable)
J	Integrated 9-Axis Absolute Orientation HUD (Heads-Up Display), 3-Axis Sensors for Compass Reading, Inclinometer/Pitch Reading, and Level/Roll Reading