



ADVANCED PHOTONICS

LONG-RANGE FUSION BINOCULARS QUADRO-B50



The QUADRO-B50 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.

ADVANTAGES OF QUADRO-B50

Ergonomic Full-Size Keypad,
User-Friendly Interface

External Power Port & Video-Out

Battery Compartment with
"Quick Swap" Battery Holders

High-Performance, Auto-
NUC, Shutterless, Silent FPA

Multi-Use Top & Side
Picatinny Mounting Bracket

All-Aluminum Rugged
Housing

Fast Germanium Glass
Objective Lens
(Far-Infrared Channel)

Visible/Near-Infrared
Channel

Canadian-Made, Non-ITAR System



KEY FEATURES

- ◆ 100% Target Detection Capability
- ◆ Multi-Mode 24/7 Operation
- ◆ Auto-NUC: No Calibration Needed
- ◆ Dual-Eye, Long-Range Observation
- ◆ ITAR-Free System

MAIN APPLICATIONS

- ◆ Special Forces
- ◆ Security & Law Enforcement
- ◆ Perimeter Security
- ◆ Border Patrol
- ◆ Tactical Surveillance & Reconnaissance



Designed, Developed, Manufactured by GSCI Advanced Photonics
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DISCLAIMER. Technical description, certain optical-electronic-mechanical features of the product shown herein and/or some of its parts/components may not precisely represent the actual device and are subject to change without prior notice by the sole discretion of General Starlight Co., Inc. Mass of the product represents measurable weight of all components this product consists of, such as optics, mechanics, and electronics. Dimensions of the product represents measurable size of the body, including all optical components attached and in fully folded position. Dimensions of additions such as mounting brackets, eyecups, objective lens covers, and/or battery extensions may vary and therefore are not listed herein. Copyright © 1992-2024 General Starlight Co., Inc. Canada. All rights reserved.



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QUADRO-B50



OPTICAL PARAMETERS	Optical Magnification	2X
	Field of View	12.4x°x9.3°
	Focusing Range	1m .. Infinity
SYSTEM PARAMETERS: CAPABILITIES AND SPECIAL FEATURES	Eyepiece	Dual
	Eyereief	Min. 20mm
	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)	1660m / 2250m
	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	
THERMAL (LWIR) CHANNEL	FPA Type	Uncooled, a-Si, Shutterless, Silent, Auto-NUC (Uninterrupted Operation)
	FPA Resolution and Pitch	640x480, 17µm
	FPA Sensitivity (NETD)	<40mK
	FPA Refresh Rate	50Hz
	Digital Zoom	1X, 2X, 4X, 8X
	Imaging Modes	Monochrome (White-Hot / Black-Hot) and 8 Colour Palettes
DAY/NIGHT (VNIR) CHANNEL	Sensor Type	High-Performance CCD
	Sensor Size	1/3"
	Resolution	800x600
	Sensitivity	Up to 0.1Lux
	Night Boost Mode	Yes
	VNIR Modes	Day/Night

DISPLAY	Internal Display	Full Size: 0.5-Inch Diagonal, Dual-AMOLED, Colour, 800x600
	Internal Display Contrast	>10000:1
IMAGE FUSION	Type	Real-time, Electronic
	Fused Channels	LWIR + VNIR
	Parallax Compensation	Electronic, Adjustable
ELECTRONICS, MECHANICAL, ENVIRONMENTAL FEATURES	Heat Signature Opacity Range	User Adjustable: 0% .. 100%
	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	165x152x68mm
	Weight	995 grams
	Operating Temperature	-40°C .. +50°C
	Storage Temperature	-55°C .. +65°C
Body Material	Hard-Anodized Aluminum	
Warranty	7 Years, Limited	



Made In Canada, ITAR-Free

* Batteries are not included



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STANDARD EQUIPMENT: WHAT'S IN THE BOX

1	Fusion Binoculars
2	Rubber Eyecups (<i>Installed on the device</i>)
3	Protective Lens Covers (<i>Installed on the device</i>)
4	USB Power Cable (<i>5-pin to USB</i>)
5	Video-Out Cable (<i>5-pin to RCA</i>)
6	Quick Swap AA-Battery Containers (<i>4pcs</i>)
7	Neck Cord
8	Soft Carrying Pouch
9	User Manual
10	Waterproof Hard Carrying Case
11	Cleaning Kit (<i>3-in-1 Multi-Pen + Soft Cloth</i>)

* Batteries are not included

OPTIONAL EQUIPMENT

A	Universal Remote Control Unit TRC-120 (<i>Comes with connection cable</i>)
B	Universal Multi-Voltage Battery Pack MVP-240™ (<i>Comes with connection cable</i>)
C	Built-In Digital Video Recorder GS-DVR-INT (<i>Comes with 32GB microSD card and SD adapter</i>)
D	External Digital Video Recorder GS-EDVR (<i>Comes with set of cables and 32GB SD card</i>)
E	MTAR™-HUD Heads Up Display (<i>Streams video directly from the unit; equipped with built-in DVR, GPS and Integrated 9-Axis Absolute Orientation HUD</i>)
F	Portable Head-Mounted Display HMD-800-MOD (<i>Streams thermal video directly from the device</i>)
G	Integrated 9-Axis Absolute Orientation HUD (Heads-Up Display), 3-Axis Sensors for Compass Reading, Inclinometer/Pitch Reading, and Level/Roll Reading
H	Tactical Infrared Illuminator IR-250S . Kit Includes IR-250S Unit (850nm), Remote Control, Picatinny Mount
I	Advanced Multi-Functional Laser Rangefinder Unit QRF-4500™ with MIL-STD 1550nm wavelength



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