



ADVANCED PHOTONICS

TACTICAL LONG RANGE
FUSION BINOCULARS

QUADRO-B50-MOD



The QUADRO-B50-MOD is the augmented vision long-range binoculars for tactical surveillance and observation.

Along with selecting between visible/near-infrared and far-infrared (thermal) channels individually, GSCI's Unique Patented technology allows to produce and display real-time, delay-free *fusion* image that superimposes 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 rugged, lightweight, made of hard-anodized aluminum for added strength and shock resistance.



KEY FEATURES

- ◆ 100% Target Detection Capability
- ◆ Dual-Eye, Long-Range 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



Designed, Developed, Manufactured by GENERAL STARLIGHT COMPANY INC.

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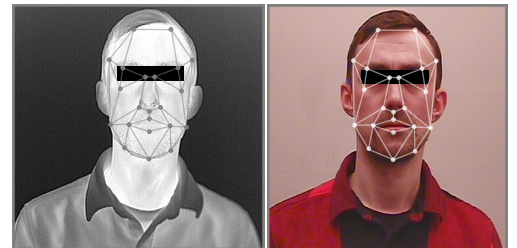
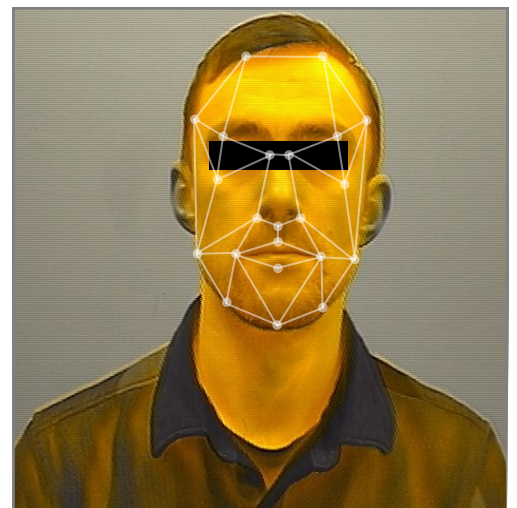


FACE RECOGNITION TECHNOLOGY READY.

The QUADRO lineup is designed utilizing GSCI's patented technology that produces and displays real-time, delay free fusion image that superimposes both spectral ranges covered by its sensors. Besides a number of unique features, this device combines consequential technologies to produce an image allowing for facial recognition in low light or night conditions. The data recorded can be used for enhanced real-time biometrics and post mission forensic analysis for covert nighttime operations. Using this type of technology for recognition at nighttime has revolutionized warfare as it has proven extremely beneficial for informing a soldier that the individual is someone of interest and reducing risk of misidentification.

Fused images can be used in combination with biometric face databases/watch lists that only contain visible face imagery. The fusion technology allows taking advantage of both technologies and combining thermal and visible imagery to jointly preserve the shape of the entire face and appearance of the local identifying details.

Detecting objects that were difficult, or impossible, to see using current state-of-the-art thermal cameras was the main objective behind the design of the QUADRO systems, and all the functions can be done with a simple press of a button.



Additional Features such as Digital Edge Detection and Digital Detail Enhancement make Face Recognition even more effective



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QUADRO-B50-MOD TECHNICAL DATA		
SYSTEM	FOV	14.4° x 9.3°
	Optical Zoom	2X
	Focusing Distance	1m .. Infinity
	Eyereief	20mm
	Stow Safety Feature (SSF)	Equipped
	Stadiametric Rangefinder (SRF)	Equipped
	Digital Details Enhancement (DDE)	Equipped
	Digital Edge Detection (DED)	Equipped
	Real-Time Clock with Date-Time Stamp	Equipped: Simplified, Extended, DTG Formats available
	Detection Human (1.7x0.5m)	Up to 1160m
	Detection Vehicle (2.3x2.3m)	Up to 2250m
Integrated Laser	User's Choice: No Laser, 665nm or 850nm	
THERMAL CHANNEL (LWIR)	FPA Type	a-Si Microbolometer, Uncooled, Shutterless, Auto-NUC
	FPA Spectral Range	7µm .. 14µm
	FPA Sensitivity	<50mK
	FPA Gain	Manual/Automatic
	FPA Resolution	640x480, 17µm pitch
	FPA Refresh Rate	50Hz
	Digital Zoom	2X, 4X
	Objective Lens	f/1.0
	Polarity Control	Yes
	Imaging Modes	1 Monochrome and 8 Pseudo-Colours

QUADRO-B50-MOD TECHNICAL DATA (Continued)		
DAY/NIGHT CHANNEL	Sensor Type	CCD
	Sensor Size	1/3"
	Resolution	800x600
	Sensitivity	Up to 0.1Lux
	VNIR Modes	Day/Night
DISPLAY	Display Type	Full Size: 0.5-Inch, Colour, Dual-AMOLED, 800x600
	Display Brightness Control, Contrast	Manual, >10000:1
IMAGE FUSION	Type	Real-time, Electronic
	Fused Channels	LWIR + VNIR
	Parallax Compensation	Electronic, Adjustable
	Heat Signature Opacity Range	User Adjustable: 0% .. 100%
ELECTRONICS, MECHANICAL AND ENVIRONMENTAL	Digital Video Recorder	Built-In with Removable 32GB microSD Card (comes with SD Adapter)
	Power Supply	4 AA Batteries and/or various External Power Sources
	Quick Swap Battery Packs	Each holds 4xAA (Lithium recommended)
	External Power Source Voltage Range	5VDC .. 15VDC
	Autonomy on 4 AA Batteries	Up to 7 hours
	Video Output	CVBS 1Vpp @ 75 Ohm
	Operating Temperature	-40°C .. +50°C
	Storage Temperature	-50°C .. +60°C
	Housing Material	Hard-Anodized Aluminum
	Dimensions, mm	165x152x68
	Weight, grams	995
Environmental Protection	Waterproof, Nitrogen-Purged	
Export	Available Worldwide *	

* Canadian Export Permit Required. GSCI provides assistance in obtaining the

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STANDARD KIT CONTENTS: WHAT'S IN THE BOX



QUADRO-B50-MOD

(comes with rubber eyecups, lens covers, 32GB microSD card, SD adapter, User Manual and Warranty Card)



Neck Strap



USB Power
Cable



Video-Out
Cable



Quick-Swap
Battery Holders



Soft Carrying
Pouch



Hard Waterproof
Case

OPTIONAL ACCESSORIES



External Video Recorder with SD Card



Wired Remote Control with Video-Out



Video-Out to USB Adapter



Portable Head-Mounted Display HMD-800/HMD-800-MOD (streams video directly from the device)

