



## TFN LHA Series Binoculars Telescope



### Product Introduction

The LHA Series binoculars are precision-engineered for outdoor enthusiasts, field professionals, and adventure seekers who demand clarity, durability, and versatility. Designed with high-transmission BaK4 roof prisms and fully multi-coated optics, these binoculars deliver bright, sharp, and color-accurate images even in low-light conditions. Whether you are hiking, birdwatching, trekking, beekeeping, sailing, or conducting field inspections, the LHA Series breaks distance limitations and brings distant details close to your eyes. Lightweight, waterproof, and shock-resistant, they are built for all-weather reliability. Experience nature's beauty as if it's right in front of you – with the LHA Series, every scene is “within reach.”

### Product Key Selling Points

Exceptional Optical Clarity with BaK4 Prisms

Equipped with premium BaK4 roof prisms and fully multi-coated lenses, the LHA Series achieves over 90% light transmission. You get bright, razor-sharp images with true color reproduction and no dark edges. Say goodbye to blurry, dim views – even at dawn or dusk, every detail stands out with stunning contrast and clarity.

Rugged All-Weather Construction

Completely sealed and nitrogen-purged, these binoculars are waterproof (IPX7 rated) and fog-proof. Rain, snow, humidity, or sudden temperature changes won't stop you. Perfect for marine use, mountain hiking, or tropical field research. No more worrying about moisture damage or internal fogging – just reliable performance in any environment.

Ultra-Light & Ergonomic Design for Long Sessions

Weighing only 550 grams, the LHA Series features a durable polycarbonate body with non-slip rubber armor. The longer eye relief (18mm) and twist-up eyecups make them comfortable for eyeglass wearers. Fatigue-free handling means you can observe for hours during birdwatching, patrols, or outdoor competitions without arm or eye strain.

Wide Field of View & Fast Focus

With a 330ft/1000yds field of view (for 10x model), you can track moving subjects effortlessly



– from flying birds to racing cyclists. The large central focus wheel allows one-finger fine-tuning from close-up (2m) to infinity in under 1.5 turns. No more missing the moment because of slow focusing or a narrow tunnel view.

Multi-Scenario Versatility – Never Idle

From seeking honeybees in forests to spotting buoys at sea, from campsite stargazing to industrial line inspections, the LHA Series adapts to over 10 use cases. It replaces multiple single-purpose optics. You get one tool that does it all – saving cost, space, and hassle. Truly “never idle” for both work and play.

### Product Specifications

Parameter	Specification
Model	LHA 10×42 / LHA 8×42 (options)
Magnification	10x / 8x
Objective Lens Diameter	42 mm
Prism Type	BaK4 roof prism
Lens Coating	Fully multi-coated (FMC)
Light Transmission	>90%
Exit Pupil Diameter	4.2 mm (10x) / 5.25 mm (8x)
Eye Relief	18 mm
Field of View (at 1000m)	110 m (10x) / 128 m (8x)
Field of View (at 1000yds)	330 ft (10x) / 384 ft (8x)
Close Focus Distance	2.0 m / 6.6 ft
Diopter Adjustment Range	± 4 D
Interpupillary Distance	56 – 74 mm
Focusing System	Central large knob
Waterproof Rating	IPX7 (submersible up to 1m for 30 min)
Fog-proof	Nitrogen gas filled
Body Material	Polycarbonate + rubber armor
Dimensions (H×W×D)	14.5 × 12.5 × 5.2 cm
Weight	550 g (10x42) / 540 g (8x42)
Operating Temperature	-20° C to 60° C (-4° F to 140° F)
Strap Attachment	Standard tripod adaptable (with adapter, not included)
Accessories	Neck strap, carry pouch, lens cloth, user manual, warranty card

### Product Features

#### Section 1: High-Transmission Optics – Eliminate Dark & Blurry Views

The LHA Series employs BaK4 prisms and fully multi-coated optics that maximize light throughput. Traditional low-end binoculars often suffer from dark edges, poor contrast, and dim images – especially in forest canopies or during twilight. With the LHA Series, you get an



exceptionally bright and clear image even when the sun is low. Every feather, leaf, or distant sign becomes vividly defined. For birdwatchers who need to identify species by subtle color patterns, or for beekeepers checking hive activity from a safe distance, this optical power directly solves the pain of “can’t see clearly enough.” The anti-reflection coatings also reduce glare, so you won’t squint under bright sunlight. Result: less eye fatigue and more accurate observations.

### **Section 2: Close Focus Capability – Reveal Tiny Details Up Close**

With a minimum focusing distance of just 2 meters (6.6 feet), the LHA Series turns into a powerful macro viewer. Many standard binoculars require you to stand far away from small objects, making it impossible to examine a butterfly’s wing, a hive’s entrance, or a circuit board during field repairs. The LHA Series lets you walk right up and still achieve perfect focus. This is a game-changer for naturalists, quality inspectors, and even gardeners looking for pests. You no longer need a separate magnifying glass or macro lens. Just twist the focus wheel and you’ll see intricate details like pollen on a bee’s leg or serial numbers on a remote pipeline marker – bridging the gap between distance viewing and close-up inspection.

### **Section 3: All-Weather Reliability – No More Weather-Induced Downtime**

Outdoor professionals and hobbyists alike know the frustration of fogged-up lenses after rain or a sudden temperature drop. Sealed with O-rings and purged with dry nitrogen gas, the LHA Series remains perfectly clear inside. It meets IPX7 waterproofing, meaning you can drop them in a stream or use them under a downpour without any damage. The rubber-armored body also absorbs shocks if you accidentally knock them against rocks or deck rails. For sailors, search-and-rescue teams, or mountain hikers who face unpredictable weather, this durability means your optic tool will never let you down. No need to pack fragile “fair-weather only” binoculars – the LHA Series works in blizzards, desert heat, and tropical storms.

### **Section 4: Wide Field of View & Fast Focus – Capture Fast Action Instantly**

Tracking a running dog, a flying eagle, or a racing yacht requires both a wide panorama and instant focusing. Many budget binoculars have a narrow field (like a straw) and a stiff focus wheel that takes many turns. The LHA Series offers a generous 110m field at 1000m (10x model) – that’s 30% wider than typical 10x binoculars. Combined with a large central focus knob that moves from near to far in just 1.5 rotations, you can lock onto a moving target in a split second. During bird migration observation or cycling race monitoring, you’ll never miss the critical moment. The pain of “lost the subject while refocusing” is completely eliminated.

### **Section 5: Ergonomic Comfort – Use for Hours Without Fatigue**

Long observation sessions often lead to shaky hands, neck strain, and sore eyes. The LHA Series is designed with human factors in mind: it weighs only 550g, has a soft rubber armor for secure grip, and provides 18mm eye relief – more than enough for eyeglass wearers. The twist-up eyecups allow perfect positioning, and the diopter ring on the right eyepiece compensates for any difference between your eyes. For professional uses like wildlife surveillance, archaeological site surveying, or security patrols that require continuous monitoring, this comfort directly translates to better focus and less physical exhaustion. No more putting down the binoculars every few minutes to rest your hands or eyes – the LHA Series stays ready as long as



you are.

### Applications & Pain Points Solved

Scenario	Customer Pain Point	How LHA Solves It
Mountain Hiking & Trekking	Heavy gear causes fatigue; binoculars are bulky and fragile.	Lightweight (550g) and armored body – easily fits into a daypack. Shock-resistant design survives accidental drops on rocky trails.
Birdwatching & Wildlife Observation	Fast-moving birds go out of focus quickly; low-light dawn/dusk viewing is impossible.	Wide field of view + fast central focus track fliers seamlessly. High-transmission optics deliver brightness even at dawn/dusk.
Marine & Sailing / Coastal Patrol	Salt spray and fog fog up lenses; binoculars sink if dropped overboard.	IPX7 waterproof and fog-proof – rinse under tap after saltwater use. Neck strap with floatable foam accessory (optional) adds safety.
Beekeeping & Insect Hunting (Seeking Bees)	Need to observe hive activity from 3 – 5 meters without disturbing bees; standard binoculars cannot focus that close.	Close focus distance of 2 meters allows safe, non-intrusive observation. Clear detail reveals queen bee location or signs of disease.
Industrial Inspection & Field Surveying	Hard to read remote labels or detect small cracks from a distance; frequent switching between distances is slow.	Smooth zoom-like focus from 2m to infinity in seconds; sharp optics resolve small text on power poles or pipeline markers.

### Q&A

Q1: Are the LHA Series binoculars fully waterproof? Can I use them in heavy rain?

A: Yes, the LHA Series is rated IPX7 waterproof, meaning they can be submerged in water up to 1 meter for 30 minutes without damage. They are also nitrogen-purged to prevent internal fogging, so heavy rain, snow, or even accidental drops into a stream will not harm the optics.

Q2: I wear glasses. Will I see the full field of view?

A: Absolutely. The LHA Series provides 18mm long eye relief, which is suitable for most eyeglass wearers. Simply twist down the rubber eyecups and you will enjoy the complete wide field of view without taking off your spectacles.

Q3: What is the closest distance I can focus with these binoculars?

A: The minimum focusing distance is 2 meters (6.6 feet). This is exceptionally close for a full-size binocular and allows you to observe butterflies, flowers, hive entrances, or small machine parts in sharp detail.

Q4: Are the LHA Series binoculars suitable for astronomy or night use?

A: While not a dedicated astronomy binocular, the LHA Series with 42mm objective lens and high



light transmission works well for casual stargazing, lunar observation, and twilight wildlife viewing. For deep-sky objects, a larger aperture (e.g., 50mm) would be better, but for general night-time outdoor use, they perform excellently.

Q5: Can I mount the LHA binoculars on a tripod?

A: Yes, the LHA Series has a standard 1/4" -20 threaded socket hidden under a cap on the central hinge. You can attach a tripod adapter (sold separately) for long-term stationary viewing, such as bird hides, surveillance, or astronomy.

### **Package Contents**

1. LHA Series Binoculars (1 unit, with lens covers for objective and eyepiece)
2. Premium Neoprene Neck Strap (quick-release, adjustable)
3. Custom Molded Carry Pouch (soft-lined, with belt loop and drawstring)
4. Microfiber Lens Cleaning Cloth (non-abrasive)
5. Multi-language User Manual (includes care instructions and diopter setting guide)
6. Warranty Registration Card (5-year limited warranty against manufacturing defects)

Optional accessories available for bulk orders: tripod adapter, floating neck strap, lens pen, hard carrying case.