



ADVANCED PHOTONICS



NSN: 1240-20-014-8145

1550nm
Advanced
Laser
Rangefinder
Unit With
Ballistic
Computer

**QRF
4500
BC**



The **QRF-4500S-BC™** is a compact, all-in-one 1550nm rapid targeting and ranging module with GPS, compass, IR/visible laser pointer, and IR illuminator. Built for reconnaissance, surveillance, and engagement, it fits on weapons and optical systems, including high-caliber .50 BMG rifles. Its rugged aluminum housing ensures durability with an IP67 rating and shock resistance. Compatible with day, night, thermal, and fusion devices, it provides continuous measurements and ground target designation. Featuring GSCI's 9-axis HUD, ballistic calculator, and weather station, it enhances first-shot accuracy and shot correction.

ADVANTAGES OF QRF-4500-BC

- 1 **LRF + Laser Safety Front Cover**
- 2 **GPS Module and Ballistic Calculator**
- 3 **Locking Lever & Latching Knob**
- 4 **Front Cover Latching Knob**
- 5 **Keypad**
- 6 **Laser Rangefinder: Transmitter**
- 7 **Laser Rangefinder: Receiver**
- 8 **Laser (IR Pointer)**
- 9 **Laser (VL Pointer)**
- 10 **IR Illuminator**
- 11 **Control Knob: Power Switch**
- 12 **Universal Port: Power & Connectivity**
- 13 **OLED Display**
- 14 **Battery Compartment Cap**
- 15 **Iron Sights**
- 16 **Wind Impeller**
- 17 **Weather Station Protection Slide**
- 18 **Laser Adjustment: Windage**
- 19 **Laser Adjustment: Elevation**
- 20 **LRF Adjustment: Windage**
- 21 **LRF Adjustment: Elevation**
- 22 **High Power Lockout Screws**



KEY FEATURES: QRF-4500-BC

- For hand-held, optics, and weapon mountable applications
- Can be paired with various optical-electronic systems
- 1550nm LRF wavelength
- 4.5km (2.8mi) maximum ranging capability
- Rapid and continuous (uninterrupted) accurate measurements
- 128 x 64 OLED display with brightness adjustment
- Iron sights for hand-held aiming and ranging
- Synchronized compass, GPS and rangefinder
- Provides real-time positioning information for both the user and the target

- 3 memory slots for target distance measurements
- Measures distance between two targets
- Measures speed, heading direction and track angle.
- 12 weapon and ammunition presets/profiles.
- Adjustable IR laser + Red or Green visible laser and focusable IR illuminator.
- Compact and rugged all-aluminum housing.
- Mounts on MIL-STD-1913D "Picatinny" rail.
- Remotely controlled via cable connection.
- Ballistic calculator and weather station.

QRF-4500™-BC

TECHNICAL SPECIFICATIONS



Ranging Capability	3m .. 4500m (10ft .. 2.8 Mi)
Minimum Measuring Time	0.4s
Distance-To-Target Precision	Better than 1m (3ft)
Distance Units	User-Selectable: Meters, Yards, Kilometers, Miles
Display Type	Integrated, Energy-Efficient, Digital (OLED), 0.96", Glare Protected
Compass	High Accuracy Magnetic and Gyro-Compass
Compatible Global Positioning Systems	GPS, GLONASS, Galileo, EGNOS
Precise GPS Location	Yes: Displayed in Degrees-Minutes-Seconds
LRF Wavelength	1550nm (Eye Safe)
Performance to Human Size Target	1500m (1640 yds)
Performance to NATO Target (2.3x2.3m)	2000m (2190 yds) (30% Reflectivity)
Communications	Serial, RS232
Laser Aimer IR	IR + Red or Green Visible Laser
IR Illuminator	IR Illuminator Flood-to-Spot
Ballistic Calculator	Yes: up to 12 profiles
Power Source Options	1 pc CR123 (3V) or External Power Supply (4VDC .. 15VDC)
Ranging Measurements / Battery Life	Up to 4500 Events on 1 pc CR123 (3V)
Weapon Mountable	MIL-STD-1913 (Picatinny), Recoil-Proof
Dimensions	<130x100x60 mm (5.1x3.9x2.3 in)
Weight (with battery and cable)	<450 grams (<15.9 oz)
Environmental Protection	IP67 min.
Operating Temperature	-40°C .. +50°C (-104 F .. +122° F)
Storage Temperature	-50°C .. +60°C (-122°F .. +140° F)
Warranty	7 Years

QRF-4500™ IS A GREAT ATTACHMENT UNIT FOR:

PRECISION FIREARMS



DAY OPTICS



THERMAL IMAGERS



NIGHT VISION DEVICES



FUSION SYSTEMS



Each QRF-4500S-BC are made per order; housing type and general appearance may vary based on the ordered configuration.



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 © 1992-2025 General Starlight Co., Inc. Canada. All rights reserved.